

**Appendix C – Reservoir Land Planning Allocation
Zone Descriptions and Examples**

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Land Use Zone Definitions

Zone	Definition
<p>Zone 1 Non-TVA Shoreland</p>	<p>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.</p> <p>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.</p>
<p>Zone 2 Project Operations</p>	<p>Land currently used, or planned for future use, for TVA operations and public works projects, including:</p> <ul style="list-style-type: none"> • Land adjacent to established navigation operations — Locks, lock operations and maintenance facilities, and the navigation work boat dock and bases. • Land used for TVA power projects operations — Generation facilities, switchyards, and transmission facilities and rights-of-way. • Dam reservation land — Areas acquired and managed for the primary purpose of supporting the operation and maintenance of TVA dams and associated infrastructure; secondary uses may also include developed and dispersed recreation, maintenance facilities, miscellaneous TVA field offices, research areas, and visitor centers. • Navigation safety harbors/landings — Areas used for tying off commercial barge tows and recreational boats during adverse weather conditions or equipment malfunctions. • Navigation dayboards and beacons — Areas with structures placed on the shoreline to facilitate navigation. • Public works projects — Includes rights-of-way for public utility infrastructure, such as sewer lines, water lines, transmission lines, and major highway projects.
<p>Zone 3 Sensitive Resource Management</p>	<p>Land managed for protection and enhancement of sensitive resources. Sensitive resources, as defined by TVA, include resources protected by state or federal law or executive order and other land features/natural resources TVA considers important to the area viewscape or natural environment.</p> <p>Recreational natural resource activities, such as hunting, wildlife observation, and camping on undeveloped sites, may occur in this zone, but the overriding focus is protecting and enhancing the sensitive resource the site supports.</p> <p>Areas included are:</p> <ul style="list-style-type: none"> • TVA-designated sites with potentially significant archaeological resources. • TVA public land with sites/structures listed in or eligible for listing in the National Register of Historic Places. • Wetlands — Aquatic bed, emergent, forested, and scrub-shrub wetlands as defined by TVA. • TVA public land under easement, lease, or license to other agencies/individuals for resource protection purposes. • TVA public land fronting land owned by other agencies/individuals for resource protection purposes. • Habitat protection areas — These TVA natural areas are managed to

Zone	Definition
	<p>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.</p> <ul style="list-style-type: none"> • Ecological study areas — These TVA natural areas are designated as suitable for ecological research and environmental education by a recognized authority or agency. They typically contain plant or animal populations of scientific interest or are of interest to an educational institution that would utilize the area. • Small wild areas — These TVA natural areas are managed by TVA or in cooperation with other public agencies or private conservation organizations to protect exceptional natural, scenic, or aesthetic qualities that can also support dispersed, low-impact types of outdoor recreation. • River corridor with sensitive resources 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. • Significant scenic areas — Areas designated for visual protection because of their unique vistas or particularly scenic qualities. • Champion tree site — Areas designated by TVA as sites that contain the largest known individual tree of its species in that state. The state forestry agency “Champion Tree Program” designates the tree, while TVA designates the area of the sites for those located on TVA public land. • Other sensitive ecological areas — Examples of these areas include heron rookeries, uncommon plant and animal communities, and unique cave or karst formations.
<p>Zone 4 Natural Resource Conservation</p>	<p>Land managed for the enhancement of natural resources for human use and appreciation. Management of resources is the primary focus of this zone. Appropriate activities in this zone include hunting, timber management to promote forest health, wildlife observation, and camping on undeveloped sites. Areas included are:</p> <ul style="list-style-type: none"> • TVA public land managed for wildlife or forest management projects. • TVA public land under easement, lease, or license to other agencies for wildlife or forest management purposes. • TVA public land fronting land owned by other agencies for wildlife or forest management purposes. • Dispersed recreation areas maintained for passive, dispersed recreation activities, such as hunting, hiking, bird watching, photography, primitive camping, bank fishing, and picnicking. • Shoreline conservation areas — Narrow riparian strips of vegetation between the water’s edge and TVA’s back-lying property that are managed for wildlife, water quality, or visual qualities. • Wildlife observation areas — TVA natural areas with unique concentrations of easily observed wildlife that are managed as public wildlife observation areas. • River corridor without sensitive resources present — A river corridor is a linear green space along both stream banks of selected tributaries entering a reservoir managed for light boat access at specific sites, riverside trails, and 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	Definition
<p>Zone 5 Industrial</p>	<p>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 terminals, mooring cells, etc., or (2) land-based development potential.</p> <p>Areas included are:</p> <ul style="list-style-type: none"> • TVA public land under easement, lease, or license to other agencies/individuals/ entities for industrial purposes. • TVA public land fronting land owned by other agencies/individuals/entities for industrial purposes. <p>In some cases, TVA land allocated to industrial use would be declared surplus and sold at public auction.</p> <p>Types of development that can occur on this land are:</p> <ul style="list-style-type: none"> • 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. • Industrial access — Access to the waterfront by back-lying property owners across TVA property for water intakes, wastewater discharge, or conveyance of commodities (i.e., pipelines, rail, or road). Barge terminals are associated with industrial access corridors. • Barge terminal sites — Public or private facilities used for the transfer, loading, and unloading of commodities between barges and trucks, trains, storage areas, or industrial plants. • Fleeting areas — Sites used by the towing industry to switch barges between tows or barge terminals that have both offshore and onshore facilities. • Minor commercial landing — A temporary or intermittent activity that takes place without permanent improvements to the property. These sites can be used for transferring pulpwood, sand, gravel, and other natural resource commodities between barges and trucks.
<p>Zone 6 Recreation</p>	<p>Land currently used, or planned for future use, for concentrated, active recreational activities that require capital improvement and maintenance of developed infrastructure, including:</p> <ul style="list-style-type: none"> • TVA public land developed for recreational purposes, such as campgrounds, day use areas, etc. • TVA public land under easement, lease, or license to other agencies/individuals/entities for developed recreational purposes. • TVA public land fronting land owned by other agencies/individuals/entities for developed recreational purposes. <p>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 are:</p> <ul style="list-style-type: none"> • 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

Zone	Definition
	<p>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 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.</p> <ul style="list-style-type: none"> • 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. • 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.
<p>Zone 7 Shoreline Access</p>	<p>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:</p> <ul style="list-style-type: none"> • Residential water use facilities, e.g., docks, piers, launching ramps/driveways, marine railways, boathouses, enclosed storage space, and nonpotable water intakes. • Shoreline access corridors, e.g., pathways, wooden steps, walkways, or mulched paths that can include portable picnic tables and utility lines. • Shoreline stabilization, e.g., bioengineering, riprap, gabions, and retaining walls. • Shoreline vegetation management.

Parcel Descriptions

Parcel 12–45 – (1.6 acres)

Zone 6, Developed Recreation

This parcel is located on the right bank of Emory River mile 2.5. It fronts land transferred to the State of Tennessee, TVA tract number XTWBR–45. This parcel is encumbered with certain easement rights as well as a license agreement with Tennessee Wildlife Resources Agency for public recreation purposes, specifically for a boat launching ramp. This parcel would continue to be managed in recognition of the existing contractual agreements with the State of Tennessee for public recreation. Requests for private water–use facilities will not be considered.

Parcel 12–51 – (1.2 acres)

Zone 6, Developed Recreation

This parcel is located on the right bank of Emory River mile 2.3. It fronts land transferred to the State of Tennessee, TVA tract number XTWBR–51. This parcel is encumbered with certain easement rights as well as a license agreement with Tennessee Wildlife Resources Agency for public recreation purposes, specifically for a boat launching ramp. A small gravel area is also located on this parcel. This parcel would continue to be managed in recognition of the existing contractual agreements with the State of Tennessee for public recreation. Requests for private water–use facilities will not be considered.

Parcel 184 – (21.3 acres)

Zone 2, Project Operations

This parcel is located on the right bank of Emory River mile 2.6 to 3.6 and adjacent to Lake Shore subdivision. This parcel adjoins property that TVA has transferred to Tennessee Wildlife Resources Agency and two TVA parcels that have been allocated to Natural Resource Conservation.

The primary function of this parcel is to support the ongoing recovery efforts and provide for future operational use of KIF. TVA is planning to enhance and restore three recreation areas located on Parcels 184, 187, and 188. Specifically on this parcel, the recreation area would include the following components: lakeshore walking trail; two fishing piers; a boat launching ramp with courtesy pier; parking areas; and signage. Disturbed areas would be revegetated with native plant species, or nonnative noninvasive species. Requests for private water–use facilities will not be considered.

Parcel 184a – (7.7 acres)

Zone 7, Shoreline Access

This parcel is located on the right bank of Emory River mile 2.6 to 3.6 and contains two segments of land. Formerly, this parcel was composed of the entire area fronting Lakeshore Subdivision. TVA purchased properties affected by the KIF ash spill event. Those areas are no longer considered as Zone 7 properties and are not part of this parcel. Requests for water—use facilities will be considered.

Parcel 185 – (4.1 acres)

Zone 2, Project Operations

This parcel is located on the right bank of Emory River mile 3.1 at Swan Pond Circle Road. This parcel contains in two disjointed segments of land. Segment A lies along Swan Pond Circle Road and a small embayment. Segment B is situated adjacent to Swan Pond Circle Road and the main-stem reservoir shoreline. Segment A is a low-lying narrow riparian zone with a mix of hardwoods such as sycamore, green ash, black willow, river birch, and red maple. Much of this parcel is maintained fescue grass with young trees scattered throughout. There is an encroachment of unauthorized mowing occurring on Segment A. Segment B contains a mixture of “pole-sized” hardwood and pine trees such as Virginia pine, yellow poplar, black cherry, sweetgum, and red maple. The understory in this area is dominated by invasive plant species including multi-flora rose, privet, and honeysuckle. Segment B also contains a maintained pathway from Swan Pond Circle Road to the shoreline. Overall, this parcel provides habitat for a relatively limited variety of wildlife species due to the encroachment and the level of invasive plant species present.

The primary function of this parcel is to support the ongoing recovery efforts and provide for future operational use of KIF. Requests for private water-use facilities will not be considered.

Parcel 186– (13.7 acres)

Zone 2, Project Operations

This parcel is located on the right bank of Emory River mile 3.2 within the Swan Pond Circle Road embayment. The shoreline of this parcel is comprised of a multi-age palustrine forested wetland. The wetland is underlain by Atkins Very Fine Loam soil that is located on Roane County’s hydric soils list. The dominate tree species include sweetgum, red maple, American elm, black willow, and willow oak. The supporting hydrology is from back flooding from the reservoir, ponding precipitation, and beaver impoundments. This wetland provides many water quality protection and enhancement functions including filtering and sequestration of sediments and nutrients while increasing local floodwater retention capacity.

The wetland present on this parcel also provides high value wildlife habitat. This area has habitat for a host of wildlife species from large mammals to amphibians. White-tailed deer, American toads, and Cope’s gray treefrog are examples of the wide range of wildlife present. In addition, this area is extensively used by a variety of waterfowl, resident, and neo-tropical migrant bird species. Wood ducks, mallards, herons, pileated woodpeckers, yellow-rumped warblers, and prothonotary warblers have been observed in this area.

The primary function of this tract is to support the ongoing recovery efforts and provide for future operational use of KIF. TVA will strive to balance the competing demands of the recovery efforts while continuing to manage the wetland resources present in this area. Requests for private water-use facilities will not be considered.

Parcel 187– (56.8 acres)*Zone 2, Project Operations*

This parcel is located on the right bank of Emory River mile 2.5. This parcel has segments adjoining a large unnamed tributary embayment, Swan Pond Creek embayment, and the ash disposal area at KIF. The largest segment of the parcel is situated around the large embayment. This segment is a relatively flat, low-lying riparian zone with mid-age sycamore, green ash, and silver maple trees. There is also a considerable amount of fescue grass and some scattered exotic kudzu present. The segment of the parcel that extends into the main reservoir is comprised of bottomland hardwoods such as silver maple, sycamore, green ash, and sweetgum trees. A scrub-shrub and emergent wetland fringe is present along the shallower shoreline areas. The third segment lies near the ash disposal area. This segment is a steep predominately north facing slope. The vegetation present is mostly old age upland hardwoods comprised of various oak, hickory, white ash, black gum, yellow poplar, black cherry, red maple, basswood, American beech, yellow buckeye, and flowering dogwood trees.

The adjacent land use of this parcel includes forestland, rural residential, and agricultural with KIF nearby. Upland and riparian/wetland wildlife species, similar to those described under Parcel 186, are found in this area. Public use of this parcel is comprised mostly of bank fishing.

The primary function of this tract is to support the ongoing recovery efforts and provide for future operational use of KIF. TVA is planning to enhance and restore three recreation areas located on Parcels 184, 187, and 188. Specifically on this parcel, the recreation area would include the following components: access road and parking area; natural turf sports fields; and some vegetation around the perimeter of the sports field area. TVA would revegetate disturbed areas with native plant species, or nonnative noninvasive species. TVA is planning ultimately to entrust the land management responsibilities for the ball field area to a public entity (preferably Roane County) via a contractual agreement. If a contractual agreement cannot be reached, TVA would not likely develop the proposed recreation concept for this parcel. Requests for private water-use facilities will not be considered.

Parcel 188– (25.3 acres)*Zone 2, Project Operations*

This parcel is located on the right descending bank of Emory River Mile 3.2. This parcel contains a wetland similar to that described under Parcel 186. However, the forested component of this wetland is somewhat younger in age. The dominant tree species present include red maple, black willow, American elm, and sweetgum. There is also a significant amount of buttonbush and silky dogwood present. The emergent wetland portions have a high diversity of obligate wetland grasses, rushes, sedges, smartweeds, jewelweed, and marsh mallow. The hydric soils are mostly super saturated with numerous vernal pools and depression type situations. The wetland provides habitat to various amphibian species.

The primary function of this tract is to support the ongoing recovery efforts and provide for future operational use of KIF. TVA is planning to enhance and restore three recreation areas located on Parcels 184, 187, and 188. Specifically on this parcel, the recreation area

would be mainly green space with some planned observation areas, trails, interpretive signage, and a small parking area. TVA is also planning to restore wetland areas on the property, and anticipated land uses would include bird/wildlife watching and wetland management. TVA will strive to balance the competing demands of the recovery efforts while continuing to manage the wetland resources present in this area. Requests for private water-use facilities will not be considered.

Parcel 189a– (11.9 acres)

Zone 4, Natural Resource Conservation

This parcel is located on the right descending bank of Emory River Mile 2.0 to 2.3. This parcel is comprised of a peninsula and small islands adjacent to the KIF ash disposal area.

The peninsula was formerly planted with loblolly pine, and many of the trees were killed by the southern pine beetle outbreak in the 1990's and 2000's. These impacted areas are regenerating to typical early succession bottomland hardwoods. In addition, there are scattered scrub-shrub and emergent fringe wetlands along the shoreline. However, the northern end of the peninsula's shoreline is eroding.

The small islands support young bottomland hardwoods with river alder dominated fringe shrub wetlands around them. Wetland wildlife and wading birds such as great blue herons, green herons, black-crowned night herons, cattle egret, and osprey are present. Due to access limitations, public use of this parcel appears limited to occasional duck hunting. Requests for water-use facilities will not be considered.