#### TENNESSEE VALLEY AUTHORITY



# WATTS BAR RESERVOIR

Loudon, Meigs, Rhea, and Roane Counties, Tennessee

# Draft Land Management Plan Amendment

**VOLUME II** 



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# WATTS BAR RESERVOIR

Loudon, Meigs, Rhea, and Roane Counties, Tennessee

## **Draft Land Management Plan Amendment**

## VOLUME II

Prepared by Tennessee Valley Authority

November 2018

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## ACRONYMS AND ABBREVIATIONS

CVLP	Comprehensive Valleywide Land Plan
EA	Environmental Assessment
EIS	Environmental Impact Statement
NEPA	National Environmental Policy Act
NRP	Natural Resource Plan
RLMP	Reservoir Land Management Plan
SMI	Shoreline Management Initiative
SMP	Shoreline Management Policy
TRM	Tennessee River Mile
TVA	Tennessee Valley Authority
TVA Act	Tennessee Valley Authority Act of 1933
TVA Board	Tennessee Valley Authority Board of Directors
TWRA	Tennessee Wildlife Resource Agency
U.S.	United States
Valley	Tennessee River Valley Region

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Introduction

## **CHAPTER 1. INTRODUCTION**

The Tennessee Valley Authority (TVA) manages approximately 293,000 acres of land along its reservoirs 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 ensure continuing economic growth in the Tennessee River Valley region (Valley). TVA prepares reservoir land management plans (RLMPs) to guide land use approvals, private water use facility permitting, and resource management decisions on these reservoir lands.

In February 2009, TVA issued the *Watts Bar Reservoir Land Management Plan and Environmental Impact Statement* (TVA 2009), which examined the potential effects of several alternative methods to manage reservoir lands on Watts Bar Reservoir. TVA proposes to amend the 2009 Watts Bar Reservoir Land Management Plan (2009 RLMP) and to alter the land use allocations on six parcels in response to new issues and changes in conditions and circumstances that affect approximately 226 acres on Watts Bar Reservoir (See Appendix A). The land use allocations on other Watts Bar Reservoir parcels would remain as described in the 2009 RLMP and its related supplements<sup>1</sup>. TVA has also prepared an associated Supplemental Environmental Assessment (EA) (Volume I) that tiers from the 2009 RLMP and Environmental Impact Statement (EIS) to assess potential impacts of the proposed allocation changes.

TVA develops RLMPs using the Single Use Parcel Allocation methodology, which defines separate parcels of reservoir lands and allocates those parcels and affiliated land rights to one of the following land use categories or 'zones':

#### **TVA Land Planning Zones**

- Zone 1 Non-TVA Shoreland
- Zone 2 Project Operations
- Zone 3 Sensitive Resource Management
- Zone 4 Natural Resource Conservation
- Zone 5 Industrial
- Zone 6 Developed Recreation
- Zone 7 Shoreline Access

<sup>1</sup>After the 2009 RLMP and EIS were issued, TVA prepared the following supplements to the 2009 RLMP and EIS: an Errata Sheet that lists corrections to the 2009 RLMP and EIS and the 2012 Kingston Recovery Project Land Management Plan (TVA 2012) that addresses eight of the nine parcels on Watts Bar Reservoir that were impacted by the 2008 Kingston Fossil Plant ash spill.

Following the completion of the 2011 Natural Resource Plan (TVA 2011), TVA developed new RLMP layouts to improve consistency, and this draft amendment to the 2009 Watts Bar RLMP (RLMP Amendment) incorporates the updated RLMP layout. Consistent with this updated design, this document provides background information about TVA's land management throughout its history and specifically focuses on TVA's management of reservoir lands surrounding Watts Bar Reservoir. It explains the purpose of this proposed amendment and describes the process used in its development. Parcel descriptions for the parcels affected by the proposed allocation changes are included in Chapter 4 of this document along with maps that delineate the land use allocation changes proposed to 226 acres on Watts Bar Reservoir (see Appendix A).

## 1.1 Tennessee Valley Authority History

President Franklin Roosevelt needed creative solutions to lift the nation out of the depths of the Great Depression, and TVA is considered one of his most innovative initiatives. Roosevelt envisioned TVA as an agency different from any other; he asked Congress to create "a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise." On May 18, 1933, Congress passed the Tennessee Valley Authority Act (TVA Act). The TVA Act is available at <u>https://www.tva.com/About-TVA/Our-History/The-TVA-Act</u>.

From the start, TVA established a unique problem-solving approach to fulfilling its mission: Integrated Resource Management. Each issue TVA faced, whether it was power production, navigation, flood control, malaria prevention, reforestation, or erosion control, was studied in its broadest context as TVA weighed each issue relative to the others. From this beginning, TVA has held fast to its strategy of integrated solutions, even as the issues changed over the years. A short TVA history is available at <u>http://www.tva.com/abouttva/history.htm</u>.

## 1.2 Overview of TVA's Mission and Environmental Policy

## 1.2.1 TVA's Mission

TVA has a rich history of improving the quality of life and economic prosperity for the people and businesses in the TVA service area. TVA was created by Congress in 1933 and charged with a unique mission—to improve the quality of life in the Valley through the integrated management of the region's resources. For more than eight decades, TVA has worked tirelessly to carry out that mission and to make life better for the nine million people who live in the Valley today. TVA

Introduction

serves the people of the Valley by focusing on three key areas: energy, environment, and economic development.

While TVA's mission has not changed, the environment in which TVA does business continues to evolve. Facing challenging economic conditions, tougher environmental standards, the need to modernize its power generating fleet, and changing customer needs, TVA recognized a need to refine its strategic vision for the future.

In August 2010, the TVA Board of Directors (TVA Board) adopted a renewed vision to help TVA lead the Valley and the nation toward a cleaner and more secure energy future by relying more on nuclear power and energy efficiency and less on coal. TVA's renewed vision is to be one of the nation's leading providers of low-cost and cleaner energy by 2020. More specifically, TVA intends to be the nation's leader in improving air quality, the nation's leader in increased nuclear production, and the Southeast's leader in increased energy efficiency.

#### 1.2.2 Environmental Policy

As stated in TVA's 2007 Strategic Plan, "TVA will be proactive in addressing environmental concerns, including those related to global climate change." It follows that roughly half of the identified strategic objectives and critical success factors in that plan relate directly to TVA's environmental activities and policy-making.

Following the release of the 2007 Strategic Plan, the TVA Board asked for the development of an integrated environmental policy to outline objectives and critical success factors across the multiple areas of TVA's activities. In 2008, the TVA Board approved the Environmental Policy, which provides guiding principles for reducing the environmental impacts of TVA operations while continuing to provide reliable and affordable power to the Valley. In 2010, a biennial review of the Environmental Policy was completed, which did not result in major changes or revisions. TVA's overarching Environmental Policy objective is to provide cleaner, reliable, and affordable energy, support sustainable economic growth in the Valley, and engage in proactive environmental stewardship in a balanced and ecologically sound manner. A copy of the Environmental Policy is available at <a href="http://www.tva.com/environment/policy.htm">http://www.tva.com/environment/policy.htm</a>.

#### 1.2.3 Land Policy

On behalf of the United States (U.S.), TVA originally acquired approximately 1.3 million acres of land in the Valley. However, creation of the TVA reservoir system inundated approximately

3

470,000 acres with water. Since that time, TVA has transferred or sold approximately 508,000 acres, the majority of which was transferred to other federal and state agencies for public uses. TVA currently controls approximately 293,000 acres of reservoir lands (Figure 1-1) which continue to be managed pursuant to the TVA Act. These TVA-managed lands are also referred to as "TVA public land" in this document.

In 2006, TVA adopted a Land Policy to guide retention, disposal, and planning of real property. Accordingly, it is TVA's policy 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 Valley. Recognizing that historical land transfers have contributed substantially to meeting multipurpose objectives, TVA maintains the policy of retaining in public ownership the reservoir lands under its control except in those rare instances where the benefits to the public will be so significant that transferring lands to private ownership or another public entity is justified. The Land Policy is available at www.tva.com/landpolicy.

## 1.2.4 Shoreline Management Policy

In November 1998, TVA completed a Shoreline Management Initiative (SMI) EIS (TVA 1998) analyzing possible alternatives for managing residential shoreline development throughout the Valley. In April 1999, TVA adopted the "blended alternative" and the current Shoreline Management Policy (SMP) became effective in November 1999. The SMP incorporates a strategy of managing public shoreline through an integrated approach that conserves, protects, and enhances shoreline resources and public use opportunities while providing for the reasonable and compatible use of the shoreline by adjacent residents and defines the standards for vegetation management, docks, shoreline stabilization, and other residential shoreline alterations. On August 20, 2009, the TVA Board of Directors decided to amend the SMP to terminate the "Maintain and Gain" program, which allowed for the exchange of shoreline access rights of equal or greater value. SMP information is available at <u>www.tva.com/smp</u>.

## 1.2.5 Section 26a of the TVA Act

The TVA Act of 1933 confers on TVA the broad authority related to the unified conservation and development of the Valley and surrounding area and directs that property in TVA's custody be used to promote the Act's purposes. In particular, Section 26a of the Act requires that TVA's approval be obtained prior to the construction, operation, or maintenance of any dam,

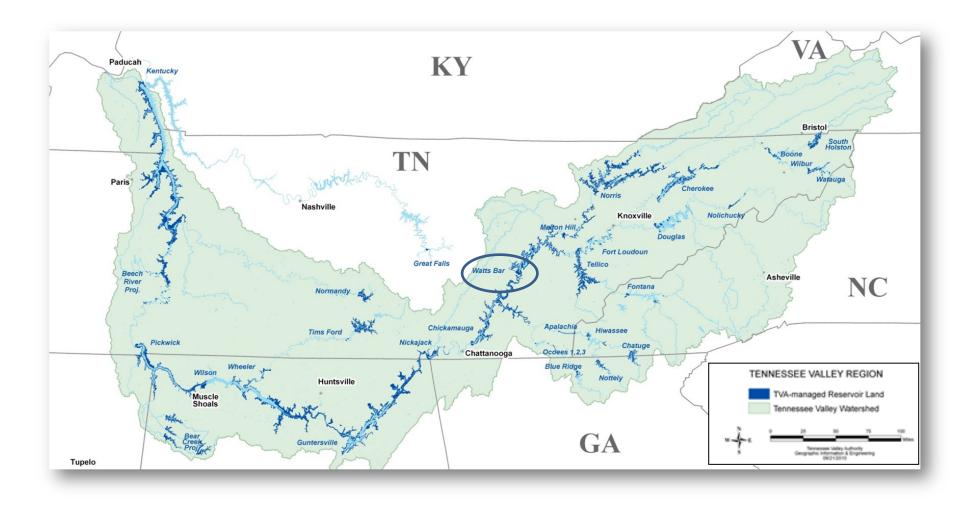


Figure 1-1. Map of TVA-Managed Reservoir Land

appurtenant works, or other obstruction affecting navigation, flood control, or public lands or reservations along or in the Tennessee River or any of its tributaries. TVA's Section 26a regulations include shoreline construction standards as well as the approval process and other requirements regarding TVA's Section 26a jurisdiction. Section 26a regulations are available at <a href="http://www.tva.com/26aregulations">www.tva.com/26aregulations</a>.

## 1.3 The Natural Resource Plan

In 2011, TVA adopted a Natural Resource Plan (TVA 2011) that strategically guides the management of both renewable and nonrenewable resources in the Valley, underscoring the importance of protecting those resources that will be lost forever if they are not actively protected or improved today. TVA is one piece of the solution and recognizes the need for a coordinated and collaborative effort to meet the near- and long-term resource needs. As such, the Natural Resource Plan (NRP) is designed to:

- Integrate the objectives of six resource areas (biological, cultural, recreation, water, public engagement, and reservoir lands planning).
- Provide optimum public use benefit.
- Balance competing and sometimes conflicting resource uses.

These competing interests, coupled with today's environmental awareness and focus on preserving nonrenewable resources, underscore the necessity for a consistent approach to the management of TVA public lands. The NRP represents TVA's high-level strategy for managing its natural resources in the near and long term. Detailed implementation plans, such as this draft RLMP Amendment, are being developed based on the NRP to drive specific implementation efforts. NRP information is available at <a href="http://www.tva.com/nrp">www.tva.com/nrp</a>.

## 1.3.1 Comprehensive Valleywide Land Plan

As part of the NRP, TVA adopted the Comprehensive Valleywide Land Plan (CVLP), which established target allocation ranges for each type of land use to enable TVA to maintain a desired balance of shoreline land uses on a system-wide basis. The CVLP and its allocation range targets enable TVA and the public to consider allocations across the reservoir system and determine whether too much or too little attention is being given to particular land uses.

Since the 2011 adoption of the CVLP, TVA completed eight RLMPs for the use and management of approximately 138,320 acres on Chickamauga, Fort Loudoun, Great Falls, Kentucky, Nickajack, Normandy, Wheeler, and Wilson Reservoirs. Further, in August 2017, the

CVLP allocation ranges were updated to reflect changes in land use allocations across the Valley after the completion of the Multiple Reservoir Land Management Plans and EIS (TVA 2017). These eight reservoirs that were included in the RLMPs comprised the last of the TVA reservoir lands to be planned using the Single Use Parcel Allocation methodology. The current valleywide percentages of TVA reservoir land use allocations shown in Table 1-1 represent the land use allocation acreages in TVA Board-approved RLMPs.

	•	•	•
		Current Valleywide	CVLP Allocation
	Allocation Designation <sup>1</sup>	Allocation	Ranges
		(Percent)	(Percent)
Zone 2	Project Operations	8.7	7 to 10
Zone 3	Sensitive Resource Management	16.1	14 to 18
Zone 4	Natural Resource Conservation	60.0	56 to 63
Zone 5	Industrial	1.7	1 to 3
Zone 6	Developed Recreation	8.4	8 to 10
Zone 7	Shoreline Access	5.1	5 to 6

 Table 1-1.
 Current and Comprehensive Valleywide Land Plan Allocation Ranges

<sup>1</sup> Zone 1 – Non-TVA Shoreland represents private land on which TVA retained certain rights such as flowage.

#### 1.4 Purpose of Reservoir Land Planning

As a regional development agency and the nation's largest public power provider, TVA is committed to protecting and sustaining the environmental resources of the Valley for future generations through leadership in clean energy innovation and environmental management. In managing its public lands and resources, TVA seeks to provide efficient resource stewardship that is responsive to stakeholder interests.

An increasing demand for use of reservoir lands sometimes results in conflicting public opinions regarding the most appropriate use of individual parcels of TVA public land. These competing interests and development pressures, coupled with today's environmental awareness, underscore the necessity for a methodical and comprehensive planning approach to the management, retention, and disposal of reservoir lands managed by TVA.

The purpose of reservoir lands planning is to apply a systematic method of identifying and evaluating the most suitable uses of TVA public lands in furtherance of TVA's responsibilities under the TVA Act and TVA policies and plans. Updates to RLMPs are needed to reflect changing land use needs and/or circumstances and to incorporate TVA's business needs and goals for managing its public lands.

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## CHAPTER 2. REGIONAL OVERVIEW

## 2.1 Watts Bar Reservoir and Present Shoreline

Watts Bar Reservoir is an impoundment of the Tennessee River formed by Watts Bar Dam and Lock, which is located at Tennessee River mile (TRM) 530. Watts Bar Reservoir flows from the northeast to southwest through Loudon, Meigs, Rhea, and Roane counties and extends 72.4 miles up the Tennessee River to Fort Loudoun Dam and 62.5 miles to Melton Hill Dam on the Clinch River. Watts Bar Reservoir also includes parts of the Emory and Little Emory Rivers (see Figure 2-1).

Existing land use patterns along the shoreline and backlying land have been influenced by initial TVA land acquisition and subsequent disposition via the sale, transfer of ownership, or retention of properties. TVA originally acquired approximately 55,000 acres of land for the Watts Bar project, including flowage and easements (TVA 1949). About 9,000 acres of this land has since been sold for private use or transferred to other federal and state agencies for public use. Watts Bar Reservoir covers 39,000 acres and subsequent land purchases for fossil and nuclear plants, transfers and/or sales of land to the U.S. Department of Energy, and for various commercial, industrial, residential, and recreational uses have resulted in a current balance of about 16,220 acres of TVA managed land. Of these 16,200 acres, approximately 2,796 acres are classified as power property (TVA fossil and nuclear plant property), and the remaining approximate 13,425 acres are the scope of TVA public lands on Watts Bar Reservoir.

At full pool, the reservoir shoreline length is 721 miles, and the surface area is about 39,000 acres. Of the 721 miles of shoreline, 340 miles (47 percent) are available for Shoreline Access uses (where TVA sold tracts with deeded or implied rights for access and/or water use facilities across TVA land), which include current development. The available area also includes previously planned lands determined by TVA policy to be available for consideration of water use facilities.

## 2.2 History of Watts Bar Reservoir Lands Planning

In August 1988, the TVA Board approved the *Watts Bar Reservoir Land Management Plan* (TVA 1988) to guide TVA resource management and property administration decisions concerning the 10,405 acres of TVA land on Watts Bar Reservoir. A multidisciplinary TVA team

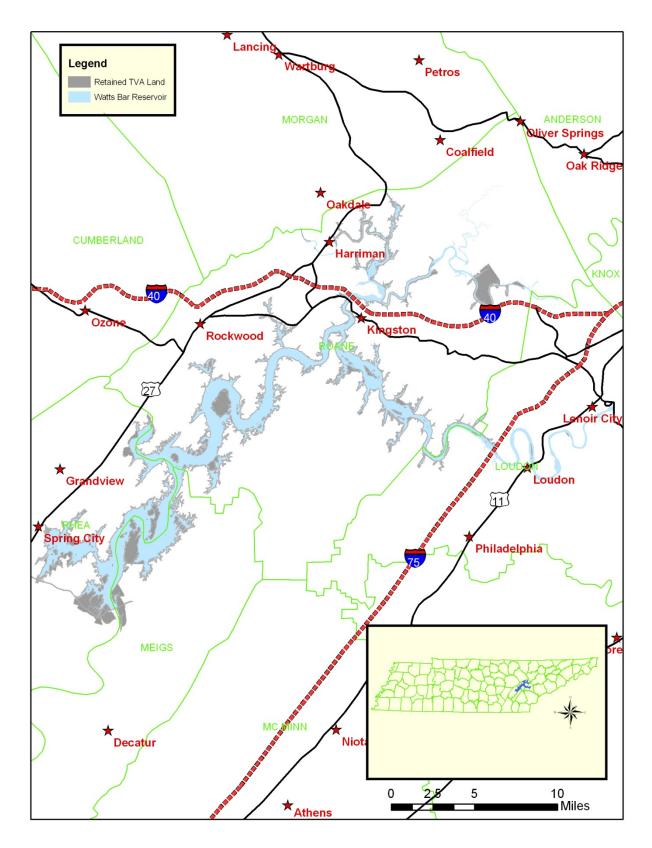


Figure 2-1. Map of TVA-Managed Reservoir Lands on Watts Bar Reservoir

undertook a detailed planning process that resulted in the land use designations in the 1988 RLMP. Both public input and information from TVA specialists were analyzed in making these land use decisions. The 207 tracts of land in the 1988 RLMP were allocated under the former Multiple Use Tract Allocation methodology, which assigned one or more allowable land uses from a menu of 19 different land use allocations. The scope of the 1988 RLMP did not include land already committed to long-term or permanent uses, such as tracts encumbered by easements or property set aside for TVA dam reservations or power plants. Further, the narrow strips of TVA-managed land that fronts properties which TVA had previously sold or transferred, known as marginal strips, were not included under this planning methodology.

In February 2009, TVA superseded the 1988 RLMP with the updated 2009 RLMP and EIS (TVA 2009) for managing its 16,220 acres of public lands on Watts Bar Reservoir. The 2009 RLMP and EIS identified the most suitable uses for 367 parcels allocated under the current Single Use Parcel Allocation methodology that assigns one of seven land use allocations to each parcel.

On December 22, 2008, a dike failed at Kingston Fossil Plant, releasing roughly 5.4 million cubic yards of coal ash that was estimated in January of 2009 to cover about 275 acres of TVA land and private land, including two coves on Watts Bar Reservoir. The 2009 RLMP and EIS were released soon after the ash spill though impacts to environmental resources and private and public properties were still being assessed at that time. After the release of the 2009 RLMP and EIS, TVA determined that more parcels and acreages were impacted by the ash spill than were initially described and clarified in an Errata Sheet. TVA found that 184 acres on nine parcels, rather than 134 acres on six parcels, were impacted by the ash spill, and that nine parcels, rather than six parcels needed to be excluded from the 2009 RLMP and EIS. Due to these changes, the total acreage considered in the 2009 RLMP and EIS shifted from 16,220 acres to 16,036 acres. These nine parcels were categorized as "Unplanned," and TVA decided that the appropriate future uses of these parcels would be determined during the Kingston Recovery Planning process. The TVA Board approved the 2009 RLMP and EIS on November 19, 2009.

In January 2009, TVA began developing a recovery plan to address remediation of the area affected by the ash spill. As part of the recovery process, TVA completed the *Kingston Recovery Project Land Management Plan* (TVA 2012) to address eight of the nine parcels excluded from the 2009 RLMP and EIS. This land planning effort allocated land use zones to 143.6 acres of the 184 acres of reservoir property impacted by the ash spill, and the Kingston

Recovery Project Land Management Plan (2012 Recovery Plan) serves to supplement the 2009 RLMP. A 40.6-acre parcel (Parcel 153) that fronts residential property that was allocated as Zone 7 (Shoreline Access) prior to the ash spill remains categorized as "Unplanned," and this draft RLMP Amendment addresses this parcel.

## 2.3 The Proposed Watts Bar Reservoir Land Management Plan Amendment

## 2.3.1 Land Use Allocation Changes

The Land Policy provides for the continued development of RLMPs with public input and with the approval of the TVA Board or its designee. Up-to-date RLMPs are needed to make land planning allocations on reservoirs consistent with standing TVA policies, like the Land Policy and SMP, regulations (Section 26a of the TVA Act), plans such as the NRP and the CVLP, and other guidance incorporate TVA's goals for managing natural resources on TVA public lands. Reservoir lands planning is performed on a reservoir-by-reservoir basis and land planning efforts may include an individual reservoir, multiple reservoirs, or portions of a reservoir. Furthermore, RLMPs govern decisions about whether land is disposed of or retained and establish how the land may be used and by whom.

After TVA approves a RLMP for a reservoir, all future uses of TVA-managed lands on that reservoir must then be consistent with the land use allocations within that RLMP. However, modifications to RLMPs to correct administrative errors that occurred during the lands planning process are allowed after approval of RLMPs but allocation changes needed for other purposes are limited to those identified in the Land Policy. In accordance with TVA policies and guidelines, allocation changes after the completion of a RLMP or outside the normal planning process ('off-cycle') are allowable only under the circumstances described below:

- To correct administrative errors that occurred during the planning process,
- To implement TVA's SMP, and
- To allow water-access for industrial or commercial recreation operations on backlying property.

Allocation changes that are needed for purposes other than those noted above must be completed during the normal land planning cycle, i.e., through a supplement or an amendment to a portion of reservoir lands in an RLMP or through a revision of all reservoir lands in an RLMP. The proposed land use allocation changes on Watts Bar Reservoir do not meet the criteria for an 'off-cycle' allocation change, and therefore, an amendment to a portion of the reservoir lands in the 2009 RLMP is warranted.

Regional Overview

#### 2.3.2 Proposed Land Use Allocation Changes

In order to reflect changes in conditions and circumstances on Watts Bar Reservoir since the 2009 RLMP and the 2012 Recovery Plan were completed, TVA has prepared a draft RLMP Amendment to update a portion of parcels (0.2 percent) on Watts Bar Reservoir. TVA proposes to change the land use allocations on six parcels involving approximately 226 acres of TVA public land. The land use allocations on other Watts Bar parcels would remain as allocated in the 2009 RLMP and the 2012 Recovery Plan.

Further, the draft RLMP Amendment serves to update the changes in Watts Bar Reservoir land acreages from 16,220 acres to 13,425 acres to reflect the NRP's removal of about 2,796 acres of power plant properties. The NRP removed power plant properties from "planned" TVA reservoir lands and the 2009 RLMP included 2,796.1 acres of power plant properties, Parcel 191 - Kingston Fossil Plant (1,258.1 acres), Parcels 302 and 304 – Former Watts Bar Fossil Plant (268.0 and 191.5 acres), and Parcels 303 and 305 – Watts Bar Nuclear Plant (85.3 and 993.2 acres). Consistent with the NRP, the scope of planned acreage for Watts Bar Reservoir lands shifts from 16,220 acres to 13,425 acres to reflect the removal of power plant properties.

Parcel Number	Parcel Acreage	Current Allocation	Proposed Allocation Change Description
89a	0.4	Zone 4 – Natural Resource Conservation	Change 0.4-acre portion (new Parcel 89a) to Zone 7 - Shoreline Access to reflect a previous property exchange where shoreline access rights were gained under TVA's former Maintain and Gain program <sup>1</sup> (associated with Parcel 256a).
144	172.3	Zone 3 – Sensitive Resource Management	Change entire parcel to Zone 2 - Project Operations to support TVA's potential use for this and several adjacent Zone 2 parcels. This parcel is included in the site of the potential Clinch River Small Modular Reactor Project.
153	40.6	Unplanned – (Zone 7 before Ash Spill)	Change entire parcel to Zone 7 to reflect the change in backlying property ownership. TVA acquired the private backlying property after the ash spill and has since returned it to private residential ownership with shoreline access rights.
197a	10.2	Zone 7 – Shoreline Access	Change 10.2-acre portion (new Parcel 197a) of the 36.8- acre Parcel 197 to Zone 6 - Developed Recreation to reflect a change in backlying property ownership from private residential to the State of Tennessee for public recreation purposes.
256a	0.1	Zone 7 – Shoreline Access	Change 0.1-acre portion (new Parcel 256a) of the 34.2- acre Parcel 256 to Zone 4 – Natural Resource Conservation to reflect a previous property exchange where shoreline access rights were extinguished under TVA's former Maintain and Gain policy (associated with Parcel 89a).

	Table 2-1.	Description	on of Pro	posed Allo	cation Changes	
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Parcel	Parcel	Current	Proposed Allocation Change Description	
Number	Acreage	Allocation		
271a	2.4	Zone 4 – Natural Resource Conservation	Change 2.4-acre portion (new Parcel 271a) of the 14.0- acre Parcel 271 to Zone 6 – Developed Recreation to support public recreation access on adjacent Parcel 270 (Spring City Park).	

<sup>1</sup> Removed from the SMP in August 2009, the former Maintain and Gain program allowed TVA to consider requests from property owners without shoreline access rights to obtain those rights in exchange for eliminating shoreline access rights of equal or preferably greater length and value; such exchanges would result in no net loss, or preferably a net gain, of public shoreline.

Although TVA executive approval was granted in June 2008 for the Parcel 89a and Parcel 256 Maintain and Gain request and the associated land use agreement and allocation changes, TVA delayed proceeding with the land transaction until 2017. TVA chose not to execute the approvals until completion of numerous external reviews of the land transaction including reviews by the Office of the Inspector General and an Ethics Committee of the U.S. Congress. Although the findings of the land transaction reviews indicated it was not improper, the execution remained on hold for many years. In November 2016, the applicant re-initiated the request for the land transaction to be executed and TVA re-processed the request. Final executive approval to proceed with execution of the land transaction and associated land use agreement was granted in 2017.

Also included in the draft RLMP Amendment is a proposed environmental review process change for Parcel 109, which fronts Marble Bluff Subdivision. Parcel 109 is a 10.0-acre parcel allocated as Shoreline Access (Zone 7) in the 2009 RLMP, and wetlands are located on portions of the parcel. TVA proposes to abandon the enforcement of special conditions associated with Section 26a permitting practices that have been in place for Parcel 109 since August of 1995; TVA has researched and reviewed the special conditions and determined that the outcome of the current environmental review process for Section 26a permitting is as protective as the 1995 special conditions. The 2009 RLMP mentioned the special conditions for Parcel 109 in Appendix B – Parcel Information Table, and the parcel description for Parcel 109 has been revised in Chapter 4 of the RLMP Amendment to reflect this change by removing the mention of special conditions.

New parcel descriptions are included in Chapter 4 for parcels associated with an allocation change, and revised RLMP maps (see Appendix B) have been prepared to reflect the proposed allocation changes and the removal of power property parcels from reservoir land categorization. A new parcel description is also included for Parcel 109 that removes special permitting conditions.

The proposed draft RLMP Amendment would guide land use approvals, private water use facility permitting, and resource management decisions on TVA-managed public land around Watts Bar Reservoir. Any proposed development or activity on public land will be subject to TVA approval pending the completion of a site-specific environmental review to evaluate the potential environmental effects of the proposal. As necessary, TVA would impose any necessary mitigative measures as conditions of approval for the use of public lands in order to minimize adverse environmental effects.

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## CHAPTER 3. LAND PLANNING PROCESS

## 3.1 Process for Planning Land

The reservoir land management planning process involves allocation of reservoir land to one of seven defined land use zones, six of which are comprised of property owned by TVA in fee. The term "land use zone" refers to a descriptive set of criteria given to distinct areas of land based on location, features, and characteristics. The definition of a land use zone provides a clear statement of how TVA will manage public land, and allocation of a parcel to a particular land use zone identifies that land for specific uses. Further, the implementation of an RLMP minimizes conflicting land uses and makes it easier to handle requests for use of public land.

TVA intends to manage its public land for an optimum level of multiple uses and benefits that protect and enhance natural, cultural, recreational, and visual resources in a cost-effective manner. Through this approach, TVA ensures that resource stewardship issues and stakeholder interests are considered while optimizing benefits and minimizing conflicts.

The land use zone definitions are below in Table 3-1.

Zone	Definition
Zone 1 Non-TVA Shoreland	Shoreland that TVA does not own in fee. This land may be privately owned or owned by a governmental entity other than TVA. Uses of this non-TVA land may include residential, industrial, commercial, and/or agricultural. In many instances, TVA may have purchased the right to flood and/or limit structures on this non-TVA land (i.e., flowage easement). TVA's permitting authority under Section 26a of the TVA Act applies to construction of structures on non-TVA shoreland.
	Non-TVA shoreland allocations are based on deeded rights and, therefore, will not change as a result of the lands planning process. This category is provided to assist in comprehensive evaluation of potential environmental impacts of TVA's allocation decision.

 Table 3-1.
 Land Use Zone Definitions

Zone	Definition		
Zone 2	Land currently used, or planned for future use, for TVA operations and public		
Project Operations	works projects, including:		
	<ul> <li>Land adjacent to established navigation operations — Locks, lock operations and maintenance facilities, and the navigation work boat dock and bases</li> </ul>		
	<ul> <li>Land used for TVA power projects operations — Generation facilities, switchyards, and transmission facilities and rights-of-way</li> </ul>		
	<ul> <li>Dam reservation land — Areas acquired and managed for the primary purpose of supporting the operation and maintenance of TVA dams and associated infrastructure; secondary uses may also include developed and dispersed recreation, maintenance facilities, miscellaneous TVA field offices, research areas, and visitor centers</li> </ul>		
	<ul> <li>Navigation safety harbors/landings — Areas used for tying off commercial barge tows and recreational boats during adverse weather conditions or equipment malfunctions</li> </ul>		
	<ul> <li>Navigation dayboards and beacons — Areas with structures placed on the shoreline to facilitate navigation</li> </ul>		
	<ul> <li>Public works projects — Includes rights-of-way for public utility infrastructure, such as sewer lines, water lines, transmission lines, and major highway projects</li> </ul>		
Zone 3 Sensitive Resource Management	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.		
	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:		
	<ul> <li>TVA-designated sites with potentially significant archaeological resources</li> </ul>		
	<ul> <li>TVA public land with sites/structures listed in or eligible for listing in the National Register of Historic Places</li> </ul>		
	<ul> <li>Wetlands — Aquatic bed, emergent, forested, and scrub-shrub wetlands as defined by TVA</li> </ul>		
	<ul> <li>TVA public land under easement, lease, or license to other agencies/individuals for resource protection purposes.</li> </ul>		
	<ul> <li>TVA public land fronting land owned by other agencies/individuals for resource protection purposes</li> </ul>		
	<ul> <li>Habitat protection areas — These TVA natural areas are managed to protect populations of species identified as threatened or endangered by the U.S. Fish and Wildlife Service, state-listed species, and any unusual or exemplary biological communities/geological features</li> </ul>		
	<ul> <li>Ecological study areas — These TVA natural areas are designated as suitable for ecological research and environmental education by a recognized authority or agency. They typically contain plant or animal populations of scientific interest or are of interest to an educational institution that would utilize the area</li> </ul>		
	Small wild areas — These TVA natural areas are managed by TVA or		

Zone	Definition	
	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	
	<ul> <li>River corridor with sensitive resources present — 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> </ul>	
	<ul> <li>Significant scenic areas — Areas designated for visual protection because of their unique vistas or particularly scenic qualities</li> </ul>	
	<ul> <li>Champion tree site — Areas designated by TVA as sites that contain the largest known individual tree of its species in that state. The state forestry agency "Champion Tree Program" designates the tree, while TVA designates the area of the sites for those located on TVA public land</li> </ul>	
	<ul> <li>Other sensitive ecological areas — Examples of these areas include heron rookeries, uncommon plant and animal communities, and unique cave or karst formations</li> </ul>	
Zone 4 Natural Resource Conservation	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:	
	TVA public land managed for wildlife or forest management projects	
	<ul> <li>TVA public land under easement, lease, or license to other agencies for wildlife or forest management purposes</li> </ul>	
	<ul> <li>TVA public land fronting land owned by other agencies for wildlife or forest management purposes</li> </ul>	
	<ul> <li>Dispersed recreation areas maintained for passive, dispersed recreation activities, such as hunting, hiking, bird watching, photography, primitive camping, bank fishing, and picnicking</li> </ul>	
	<ul> <li>Shoreline conservation areas — Narrow riparian strips of vegetation between the water's edge and TVA's back-lying property that are managed for wildlife, water quality, or visual qualities</li> </ul>	
	<ul> <li>Wildlife observation areas — TVA natural areas with unique concentrations of easily observed wildlife that are managed as public wildlife observation areas</li> </ul>	
	• River corridor without sensitive resources present — A river corridor is a linear green space along both stream banks of selected tributaries entering a reservoir managed for light boat access at specific sites, riverside trails, and interpretive activities. River corridors will be included in Zone 4 unless sensitive resources are present (see Zone 3)	
	Islands without sensitive resources or existing development	
Zone 5 Industrial	Land currently used or planned for future use for economic development, including businesses in distribution/processing/assembly and manufacturing. Preference will be given for businesses requiring water access.	
	There are two primary types of uses for TVA land allocated for Industrial: (1) access for water supply or structures associated with navigation such as barge	

Zone	Definition	
	terminals, mooring cells, etc., or (2) land-based development potential.	
	Areas included are:	
	<ul> <li>TVA public land under easement, lease, or license to other agencies/individuals/ entities for industrial purposes</li> </ul>	
	TVA public land fronting land owned by other agencies/individuals/entities for industrial purposes	
	In some cases, TVA land allocated to industrial use would be declared surplus and sold at public auction.	
	Types of development that can occur on this land include:	
	<ul> <li>Industry — Manufacturing, fabrication, and distribution/processing/assembly involving chemical, electronics, metalworking, plastics, telecommunications, transportation, and other industries. Industry does not include retail or service-based businesses</li> </ul>	
	<ul> <li>Industrial access — Access to the waterfront by back-lying property owners across TVA property for water intakes, wastewater discharge, or conveyance of commodities (i.e., pipelines, rail, or road). Barge terminals are associated with industrial access corridors</li> </ul>	
	<ul> <li>Barge terminal sites — Public or private facilities used for the transfer, loading, and unloading of commodities between barges and trucks, trains, storage areas, or industrial plants</li> </ul>	
	<ul> <li>Fleeting areas — Sites used by the towing industry to switch barges between tows or barge terminals that have both offshore and onshore facilities</li> </ul>	
	<ul> <li>Minor commercial landing — A temporary or intermittent activity that takes place without permanent improvements to the property. These sites can be used for transferring pulpwood, sand, gravel, and other natural resource commodities between barges and trucks</li> </ul>	
Zone 6 Developed Recreation	Land currently used, or planned for future use, for concentrated, active recreational activities that require capital improvement and maintenance of developed infrastructure, including:	
	<ul> <li>TVA public land developed for recreational purposes, such as campgrounds, day use areas, etc.</li> </ul>	
	<ul> <li>TVA public land under easement, lease, or license to other agencies/individuals/entities for developed recreational purposes</li> </ul>	
	<ul> <li>TVA public land fronting land owned by other agencies/individuals/entities for developed recreational purposes</li> </ul>	
	Residential use, long-term accommodations, and/or individually owned units are not permitted on land allocated for developed recreation.	
	Types of development that can occur on this land include:	
	<ul> <li>Public recreation — Recreation amenities developed and owned by a public agency that are open to the public. Public recreation areas may have varying levels of development, ranging from a water access site (e.g., launching ramp) to a marina facility. Facilities at public recreation areas could include playgrounds/play structures, picnic facilities, tennis courts, horseshoe areas, play courts, recreation centers, trails, greenways, natural areas, amphitheaters, food concessions (vending, snack bar), access to water for fishing and boating, swimming areas</li> </ul>	

Zone	Definition	
	and swimming pools, launching ramps, courtesy piers, canoe access, marina facilities owned by the public entity, parking, and campgrounds. Cabins or other overnight accommodations (other than campgrounds) are only permitted if the public recreation area is operated by a state or state agency as a component of a state park system.	
	<ul> <li>Public recreation areas and facilities are typically owned and operated by the federal, state, county, or local government. However, private entities may operate recreation facilities on public recreation land as concessionaires under agreement with the public entity controlling the property. The use of the facilities may be offered free or for a fee. Time-forward, public-private partnerships where facilities are owned by private investors will not be approved on public recreation land. All structures and facilities should be owned by the public entity.</li> </ul>	
	<ul> <li>Commercial recreation — Recreation amenities that are provided for a fee to the public intending to produce a profit for the private owner/operator. These primarily water-based facilities typically include marinas and affiliated support facilities such as stores, restaurants, campgrounds, and cabins and lodges. Where applicable, TVA will require appropriate compensation for the commercial use of the property.</li> </ul>	
Zone 7 Shoreline Access	TVA-owned land where Section 26a applications and other land use approvals for residential shoreline alterations are considered in accordance with TVA's Shoreline Management Policy.	
	Types of development/management that may be permitted on this land are:	
	<ul> <li>Residential water use facilities, e.g., docks, piers, launching ramps/driveways, marine railways, boathouses, enclosed storage space, and nonpotable water intakes</li> </ul>	
	<ul> <li>Shoreline access corridors, e.g., pathways, wooden steps, walkways, or mulched paths that can include portable picnic tables and utility lines</li> </ul>	
	<ul> <li>Shoreline stabilization, e.g., bioengineering, riprap, gabions, and retaining walls</li> </ul>	
	Shoreline vegetation management	

The draft RLMP Amendment was developed by a team of land managers and technical experts from TVA, who are familiar with the reservoir and its resources. The planning team made land use decisions by integrating public needs, environmental conditions, economic benefits, state and federal policies, and the original congressional intent of the Watts Bar Reservoir project. The process includes information from resource data, computer analysis, the public, other agencies, and knowledgeable TVA staff. This draft RLMP Amendment is consistent with the strategic direction of the NRP and meets the objectives of the CVLP. Furthermore, the categorization and management of TVA-owned shoreline access land along Watts Bar Reservoir tiers from the SMI EIS (TVA 1998).

In compliance with the National Environmental Policy Act (NEPA), the Watts Bar Reservoir Land Management Plan Amendment Draft Supplemental EA (Volume I) has been prepared to assess

#### Draft Watts Bar Reservoir Land Plan Amendment

the impacts of the proposed land use allocation changes on six parcels involving approximately 226 acres of TVA public land and the environmental review process change for Parcel 109 on Watts Bar Reservoir; the draft EA serves to supplement the 2009 RLMP and EIS. The NEPA process allows for the public and intergovernmental partners to review TVA's proposed land use allocations and provide input regarding the proposed changes and the potential effects on the environment.

Prior to proposing parcel allocations, the TVA planning team reviewed the characteristics of each parcel (i.e., location and existing conditions). TVA also reviewed deeds of tracts previously sold to private entities to identify existing shoreline access rights. In addition, the planning team honored existing commitments—that is, existing leases, licenses, and easements. Parcels were also allocated based on reservoir planning objectives and consideration of public input. Proposed land use allocations 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 zone definitions listed above in Table 3-1. Land use allocation changes were made to parcels or portions of parcels where there was a change in conditions or circumstances warranting a modification.

Some committed land uses are determined by the covenants and provisions of easements, leases, licenses, and sale and transfer agreements. Committed lands include the following: properties where TVA has granted land rights (easements, leases, etc.) for specific uses, properties where TVA has previously identified resources in need of protection, Project Operations lands (transmission lines, dam reservations, public infrastructure, etc.), and lands fronting wildlife management areas.

Approximately 223.6 acres (98.9 percent) of the TVA land proposed for an allocation change in this draft RLMP Amendment are committed, and approximately 2.4 acres (1.1 percent) of the TVA land are uncommitted. The location of known and potentially sensitive resources was used in determining the capability and suitability of potential uses for each parcel of land. Potential impacts to wetlands or other sensitive resources and any mitigation resulting from potential development of TVA public land would be evaluated during a site-specific environmental review for that project.

## 3.2 Reservoir Land Planning Goals and Objectives

The NRP established long-term reservoir lands planning goals and objectives. While these goals and objectives were established to guide planning decisions across the Valley, these same goals and objectives can be applied when planning specific reservoirs.

#### Goal

TVA will strive to continue to balance shoreline development, recreational use, sensitive and natural resource management, industrial use and other land uses in a way that maintains the quality of life and other important values across the region.

## Objectives

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.

- Identify land use zone allocations to optimize public benefit and balance competing demands for the use of public lands.
- 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.
- Provide a clear process by which TVA will respond to requests for use of TVA public land.
- Comply with federal regulations and executive orders.
- Enhance 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.
- Provide a mechanism that allows local, state, and federal infrastructure projects when the use is compatible with the zone allocation.

## 3.3 Parcel Allocations

TVA's reservoir lands planning process (Section 3.1) along with TVA's goals and objectives for planning reservoir lands (Section 3.2) were used to allocate TVA public land to one of the seven

planning zones as indicated in Table 3-2. Two of the proposed allocation changes include the entire parcel (Parcels 144 and 153), and four of the proposed allocation changes include a portion of a parcel with the changed portions being assigned a new parcel number (Parcels 89a, 197a, 256a, and 271a). TVA proposes to allocate 172.3 acres (76.2 percent) of the land to Zone 2 (Project Operations), 0.1 acre (<1 percent) to Zone 4 (Natural Resource Conservation), 12.6 acres (5.6 percent) to Zone 6 (Developed Recreation), and 41.0 acres (18.1 percent) to Zone 7 (Shoreline Access) for a total of 226.0 acres.

Parcel	Proposed Land Use Zone	Acres
89a	Zone 7 - Shoreline Access 0.4	
144	Zone 2 - Project Operations	172.3
153	Zone 7 - Shoreline Access	40.6
197a	Zone 6 - Developed Recreation	10.2
256a	Zone 4 - Natural Resource Conservation	0.1
271a <sup>1</sup>	Zone 6 - Developed Recreation	2.4
	226.0	

 Table 3-2.
 Proposed Land Use Allocations for Watts Bar Land Plan Amendment

<sup>1</sup> Denotes TVA reservoir lands that are considered Uncommitted

Table 3-3 below compares the percentage changes after the six proposed allocation changes under the draft RLMP Amendment with the current valleywide allocation percentages for TVA's 293,000 acres of public land (based on the land use allocations in Board-approved RLMPs), and the updated 2017 CVLP target allocation ranges. The 2,796.1 acres of power property included in the 2009 RLMP were excluded when determining the percentages in Table 3-3.

Allocation Designation		Valleywide Allocation (Percent)	CVLP Range (Percent)	Valleywide Allocation After Proposed Watts Bar Amendment (Percent)
Zone 2	Project Operations	8.7	7 to 10	8.8
Zone 3	Sensitive Resource Management	16.1	14 to 18	16.0
Zone 4	Natural Resource Conservation	60.0	56 to 63	60.0
Zone 5	Industrial	1.7	1 to 3	1.7
Zone 6	Developed Recreation	8.4	8 to 10	8.4
Zone 7	Shoreline Access	5.1	5 to 6	5.1

 Table 3-3.
 Allocation Range Comparisons with Proposed Watts Bar Amendment

The proposed allocation changes would result in minor changes to the current valleywide allocation percentages, and the proposed allocation changes would remain to be within the

2017 CVLP allocation ranges. In conclusion, the additional analysis conducted during the development of the draft RLMP Amendment supports the CVLP.

### 3.4 Property Administration

As stewards of public land, TVA uses the RLMPs, 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 should be made to the TVA Public Land Information Center at 800-TVA-LAND or 800-882-5263 between 8 a.m. and 6 p.m. eastern time Monday through Friday.

Pursuant to the TVA Land Policy, TVA would consider changing a land use designation outside of the normal planning process only for the purpose of water access for industrial or commercial recreational operations on privately owned back-lying land or to implement TVA's SMP.

Additionally, there are a small number of TVA parcels in the Valley that have deeded access rights for shoreline access that are currently utilized for other uses such as commercial recreation and industrial. Should the private backlying land become residential, a request for a change of allocation of the parcel to Shoreline Access (Zone 7) would be subject, with the appropriate environmental review, to action by the TVA Board, or its designee, or to Board-approved policy.

Consistent with the TVA Land Policy, those parcels or portions of parcels that have become fragmented from the reservoir may be declared surplus and sold at public auction. Public works/utility projects, such as easements for pipelines, power or communication wires, roads, or other public infrastructure, proposed on TVA land that would not affect the zoned land use or sensitive resources would not require an allocation change as long as such projects would be compatible with the use of the allocated zone. Proposed public works/utility projects would be subject to a project-specific environmental review. Any other requests involving a departure from the planned uses would require appropriate approval. Proposals consistent with TVA's policies and the allocated use, and otherwise acceptable to TVA, will be reviewed in accordance with NEPA and must conform to the requirements of other applicable environmental regulations and other legal authorities.

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## **CHAPTER 4. PARCEL DESCRIPTIONS**

### Introduction

This chapter describes the uses determined to be most suitable for each parcel of TVA land associated with a proposed land use allocation change or a proposed environmental review process change in this draft RLMP Amendment.

The parcel descriptions include the land use zone allocations and relevant data regarding the planned uses are provided for each parcel and include existing land uses, physical characteristics of the land, presence of existing private water use facilities, and any special considerations related to the future use. All existing private water use facilities with TVA permits are grandfathered, provided they are constructed in accordance with the plans approved by TVA.

All uses of TVA public lands are subject to federal, state and local laws, rules and regulations. If there is a conflict between federal rules/laws and other laws, federal rules/laws prevail. Failure to comply may result in immediate removal from the property and other actions deemed appropriate by TVA and/or law enforcement officials. Land use zone definitions are included in Table 3-1 and are available at <a href="http://www.tva.com/landplanzones">www.tva.com/landplanzones</a>.

In addition to allowable land uses and the requirements of TVA's policies and regulations described in Section 1.2, TVA has published rules for the use of public land. Specific rules for the use of developed and undeveloped TVA public lands are available at <u>www.tva.com/publiclandrules</u>. Examples of uses that are not allowable on all TVA public lands include leaving trash or litter and partaking in land-disturbing activities such as construction of temporary or permanent structures and vegetation cutting or removal without TVA approval. Furthermore, recreational use of motorized vehicles such as all-terrain vehicles (ATVs) is prohibited on undeveloped TVA public lands—including within reservoir drawdown areas.

Also, TVA's Public Lands Information Center (800-882-5263 or 800-TVA-LAND) is a source for answers to your questions about public land use.

### Parcel 89a – (0.4 acre)

Land Use Allocation: Zone 7, Shoreline Access

This parcel is one small, contiguous tract of land that is relatively flat to gently sloping. Parcel 89a fronts a portion of former TVA property (XWBR-328) that has gained shoreline access rights (WBR-122,S.1Q) along 145 feet of shoreline under TVA's former Maintain and Gain Policy. The associated property where shoreline access rights were extinguished along 150 feet of shoreline of former TVA property (XWBR-122,S.1X) is located in Rhea County at Tennessee River mile (TRM) 536.0R (adjacent to Parcel 256a). There is a very low probability for the presence of cultural resources on this parcel, and requests for private water use facilities will be considered.

Table 4-89a Parcel Information	
Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Roane, Tennessee
Topographic Map (Sheet No. and Quadrant)	130-SW
TVA D-Stage Map Numbers	53
Stream Mile and Bank	TRM 577.3L
Land Use/Land Cover	Shoreland with scattered trees and shrubs
Current Agreements/Commitments	Deed modification (WBR-122,S.1Q), recreation easement (WBR-720RE), and community water use facility

Table 4-89a	<b>Parcel Information</b>

#### Parcel 89 – (34.6 acres)

Land Use Allocation: Zone 4, Natural Resource Conservation

This parcel is two noncontiguous tracts of land, and the upstream portion of this parcel (near TRM 577.0) is relatively flat to gently sloping. The parcel consists of a predominantly bottomland hardwood forest cover type along the shoreline with extensive pine bark beetle killed areas behind it. The pine beetle killed areas are reverting to early successional habitat, and there is a high presence of invasive, exotic species including privet, multi-flora rose, and Japanese honeysuckle in the area. Furthermore, the area provides good habitat for white-tailed deer, woodpeckers, and other common wildlife species, and the dead pine snags provide nesting habitat for osprey and woodpeckers as well as other cavity nesting species. The most upstream portion of this parcel fronts former TVA property (XWBR-328), which does not have the necessary land rights to request private water use facilities. There is a medium probability for

the presence of cultural resources on this portion of the parcel.

The downstream portion of this parcel (near TRM 576.0) is comprised of a steeper bank area with a relatively narrow strip of hardwoods including oaks, hackberry, elms, sycamore, and hop hornbeam. Downstream, the understory is sparse due to extensive past and present grazing pressure from cattle on the adjacent farm. Some shoreline sections of this downstream portion are severely eroding, especially where cattle have been accessing the reservoir to water. This area is utilized by species such as osprey, resident Canada geese, and belted kingfishers; however, the overall wildlife habitat value has been severely degraded by the ongoing cattle grazing activity. This cattle activity is also degrading reservoir water quality on a localized basis. Future management emphasis on this parcel should focus on the exclusion of cattle and/or the restriction of cattle access to the reservoir via a defined water lane. There is a medium probability for the presence of cultural resources on this portion of the parcel. Furthermore, the property abutting the downstream portion of the parcel was formerly owned by Bowater who sold it to a private individual. The former Bowater property also does not have shoreline access rights. Due to the fact that the backlying property owners do not have the necessary rights for private water use facilities, requests for such facilities would not be considered.

Table 4-89Parcel Information	
Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Roane, Tennessee
Topographic Map (Sheet No. and Quadrant)	53
TVA D-Stage Map Numbers	130-SW
Stream Mile and Bank	TRMs 575.9 to 577.5L
Land Use/Land Cover	Bottomland and hardwood forest, presence of invasive exotic species, shoreland with scattered trees and shrubs, some areas of eroding shoreline.
Known Dispersed Recreation Opportunities	None identified
Current Agreements/Commitments	None identified

#### Parcel 109 – (10.0 acres)

Land Use Allocation: Zone 7, Shoreline Access

This parcel is located on the main channel of the Tennessee River with the Marble Bluff Subdivision located on the backlying private property. There is a medium probability for the presence of cultural resources. Additionally, water use facilities have been permitted along portions of the shoreline, and future requests for private water use facilities would be considered; however, there are wetlands on portions of this parcel and potential impacts to wetlands or other resources and any resulting mitigation from proposed water use facilities would be evaluated during a site-specific environmental review.

Table 4-109 Parcel Information	
Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Roane, Tennessee
Topographic Map (Sheet No. and Quadrant)	130-SW
TVA D-Stage Map Numbers	53, 68, 69, and 70
Stream Mile and Bank	TRMs 577.2 to 578.7R
Land Use/Land Cover	Shoreland with scattered wetlands, woodlands, shrubs, and herbaceous vegetation
Current Agreements/Commitments	Approved water use facilities

#### Parcel 144 – (172.3 acres)

Land Use Allocation: Zone 2, Project Operations

This parcel is two noncontiguous tracts of shoreland that encompass most of the riparian zone between River Road and the Clinch River arm of Watts Bar Reservoir on the former Breeder Reactor Site, now known as the Clinch River Site. The Zone 2 (Project Operations) allocation serves to support TVA's plans to consider the Clinch River Site for future construction and operation of small modular nuclear reactors. The inland boundary of this parcel is largely bordered by an unpaved road that was originally a patrol road for the Manhattan project and is now known as River Road. This parcel, which includes several archaeological sites, scattered wetland areas, and a large wetland on the northwest side of the parcel near the site entrance, has been managed to periodically monitor sensitive resources. The parcel has been surveyed for historic properties (Phase I) and has a high probability for the presence of cultural resources. The state-listed plant spreading false-foxglove was once recorded on the parcel and there is potential for the plant to occur along the shoreline. This parcel provides habitat for a variety of wildlife species including semi-aquatic mammals such as beaver, and resident birds such as northern cardinal and Carolina wrens, and neo-tropical migrant birds such as northern parula, yellow-billed cuckoo, and white-eyed vireo. Numerous reptile and amphibian species also utilize this shoreline habitat. Potential impacts to wetlands or other sensitive resources and any mitigation resulting from the potential development of a TVA power generation facility would be evaluated during a site-specific environmental review for that project and would include a public review and opportunity for comment. However, requests for private water use facilities would not be considered.

Table 4-144 Parcel information	
Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Roane, Tennessee
Topographic Map (Sheet No. and Quadrant)	130-NE and 130-NW
TVA D-Stage Map Numbers	61
Stream Mile and Bank	Clinch River miles 16.4 to 17.5R
Land Use/Land Cover	Evergreen forest, deciduous forest, young wetland forest, and wetlands
Known Dispersed Recreation Opportunities	None identified
Current Agreements/Commitments	Revocable license to Tennessee Wildlife Resource Agency

Table 1-111 Parcel Information

#### Parcel 153 – (40.6 acres)

Land Use Allocation: Zone 7, Shoreline Access

This parcel is a 3-mile-long, linear tract of shore land that fronts residential property including the Gunters Field and Kile subdivisions. This parcel was affected by the 2008 Kingston ash spill and was one of nine parcels excluded from the 2009 RLMP. TVA acquired the private backlying property after the ash spill as part of the ash recovery project and later decided that returning these properties to their pre-spill state of residential use would be in the best interest of the local community. Thus, in 2015, TVA declared the backlying property surplus, and the land was returned to private ownership for residential use. There is a low probability for the presence of cultural resources on this parcel. Water use facilities have been permitted along the shoreline and future requests for private water-use facilities will be considered.

Table 4-153Parcel Information	
Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Roane, Tennessee
Topographic Map (Sheet No. and Quadrant)	130-NW
TVA D-Stage Map Numbers	39, 45, and 46
Stream Mile and Bank	Emory River miles 0.8 to 3.9L
Land Use/Land Cover	Shoreland with scattered trees, shrubs, and maintained vegetation
Current Agreements/Commitments	Approved water use facilities

#### Parcel 197a – (10.2 acres)

Land Use Allocation: Zone 6, Developed Recreation

This parcel is located on the right bank of the main channel of the Tennessee River and fronts property acquired by Tennessee Wildlife Resource Agency (TWRA) for public recreation purposes. Potential public water access facilities could include a boat-launching ramp and a fishing pier, and though there is a high probability for the presence of cultural resources on this parcel, requests for use of TVA lands and associated water-based structures to support developed recreation purposes would be considered.

Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Roane, Tennessee
Topographic Map (Sheet No. and Quadrant)	123-SE
TVA D-Stage Map Numbers	31, 34, and 38
Stream Mile and Bank	TRM 566.4R
Land Use/Land Cover	Shoreland with scattered trees and shrubs
Current Agreements/Commitments	None identified

|--|

#### Parcel 197 – (26.6 acres)

Land Use Allocation: Zone 7. Shoreline Access

This parcel is located on the main channel of the Tennessee River, surrounding a TRWA public boat-launching ramp and fronting residential property including the Westshore Estates and Lake Forest Estates subdivisions. This parcel also includes small shoreline areas at Bowman Bend Estates; the shoreline areas exist only where the backlying property owner abuts the 750-foot contour, and although access is in a few low-lying areas, the shoreline access rights do not extend across the road to the reservoir. Additionally, there is a high probability for the presence of cultural resources on this parcel. Water use facilities have been permitted along the shoreline, and future requests for private water-use facilities will be considered.

Т	able 4-197.	Parcel Information	
		component and Public ment Opportunities	Parcel Specific Information
	C	County, State	Roane, Tennessee
		pographic Map No. and Quadrant)	123-SE
	TVA D-S	Stage Map Numbers	31, 34, and 38
	Strea	m Mile and Bank	TRMs 562.2R to 567.1R

Location Component and Public Involvement Opportunities	Parcel Specific Information
Land Use/Land Cover	Shoreland with scattered trees, shrubs, and herbaceous vegetation
Current Agreements/Commitments	Approved water-use facilities

#### Parcel 256a – (0.1 acre)

#### Land Use Allocation: Zone 4, Natural Resource Conservation

This small parcel exists on the right bank of the main river channel of the Tennessee River. Parcel 256a fronts a portion of former TVA property (XWBR-122) where the adjacent backlying property owner extinguished the shoreline access rights (XWBR-122,S.1X) along 150 feet of shoreline under TVA's former Maintain and Gain Policy. The associated property where shoreline access rights were gained along 145 feet of shoreline of former TVA property (WBR-122,S.1Q) is located in Roane County at TRM 577.3L adjacent to Parcel 89a. There is a medium probability for the presence of cultural resources on Parcel 256a, and the adjacent backlying property no longer has shoreline access rights. Requests for private water use facilities will not be considered at this location.

Table 4-256a. Parcel Information	
Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Rhea, Tennessee
Topographic Map (Sheet No. and Quadrant)	118-NE and 124-NW
TVA D-Stage Map Numbers	14 and 17
Stream Mile and Bank	TRM 536.0R
Land Use/Land Cover	Forested riparian on moderate slope
Known Dispersed Recreation Opportunities	None identified
Current Agreements/Commitments	Deed modification (WBR-122,S.1X)

#### Table 4-256a **Parcel Information**

#### Parcel 256 – (34.1 acres)

Land Use Allocation: Zone 7, Shoreline Access

This parcel is on the main channel of the Tennessee River, is comprised of two noncontiguous tracts of land, and fronts residential property including the Lakeside and Paradise Cove subdivisions. There is a medium probability for the presence of cultural resources on this parcel. Furthermore, water use facilities have been permitted along the shoreline, and future requests for private water use facilities will be considered.

Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Rhea, Tennessee
Topographic Map (Sheet No. and Quadrant)	118-NE and 124-NW
TVA D-Stage Map Numbers	14 and 17
Stream Mile and Bank	TRMs 536.0 to 537.2R
Land Use/Land Cover	Shoreland with scattered trees, shrubs, and herbaceous vegetation
Current Agreements/Commitments	Approved water use facilities

#### Table 4-256.Parcel Information

#### Parcel 271a - (2.4 acres)

Land Use Allocation: Zone 6, Developed Recreation This parcel is one contiguous tract of land and is located across the highway from Spring City Park (Parcel 270). The topography is mostly flat, and the land cover is primarily maintained vegetation and early successional vegetation. On this parcel, there is a medium probability for the presence of cultural resources, and requests for use of TVA lands and associated waterbased structures to support developed recreation purposes would be considered.

Table 4-271a. Parcel Informat
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Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Rhea, Tennessee
Topographic Map (Sheet No. and Quadrant)	118-NE
TVAD-Stage Map Numbers	12-1
Stream Mile and Bank	Piney River mile 6.0 – Upper Piney River
Land Use/Land Cover	Early successional and herbaceous vegetation
Current Agreements/Commitments	None identified

#### Parcel 271 – (11.6 acres)

Land Use Allocation: Zone 4, Natural Resource Conservation

This parcel is one contiguous tract of land and is located along both sides of Piney River and upstream of Toestring Valley Road in Spring City; much of the parcel is adjacent to Spring City Park (Parcel 270). The most upstream portion of the parcel supports some forested riparian habitat on a moderate slope. This area provides some limited habitat for wildlife, and the adjacent slough provides local floodwater attenuation/storage during major flood events on the Piney River. There is a medium probability for the presence of cultural resources. Requests for private water use facilities will not be considered.

#### Table 4-271.Parcel Information

Location Component and Public Involvement Opportunities	Parcel Specific Information
County, State	Rhea, Tennessee
Topographic Map (Sheet No. and Quadrant)	118-NE
TVA D-Stage Map Numbers	12-1
Stream Mile and Bank	Piney River mile 6.0 – Upper Piney River
Land Use/Land Cover	Forested riparian on moderate slope and herbaceous vegetation
Known Dispersed Recreation Opportunities	None identified
Current Agreements/Commitments	None identified

## CHAPTER 5. PLANNING TEAM

Kelly R. Baxter	
Position:	Senior Specialist, Reservoir Lands Planning
Education:	M.S., Plant Science and Landscape Systems; B.S., Botany
Experience:	15 years in NEPA Compliance, Land Management, and
	Environmental Impacts Evaluation
Involvement:	Document preparation and Project manager
Chellye L. Campbell	
Position:	Senior Specialist, Land Policy
Education:	B.S., Biology
Experience:	18 years in Planning and Managing Land
Involvement:	Deed interpretation and Land Policy guidance
Janet L. Duffey	
Position:	Program Manager, Reservoir Land Use and Permitting
Education:	B.S., Civil Engineering
Experience:	22 years in Land Use and Permitting, 8 years in River Operations
	and 3 years in Floodplain Management
Involvement:	Deed interpretation
David B. Forster	
Position:	Specialist, Recreation Agreements
Education:	M.B.A., Business Management; B.A., Outdoor Recreation Management
Experience:	2 years in Recreation Management
Involvement:	Recreation Management
Jerry G. Fouse	
Position:	Recreation Specialist
Education:	M.B.A., B.S., Forestry and Wildlife
Experience:	40 years in Natural Resources – Recreation Planning and
	Economic Development
Involvement:	Planning Team and Recreation Management
S. Clay Guerry	
Position:	Specialist, Recreation Strategy
Education:	M.S., Zoology; M.S., Parks, Recreation and Tourism
	Management; B.S., Biology
Experience:	14 years in Natural Resources – Recreation Planning
Involvement:	Natural Resource Management

<b>David B. Harrell</b> Position: Education:	Recreation Agreements Specialist M.S., Forestry with emphasis in Outdoor Recreation; B.S., Wildlife and Fisheries Management
Experience:	30 years in Environmental Education, Natural Resource Sociology, Recreation Planning, and Managing Developed Recreation areas
Involvement:	Recreation Management
Ruth M. Horton	
Position:	Program Manager, Environmental Support
Education:	B.A., History
Experience:	40 years' experience at TVA; over 20 years in land planning, NEPA, and environmental compliance; 15 years' experience supporting nuclear power projects.
Involvement:	Clinch River Site guidance
Thomas O. Maher	
Position:	Senior Archaeologist
Education:	Ph.D. Anthropology
Experience:	35 years in the field of Archaeology
Involvement:	Cultural Resource Management
Leonard L. McCurdy, Jr.	
Position:	Senior Specialist, Reservoir Land Use and Permitting
Education:	J.D., Law; B.S., Environmental Studies - Chemistry
Experience:	26 years in the field of Law including 19 years in TVA real property rights
Involvement:	Deed interpretation and Land Policy guidance
Mark T. Morrissey	
Position:	Geographic Analyst
Education:	B.S., Geography
Experience:	4 years in Planning and Managing Land; 5 years in Industrial Safety and Compliance
Involvement:	Preparation of Geographic Information Systems Mapping
Karen E. Rylant	
Position:	Senior Specialist, Section 26a Policy and Process
Education:	Ph.D., Agronomy (Soil Chemistry); M.S., Soil Fertility; B.A., Chemistry, B.A., Geology
Experience:	8 years in Land and Shoreline Management, 8 years in Environmental Research
Involvement:	Deed interpretation and Section 26a guidance

# CHAPTER 6. LITERATURE CITED

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    - \_. 2012. *Kingston Recovery Project Land Management Plan*. Retrieved from <u>https://www.tva.com/Environment/Environmental-Stewardship/Land-Management/Watts-Bar-Reservoir-Land-Management-Plan</u> (accessed March 2018).
    - \_. 2017. Multiple Reservoir Land Management Plans Environmental Impact Statement, Volume 1. Retrieved from <u>https://www.tva.com/Environment/Environmental-</u> <u>Stewardship/Land-Management/Updates-to-8-Reservoir-Land-Management-Plans-and-</u> <u>the-Comprehensive-Valleywide-Land-Plan</u> (accessed March 2018).

# GLOSSARY

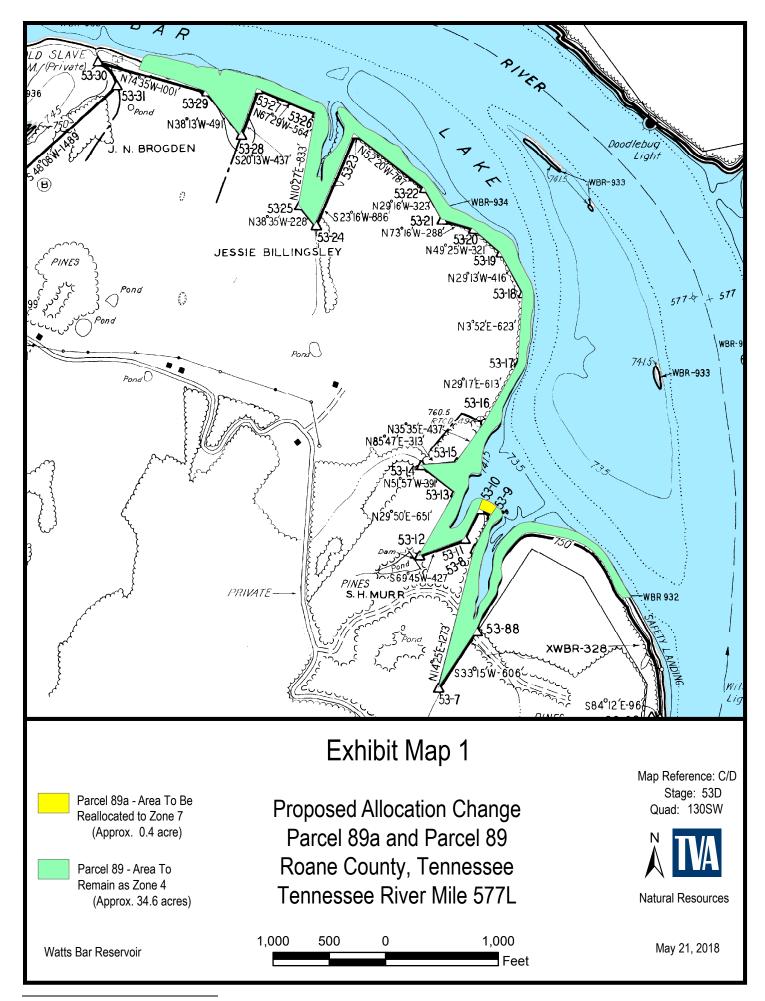
acre cultural resources dispersed recreation	A unit measure of land area equal to 43,560 square feet. Archaeological, historic, and architectural resources. Recreation of an informal nature such as hunting, hiking, biking, bird watching, photography, primitive camping, bank fishing, and
	picnicking, etc. that occur on TVA land. These activities are not associated with developed facilities although some improvements may occur for access, health and safety, or to protect the environment.
drawdown	Area of reservoirs exposed between full summer pool and minimum winter pool levels during annual drawdown of the water level for flood control.
listed species	Uncommon and rare species that have special state and/or federal legal status for their protection and recovery.
early successional habitat	Habitat with vigorously growing grasses, forbs, shrubs and trees which provide excellent food and cover for wildlife but need disturbance to be maintained. Examples of early successional habitats include weedy areas, grasslands, old fields or pastures, shrub thickets (e.g. dogwood or alder), and young forest.
flowage easement tracts	Privately owned lakeshore properties where TVA has (1) the right to flood the land as part of its reservoir operations, (2) no rights for vegetation management, and (3) the authority to control structures, under Section 26a of the <i>TVA Act</i> .
forest	Vegetation having tree crowns overlapping, generally forming 60-100 percent cover (Grossman et al. 1998).
herbaceous vegetation	Dominated by forbs, generally forming at least 25 percent cover; other life-forms with less than 25 percent cover (Grossman et al. 1998).
historic property	Defined in 36 CFR § 800.16(I) as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places."
Maintain and Gain program	The former Maintain and Gain program allowed TVA to consider requests from property owners without shoreline access rights to obtain those rights in exchange for eliminating shoreline access rights of equal or preferably greater length and value; such exchanges would result in no net loss, or preferably a net gain, of public shoreline. Program was removed from the SMP in August 2009,
marginal strip	The narrow strip of land retained by TVA between the summer operating pool and backlying tracts that are owned or controlled by private or other public entities.
maximum shoreline contour (MSC)	An elevation typically 5 feet above the top of the gates of a TVA dam. It is often the property boundary between TVA marginal strip property and adjoining private property.
mitigation	An action that either will result in avoidance or an effect, or cause the results of an activity to be minor in significance.
riprap	Stones placed along the shoreline for bank stabilization and other

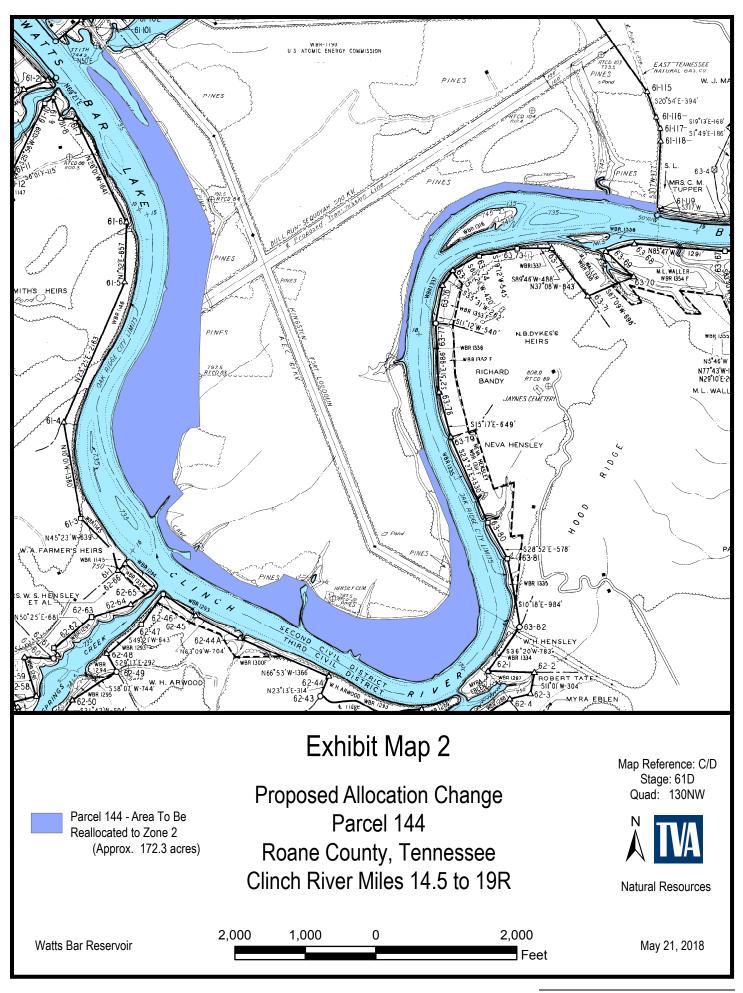
	purposes.
riparian zone	An area of land that has vegetation or physical characteristics reflective of permanent water influence. Typically a streamside zone or shoreline edge.
scrub-shrub	Woody vegetation less than about 20 feet tall. Species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions.
shoreland	The surface of land lying between the minimum pool elevation of a TVA reservoir and the maximum shoreline contour or TVA back–lying property (whichever is further).
shoreline	The line where the water of a TVA reservoir meets the shore when the water level is at the normal summer pool elevation.
shoreline access rights	TVA land encumbered with deeded or implied rights held by adjacent property owners. The deeded or implied rights allow individuals to construct water use facilities upon receipt of TVA's written approval of plans.
Single Use Parcel Allocation methodology	Land uses under this planning methodology allocate land into broad categories or "zones" including Zone 1 (Non-TVA Shoreland), Zone 2 (Project Operations), Zone 3 (Sensitive Resource Management), Zone 4 (Natural Resource Conservation), Zone 5 (Industrial), Zone 6 (Developed Recreation) and Zone 7 (Shoreline Access).
structure profile	A contour established by TVA which marks the elevation above which structures are permitted on lands which TVA either owns or on which TVA has certain land rights. The structure profile was created to avoid increasing flood damage potential.
summer pool elevation	The normal upper level to which the reservoirs may be filled. Where storage space is available above this level, additional filling may be made as needed for flood control.
upland	The higher parts of a region, not closely associated with streams or lakes.
wetlands	As defined in <i>TVA Environmental Review Procedures</i> , wetlands are "those areas inundated by surface or ground water 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 seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, mud flats, and natural ponds."
wildlife management area	Land and/or water areas designated by state wildlife agencies, such as the Tennessee Wildlife Resources Agency (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.
woodland	Open stands of trees with crowns not usually touching, generally forming 25 to 60 percent cover (Grossman et al. 1998).

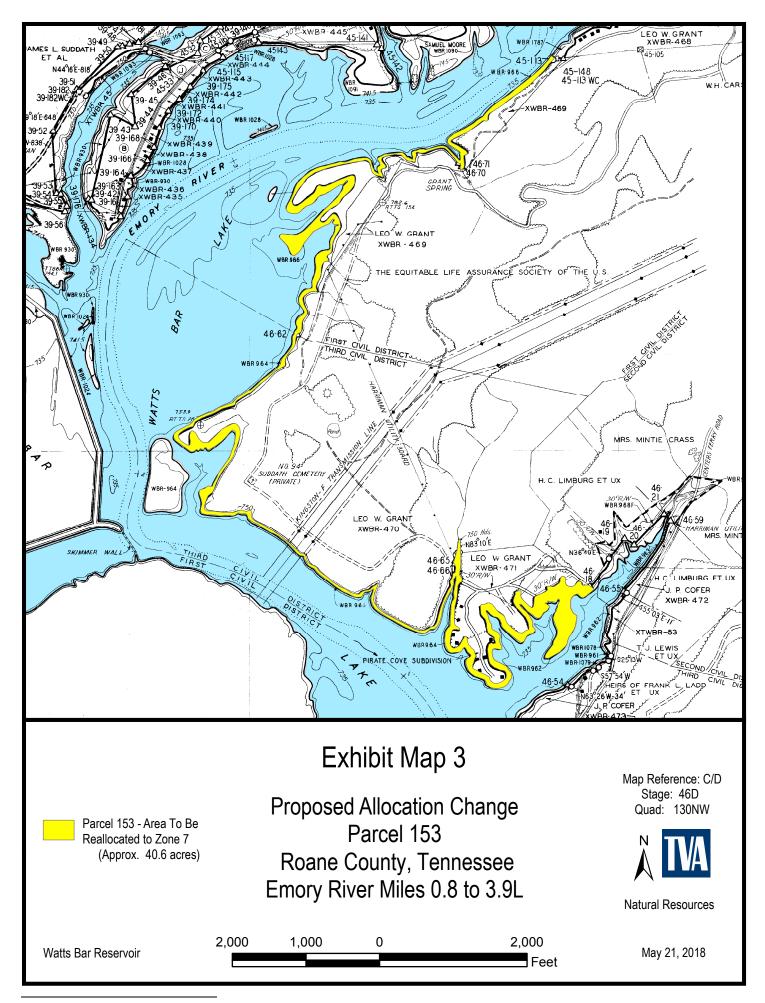
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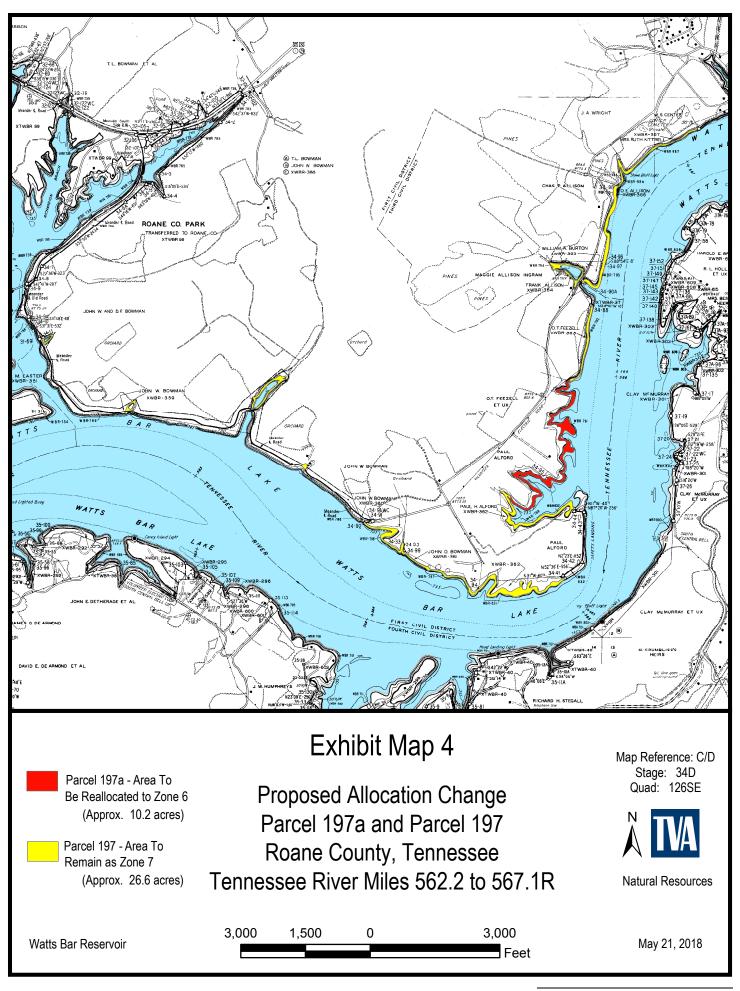
Appendix A – Proposed Allocation Change Exhibit Maps

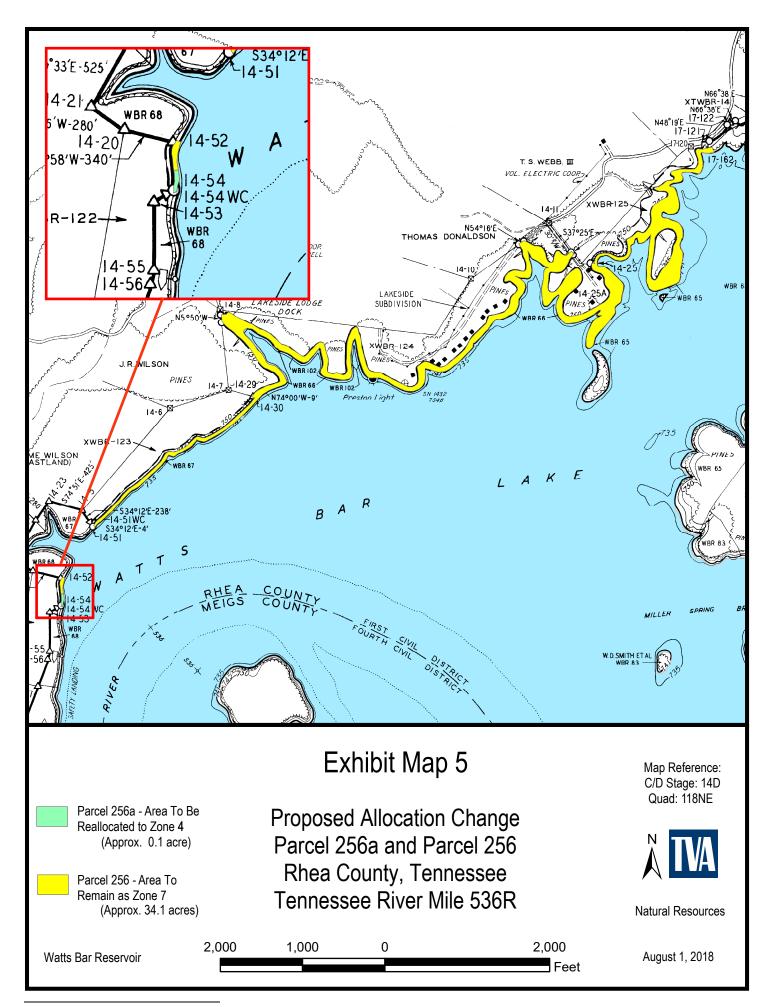
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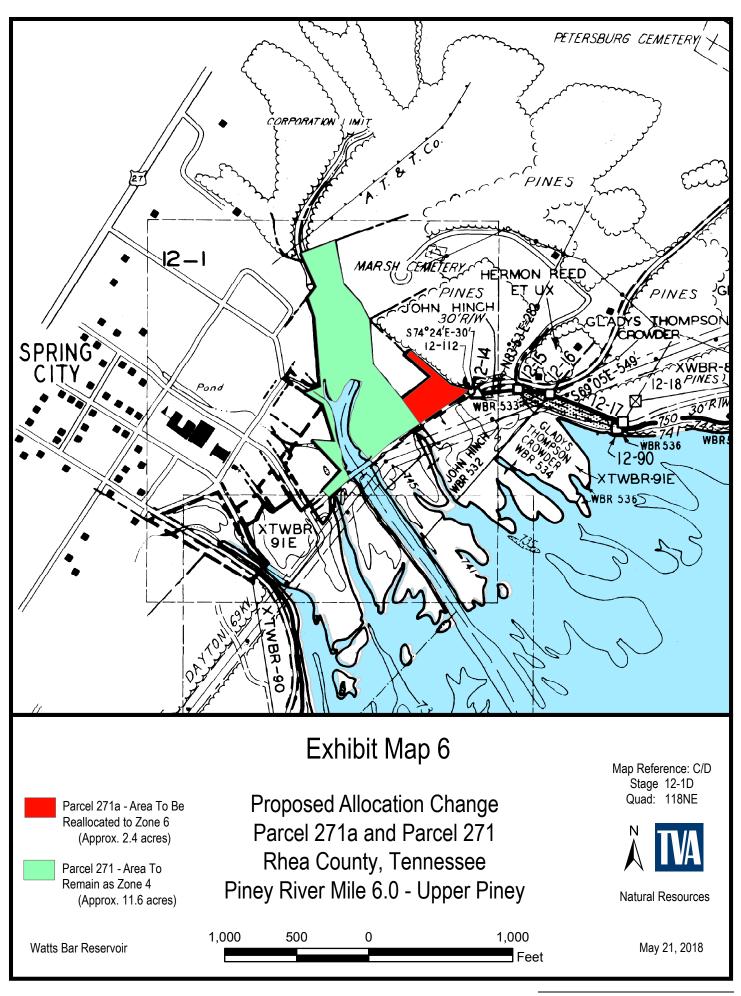








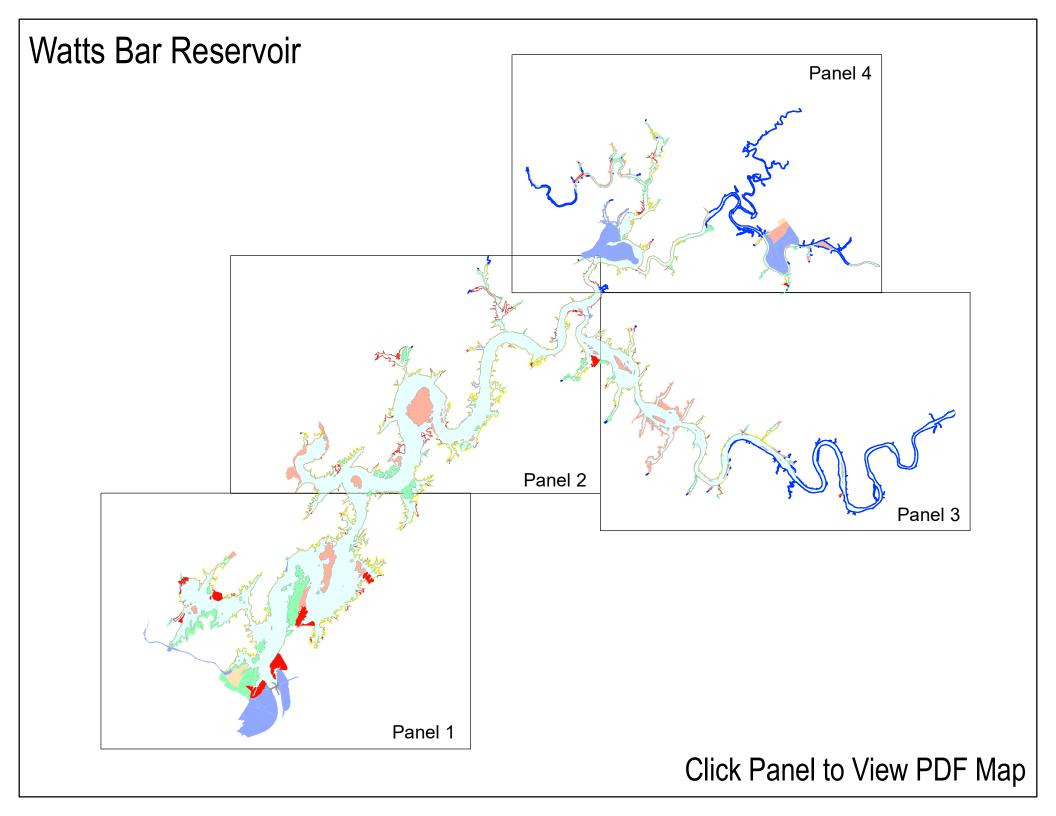




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Appendix B

Appendix B – Draft Watts Bar Land Plan Amendment Maps – Panels 1 through 4



## **APPENDIX B**

## Table B-1. Watts Bar Reservoir - Panel Map Parcel Directory

					-	_	
Parcel	Zone	Acreage	Panel	Parcel	Zone	Acreage	Panel
1	2	10.5	1	12-41	6	2.0	2
2	2	23.7	1	12-43	6	0.8	2
3	2	280.4	1	12-44	6	2.7	2, 4
4	2	145.6	1	12-45	6	1.6	4
5	6	249.0	1	12-47	6	4.5	4
6	7	4.2	1	12-48	6	10.2	4
7	4	728.7	1	12-49	6	2.8	4
8	3	141.0	1	12-50	6	8.4	4
9	6	122.5	1	12-51	6	1.2	4
10	6	78.4	1	12-53	6	6.1	4
11	7	58.6	1	12-54	6	1.5	4
12-1	6	1.6	1	12-55	6	1.4	4
12-2	6	3.0	1	12-56	6	2.6	3
12-3	6	1.7	1	12-59	6	3.8	3
12-4	6	4.5	1	12-60	6	1.7	3
12-6	6	5.1	1	12-62	6	1.6	3
12-8	6	3.4	1	12-63	6	3.2	4
12-13	6	2.4	1	12-66	6	3.8	3
12-16	6	2.9	1	12-68	6	6.3	3
12-17	6	2.3	1	12-69	6	5.2	3
12-18	6	2.1	1	12-70	6	4.4	3
12-20	6	5.6	1	13	6	5.2	1
12-22	6	4.3	2	14	6	1.8	1
12-23	6	3.7	2	15a	3	4.1	1
12-24	6	3.3	2	15	7	54.5	1
12-26	6	1.5	2	16a	3	3.0	1
12-27	6	2.3	2	16	7	20.8	1
12-29	6	4.9	2	17a	4	3.2	1
12-30	6	5.2	2	17	3	2.6	1
12-31	6	1.4	2	18	6	10.2	1
12-32	6	2.9	2	19	2	2.1	1
12-34	6	4.1	2	20	6	3.6	1
12-35	6	3.4	2	21	7	11.2	1
12-36	6	3.9	2	22	6	58.1	1
12-37	6	0.8	2	23	6	17.4	1
12-38	6	2.2	2	24	3	83.9	1
12-39	6	6.7	2	25	7	90.8	1

## Draft Watts Bar Reservoir Land Plan Amendment

Parcel	Zone	Acreage	Panel	Parcel	Zone	Acreage	Panel
26	3	7.6	1	67	4	4.0	2
27	6	1.8	1	68	6	24.3	2, 4
28	7	36.8	1	69	3	4.2	2, 4
29	6	2.3	1	70a	2	1.3	2
30	4	7.6	1	70	4	3.6	2
31	4	6.7	1	71	7	14.5	2
32	7	18.6	1	72	4	113.2	2
33	4	13.0	1	73	7	27.1	2
34	7	25.3	1, 2	74	6	77.7	2
35	4	18.2	1, 2	75	3	15.4	2
36	7	54.3	1, 2	76	4	29.9	2
37	6	2.9	1, 2	76	4	29.9	3
38	7	35.5	1, 2	77	7	10.7	3
39	4	7.5	1, 2	78	3	82.6	3
40	4	175.5	1, 2	79	4	3.8	3
41	6	2.3	2	80	4	14.9	3
42	6	0.9	2	81	7	25.6	3
43	7	46.0	2	82	4	37.2	3
44	4	23.1	2	83	7	19.0	3
45	6	32.5	2	84	4	1.6	3
46	3	785.0	2	85	2	4.4	3
47	3	21.8	2	86	6	0.7	3
48	7	66.0	2	87	4	10.6	3
49	4	2.2	2	88	3	647.7	3
50	3	20.1	2	89a	7	0.3	3
51	4	42.2	2	89	4	34.7	3
52	7	12.4	2	90	2	1.4	3
53	7	45.4	2	91	3	11.9	3
54	4	21.8	2	92	4	34.9	3
55	4	10.0	2	93	3	10.4	3
56	7	61.7	2	94	3	11.2	3
57	3	8.1	2	95	7	16.0	3
58	4	9.2	2	96	4	11.5	3
59	7	35.0	2	97	3	39.1	3
60	4	1.5	2	98	4	9.4	3
61	7	31.2	2	99	6	10.2	3
62	4	4.9	2	100	4	11.2	3
63	7	46.7	2	101	3	21.5	3
65	3	10.4	2	102	7	53.3	3
66	7	28.7	2	103	3	14.9	3
00	,	20.7	<u>ک</u>	105	5	17.7	J

Parcel	Zone	Acreage	Panel	Parcel	Zone	Acreage	Panel
104	4	7.2	3	142	2	302.5	4
105	4	1.8	3	143	2	181.6	4
106	4	11.7	3	144	2	172.3	4
107	7	19.7	3	145	2	265.7	4
108	4	21.9	3	146	3	265.5	4
109	7	10.0	3	147	5	54.2	4
110	2	1.4	3	148	2	10.5	4
111	7	15.1	3	149	3	13.3	4
112	7	25.8	3	150	7	7.4	4
113	7	5.5	3	151	7	16.6	4
114	6	4.0	3	152a	4	2.2	4
115	7	11.1	3	152	3	4.2	4
116	6	7.5	3	153	7	40.6	4
117	7	27.7	3	154	7	31.1	4
118	7	25.2	3	155	4	10.4	4
119	7	8.4	2	156	4	15.2	4
120	2	18.8	2	157	7	27.0	4
121	6	18.1	3, 4	158	4	22.5	4
122	2	16.6	3, 4	159	3	5.7	4
123	7	19.6	4	160	7	14.8	4
124	7	16.5	4	161	4	22.7	4
125	6	1.9	4	162	7	10.2	4
126	4	4.2	4	163	4	6.0	4
127a	2	1.9	4	164	7	9.9	4
127	7	11.4	4	165	4	47.9	4
128	7	25.4	4	166	3	79.2	4
129	4	24.2	4	167	7	11.6	4
130	4	60.3	4	168	4	45.7	4
131	2	4.4	4	169	3	16.4	4
132	3	4.9	4	170	5	6.0	4
133	7	15.7	4	171	3	4.7	4
134	4	62.1	4	172	4	26.9	4
135	7	6.2	4	173	3	9.8	4
136	6	11.8	4	174	5	3.2	4
137a	2	2.6	4	175	6	23.3	4
137	4	80.7	4	176	3	1.8	4
138	3	5.0	4	177	2	6.4	4
139	3	18.6	4	178	4	1.8	4
140	3	6.4	4	179	4	53.8	4
141	3	63.3	4	180	3	11.4	4

## Draft Watts Bar Reservoir Land Plan Amendment

Parcel	Zone	Acreage	Panel	Parcel	Zone	Acreage	Panel
181a	3	3.5	4	218a	5	4.6	2
181	5	7.0	4	218	4	56.8	2
182	4	36.9	4	219	6	69.4	2
183	6	25.2	4	220	7	18.4	2
184a	7	7.7	4	221a	6	31.9	2
184	2	21.0	4	221	7	42.8	2
185	2	4.1	4	222	6	4.6	2
186	2	13.7	4	223	3	68.3	2
187	2	56.8	4	224a	2	4.9	2
188	2	25.3	4	224	4	123.8	2
189a	4	11.2	4	225	7	11.7	2
189	4	8.7	4	226	4	19.4	2
190	2	1,252.9	2, 4	227	3	102.9	1, 2
192	4	6.0	2, 4	228	4	22.4	2
193	3	8.1	2, 4	229a	2	0.3	2
194	3	6.8	2, 4	229	7	44.4	2
195	7	16.1	2, 4	230a	6	2.0	2
196	3	11.4	2, 4	230	6	18.4	2
197a	6	10.2	2	231	4	4.2	2
197	7	26.8	2	232	7	40.4	2
198	2	5.4	2	233	3	80.5	2
200	4	46.1	2	234	7	39.6	2
201	6	84.1	2	235	6	2.5	2
202	4	28.6	2	236	4	1.5	2
203	7	16.8	2	237	3	87.5	2
204	4	21.4	2	238	3	171.0	2
205	4	7.5	2	239	7	24.1	1, 2
206	7	15.3	2	240	4	6.5	1, 2
207a	3	7.1	2	241	6	1.2	1, 2
207	2	12.0	2	242	7	16.7	1, 2
208	7	17.4	2	243	7	2.9	1, 2
209	4	0.5	2	244	7	6.7	1, 2
210	7	12.1	2	245	6	1.1	1, 2
211	2	11.4	2	246	4	3.4	1, 2
212	7	75.6	2	247	7	10.2	1, 2
213	2	4.2	2	248	7	44.7	1
214	3	13.9	2	249	7	8.0	1
215	7	18.2	2	250	6	0.9	1
216	7	31.5	2	251a	6	3.2	1
217	4	30.9	2	251	7	20.7	1

Parcel	Zone	Acreage	Panel	Parcel	Zone	Acreage	Panel
252	7	12.2	1	279	6	23.4	1
253	3	19.2	1	280	4	70.4	1
254	3	426.7	1	281	3	8.1	1
255	4	8.7	1	282	2	168.8	1
256a	4	0.1	1	283	4	131.5	1
256	7	34.1	1	284	7	2.4	1
257	4	9.3	1	285	4	224.5	1
258	2	14.1	1	286	4	43.2	1
259	7	12.2	1	287	7	27.6	1
260	7	48.6	1	288	3	8.9	1
261	4	16.5	1	289	7	37.7	1
262	7	41.0	1	290	4	10.1	1
263	4	14.3	1	291	4	118.9	1
264	6	5.2	1	292	4	2.5	1
265	7	51.4	1	293	7	24.3	1
266	6	99.6	1	294	2	34.0	1
267	4	25.0	1	295	4	51.6	1
268	3	39.3	1	296	4	198.2	1
269	7	38.0	1	297	5	245.0	1
270	6	53.4	1	298	5	34.4	1
271a	6	1.9	1	299	4	423.3	1
271	4	12.1	1	300	6	184.3	1
272	2	1.1	1	301	2	35.3	1
273	7	10.5	1	302	2	268.0	1
274a	5	2.0	1	303	2	85.3	1
275	6	1.1	1	304	2	191.5	1
276	3	48.6	1	305	2	993.2	1
277	6	12.2	1	306	4	54.0	1, 2, 4
278	4	19.3	1	307	2	1.7	1