Document Type: EA-Administrative Record
Index Field: Environmental Document Transmitted to the Public and Agencies
Project Name: Elk River Resort, LLC
Project Number: 2005-112

DRAFT ENVIRONMENTAL ASSESSMENT

ELK RIVER RESORT
PROPOSED RECREATION EASEMENT AND MARINA FACILITIES

Wheeler Reservoir
Lauderdale County, Alabama

TENNESSEE VALLEY AUTHORITY
U.S. ARMY CORPS OF ENGINEERS

OCTOBER 2005

Direct Comments to:
Helen Rucker
Tennessee Valley Authority
400 West Summit Hill Drive
Knoxville, Tennessee 37902
Phone: 865-632-6506
e-mail: hgrucker@tva.gov

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CHAPTER 1

1. PURPOSE OF AND NEED FOR ACTION

1.1. The Decision

Tennessee Valley Authority (TVA) is considering a request for a 30-year easement for the development of a commercial marina on approximately 91 acres of TVA property on Elk River in Lauderdale County, Alabama (see Figure 1-1). The TVA property is identified as Tract XWR-21PT in the Wheeler Reservoir Land Management Plan (Plan) and was allocated for Commercial Recreation and Visual Management in the Plan (TVA, 1995). This proposal is consistent with the above allocation. The applicant proposes to create a high-quality recreation and resort area under a term-easement agreement. The marina project would include wet slips, fishing piers, dry storage, a ship's store, a recreational vehicle (RV) park, camping areas, nature trails, cabins, and a restaurant. TVA must decide whether to grant the recreational easement and approve the proposed facilities under Section 26a of the TVA Act.

Section 10 of the Rivers and Harbors Act of 1899 prohibits the alteration or obstruction of any navigable waters of the United States unless authorized by the Secretary of the Army acting through the Chief of Engineers. Elk River is navigable waters of the United States as defined by 33 Code of Federal Regulations (CFR) Part 329. Section 301 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material into waters of the United States unless authorized by the Department of the Army (DA), pursuant to Section 404 of the same act. Elk River at Elk River Mile (ERM) 1.5 and its unnamed tributaries are waters of the United States as defined by 33 CFR Part 328. Therefore, since the proposal involves structures and fill within a navigable waterway, a Section 10 and 404 permit would be required. Since a DA permit would be required, the U.S. Army Corps of Engineers (USACE) must decide whether to (1) issue a permit as proposed, (2) issue a permit with modifications and/or conditions, or (3) deny the permit.

1.2. Other Pertinent Environmental Reviews or Documentation

Wheeler Reservoir Land Management Plan. In 1995, TVA completed the Plan, which allocated 11,284 acres of public land around Wheeler Reservoir. It identifies suitable uses for 203 tracts of TVA public land, providing sites for recreation, industry, navigation, wildlife, forest management, cultural and environmental preservation, and agriculture. The land at the proposed resort development was allocated for Commercial Recreation and Visual Management. In this plan, tracts allocated for Commercial Recreation were reserved for developments requiring water frontage. Facilities may include marinas, docks, launching ramps, rental cabins, trails, lodges, pools, campgrounds, restaurants, and other tourism-related outdoor recreation facilities.

According to the 1995 Plan, tracts available for new commercial recreation development, TVA would seek private investors with the financial and managerial capability to develop large-scale facilities that can become destination points for tourists and local reservoir uses. To encourage high-quality private development, TVA may provide such incentives as assisting with conceptual site planning or conducting market assessments. TVA may also provide technical assistance to existing commercial operators who are interested in upgrading their facilities.

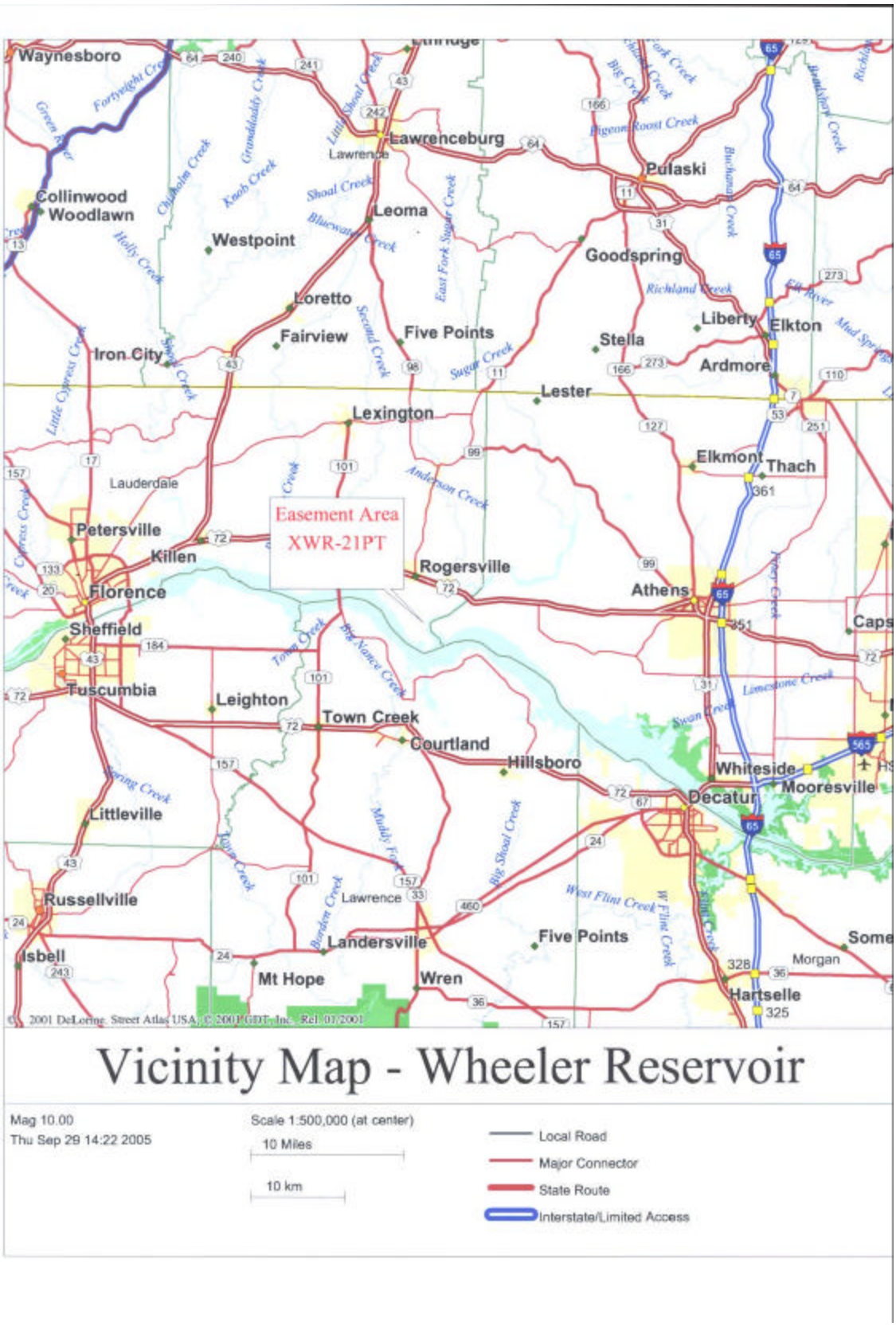

Figure 1-1 Project Vicinity Map

1.3. The Scoping Process

Public notice of TVA's proposed land action appeared in the *Florence Times Daily* on Sunday, June 26, 2005. It also ran the following Wednesday. Another local paper, *East Lauderdale News,* also ran the notice on Thursday, June 30, 2005. The comment period ran through July 29, 2005. TVA accepted comments through August 19, 2005. TVA received comments from 93 individuals who were opposed (24 of which were form letters), 19 who were in favor of the proposal, and a petition in opposition to the proposal with 259 signatures. Issues were identified relating to the following resource areas: recreation, navigation and boating safety/congestion, water quality, roads/traffic, terrestrial ecology/natural resources, threatened and endangered species, cultural resources, solid waste disposal, visual resources, noise, security concerns, property access/property values, and land use. Prior to proceeding with further review, TVA requested the applicant submit his application for the proposed facilities, which would require TVA approval under Section 26a of the TVA Act and USACE approval. USACE issued a joint public notice on August 26, 2005, announcing a public comment period through September 26, 2005. These comments together with earlier comments received by TVA, were grouped into issue categories and included in Appendix B in summarized.

1.4. Necessary Federal Permits or Licenses

TVA and USACE have potential approval of actions related to this project. TVA will decide whether to grant the recreational easement and approve the proposed facilities under Section 26a of the TVA Act. A Department of the Army (DA) permit pursuant to **Section 10 of the Rivers and Harbors Act of 1899** and **Section 404 of the Clean Water Act** (CWA) is needed for the commercial water use facilities including construction of a 100 boat slip marina, a concrete wave break, a concrete trash break with fuel dock, three fishing-mooring piers, dredging and a retaining wall to accommodate a fork boat lift launching area, a launching ramp, and riprap. An Alabama Department of Environment and Conservation water quality certification pursuant to Section 401 of the CWA must be obtained before any federal permit can be issued. The state must certify that applicable water quality standards will not be violated by the proposed work. Because of the land use action, TVA is the lead federal agency and USACE is a cooperating agency.

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CHAPTER 2

2. ALTERNATIVES INCLUDING THE PROPOSED ACTION

The applicant considered various alternative sites for the proposed resort components prior to submitting his request for TVA Tract XWR-21PT. The first site considered for this project was in Courtland, Alabama, located on Spring Creek. The land is adequate in size and secluded, making it ideal for campgrounds. The creek forms a protected slough with good shelter for a marina location. However, the site was eliminated from further consideration because a low clearance bridge crosses the slough and limits access for boats. TVA's Cow Ford Campground in Limestone County was considered. This site was not considered any further because the size of the tract limited room for future expansion and the shoreline area is unprotected making it unsuitable for a marina location. A site in Lawrence County, on Town Creek, close to Doublehead Lodge was adequate in size for the proposed action and secluded with good shelter. However, Town Creek is subject to floodwater and could not be considered for a marina location. For these reasons, the applicant eliminated these sites from further consideration and requested the Elk River site as the preferred location.

2.1. Alternative A – The No Action Alternative

Under the No Action Alternative, TVA Tract XWR-21PT would remain allocated for Commercial Recreation and Visual Management in the Wheeler Reservoir Management Land Plan (Plan). As stated in the Plan, forest and wildlife management will continue as an interim use. The area would remain available for moderate levels of informal recreational use, i.e., primitive camping, bank fishing, and some hunting. TVA would also continue to consider applications compatible for recreational development.

2.2. Alternative B – Applicant's Proposal

The applicant proposes to create a high-quality recreation and resort area under a term-easement agreement (see Appendix A). The marina project would include wet slips, fishing piers, dry storage, a ship's store, an RV park, camping areas, nature trails, cabins, and a restaurant. A wave break is also proposed within the 1,000-foot harbor limits for the proposed marina facilities. To provide road access to the resort, the applicant has purchased a 60-foot-wide private road from County Road (CR) 77 along the boundary of TVA Tracts XWR-21PT and -22PT. Construction of this road access will involve crossing five streams by installing 48-inch culverts. Vehicle parking lots will be built to accommodate campers and patrons as well as day-use anglers. The applicant proposes to dredge 2,700 cubic yards of material to accommodate the dry storage forklift launch area. Some spoil will be removed by barge and transported to a loading dock, then hauled to area landfills. Some spoil closer to the shoreline will be removed from dry land with an excavator. This dredge spoil could be utilized throughout construction as backfill above the 560-foot contour in some inland areas needing fill, most likely in areas along the road construction.

The applicant proposes to develop the Elk River Resort in five phases. Phase 1 will include construction of the road access, infrastructure, and RV/campground. Facilities to be constructed include 100 campsites along with bathhouses, fishing piers, launching ramp, playgrounds, hiking trails, and a ship's store. The store will be multifunctional including an office, retail sales, public relations, restrooms, and storage of maintenance equipment. Phase 2 will include the construction of the marina to include 50 wet slips, a

safe mooring area, and amenities such as water, electricity, and sewage disposal. Items such as fuel, food, ice, and fishing tackle would be sold. As demand increases, Phase 3 will include 100 additional campsites and 50 more wet slips. Phase 4 would include construction of a dry storage building. Phase 5 may include a specialty restaurant open to the public and cabins.

The RV park will be built on a portion of the property providing both "in transit" and "destination" parking for at least 100 vehicles. The sites will have level slabs for parking, individual electrical connections, water and sanitary connections and other amenities normally associated with modern first class RV parks. A nature/hiking trail and camping area will be built on a portion of the property with the possibility of cabins and a chalet/restaurant in coming years. A marina with a ship's store will occupy a portion of the property consisting of at least 40 covered boat slips accommodating boats of popular sizes and 10 uncovered slips for sailboats, and a dry storage building will be available to accommodate smaller boats. A boat launching ramp and parking lot will be located adjacent to the marina.

The applicant's proposed action includes the following environmental measures:

- Initial land clearing and excavation for access road right-of-way, location of maintenance building, and marina parking areas would directly affect approximately 5 acres on Tract XWR-21PT. Excavated areas would be sowed with seed prior to completion in order to stabilize banks and prevent erosion into Elk River. During construction activities, every effort will be made to minimize the impact of construction upon the flora and fauna of the site. A best management practices plan will be produced upon award of the lease and before construction begins. Additionally, all required permits and approvals from federal, state, county and local jurisdictions will be obtained before construction begins.

- Recycling and disposal of petroleum and other solid waste would be available at this facility. In the past, man-made litter and debris have accumulated on the riverbanks because no apparent system has been implemented for shoreline cleanup in this area. A natural theme for this proposed resort would involve maintenance of the infrastructure including keeping the shoreline clean and preventing liter and debris to accumulate. This should have a positive environmental impact in general.

- The proposed marina will actively partner with TVA as a leader in the Clean Marina Program. Sewage pump out service will be available for customers and required of tenants. The marina store will offer and promote environmentally friendly nontoxic products for cleaning and maintenance. The marina staff will participate in the education of boaters on sewage, fuel and bilge management.

2.3. Comparison of Alternatives

Under both alternatives, there are no uncommon terrestrial plant communities, Wild and Scenic Rivers or their tributaries, any stream on the Nationwide Rivers Inventory, or any managed areas and/or ecologically significant sites within the project area. Wildlife observed in the project area is considered common both locally and regionally. There are no known threatened and endangered plant species occurring within 5 miles of the project area. Habitat for Tennessee cave salamanders, cave invertebrates, green salamanders, and Bewick's wrens do not occur within the property boundaries. Habitat for eastern hellbenders no longer exists in the lower portions of the Elk River or main

stem portions of the Tennessee River due to flooding of these waterways by Wheeler Reservoir. The pine woodlands within the parcel do not meet the specific requirements needed for red-cockaded woodpeckers. Because no protected aquatic animals are present in the vicinity of this proposed development, there would be no impacts. The No Action Alternative or the proposed Action Alternative would have no effect on historic properties.

Under the No Action Alternative, the development would not take place. Terrestrial plant communities would not be affected, and the property would continue to function as a forest. The No Action Alternative is not expected to result in adverse impacts to threatened and endangered terrestrial animals. Currently, the project site has potential habitat for bald eagle and osprey. Under the No Action Alternative, this potential habitat would likely continue to exist. There would be no wetland impacts. No additional solid waste would be generated. There would be no impact to existing navigation conditions, floodplains, or recreation resources.

Under the Action Alternative, the loss of riverside vegetation would reduce habitat for herons, turtles, snakes, and other animals, though the loss is considered minimal since similar habitat is found in Joe Wheeler State Park and other nearby properties. Five heron colonies exist in the project area though none of these colonies are within a mile of the project site. No adverse impacts are anticipated to heron colonies, state-listed and federally listed bats, their roosting sites or habitat, or to foraging gray bats. Alligator snapping turtle habitat does occur in the Elk and Tennessee Rivers; however, recent records are only known from Kentucky Reservoir; therefore, it is not likely to result in adverse impacts to this species. Bald eagles and ospreys are observed in the area, which was confirmed by the public comments received. Neither species nests or is known to winter on the project site. Potential nesting trees do exist within the project site; however, given the amount of habitat in the vicinity and the low numbers of eagles and osprey reported from northwest Alabama, the proposed project would not result in adverse impacts to these species.

The proposed action does not include any development in the 5.2 acres of wetlands present on the site. BMPs and proper management of storm water runoff from construction activities and the proposed facilities are expected to result in insignificant impacts to reservoir water quality. Shoreline stabilization, if properly implemented, should protect the immediate harbor area from excessive erosion. The higher concentration of watercraft around the proposed marina would likely contribute to an insignificant acceleration of erosion of surrounding areas of unprotected shoreline, which would diminish with increasing distance from the marina. By following the Clean Marina guideline, the applicant's proposal for the construction and operation of the proposed marina development is not expected to result in significant increases in pollutant, nutrient, or fecal coliform bacteria levels in the reservoir.

The recreating public would have more convenient services and facilities on Elk River and this section of the Tennessee River. The increase in recreational vessels or a result of the additional wet and dry slips would not significantly impact boater congestion. The impacts to visual resources associated with the proposed action would be insignificant. There would be no impacts to the 100-year floodplain. Construction noise would be noticeable for a short time, and there would be increases in noise from land-based and water-based sources over the long term. Because of the current background noise, and the existence of similar activities and noise sources in the neighborhood, the modest increases in project noise would not amount to a significant impact. The proposed Elk

River Marina development would generate and distribute additional traffic to the existing transportation network, but would not create any significant changes or overloading to the network. The current traffic volumes in the area are at levels well below the capacity of the facilities. As a result of its reliance on available collection and disposal services, the impact of solid waste generation would be insignificant.

2.4. The Preferred Alternative

TVA's preferred alternative is the Action Alternative. The Wheeler Reservoir Land Management Plan (Plan) was completed in 1995 to provide TVA guidance toward achieving a balance between development and protection of our natural resources. The proposed action is consistent with the planned use in the Plan.

CHAPTER 3

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Wheeler Dam is located at Tennessee River Mile (TRM) 274.9 and extends 74 miles upstream to Guntersville Dam located at TRM 349.0. The Elk River joins the Tennessee River at TRM 284.3. Wheeler Reservoir drains an area of about 29,590 square miles with the Elk River watershed making up 2,249 square miles of the total drainage area. At full pool, Wheeler Reservoir has a surface area of 67,070 acres and 1,063 miles of shoreline. The average annual discharge is approximately 50,000 cubic feet per second, providing an average hydraulic retention time of about nine days.

Tract XWR-21PT is located on the west bank of the Elk River approximately 0.5 mile upstream from Wheeler Reservoir in Lauderdale County, Alabama. The riverbank forms a protected slough running generally east to west with an estimate 5,500 feet of shoreline. The 1995 Wheeler Reservoir described Tract XWR-21PT as:

> Approximately one-half of this tract is made up of planted loblolly pine, with upland hardwood dominating the remainder. Soil interpretation indicates that the site has highly erodible soils and moderate ranking for soil-related forest productivity. The tract rates high in suitability because of previous forestry investment, good access, and available markets. The tract also has excellent capability and good suitability for commercial recreation. Its topography is suitable for development and offers a large land base on both sides of a wind-protected cove. Water depth is adequate for marina development. The area now receives moderate levels of informal recreational use, i.e., primitive camping, bank fishing, and some hunting. Removal of understory vegetation or tree canopy could have an impact on the erodible soils. Approved methods for checking soil erosion must be implemented if major development is considered on this tract. Because the site has potential value for commercial recreational development, forest and wildlife management will continue as an interim use, and prescriptions should carefully consider the impacts made on the visual qualities associated with standard management implementation procedures. Floating debris, carried by the Elk River, has been deposited at the back of the embayment. Because of the cover provided by sporadic colonization of submersed aquatic plants and debris, the cove offers good sport fishery habitat for crappie and largemouth bass.

3.1. Terrestrial Ecology

3.1.1. Plants

Affected Environment

The proposed project is located along the edge of the Eastern Broadleaf Forest (Continental) Province (Bailey, 1995). The province consists of rolling hills to nearly flat basins. The northern portion of the province has been glaciated but not in the southern region of Kentucky, Tennessee, and northern Alabama. Elevation ranges from 80 to 1,650 feet (24-500 meters). The Eastern Broadleaf forest is dominated by broadleaf deciduous trees, and the smaller amounts of rainfall present in the region favor the drought-resistant oak-hickory forest association. The project area is 100 percent forested.

On August 3, 2005, TVA conducted a field survey on the proposed affected area, and three plant community types were observed within the forested area. These communities were

(1) upland mixed hardwood forest, (2) eastern broadleaf deciduous forest, and (3) palustrine forest along the creek beds.

The upland mixed forest occupies approximately 50 percent of the total project area, with loblolly and Virginia pine present in the overstory. Other dominate vegetation consisted of oak species (black, chestnut, northern red, and white), white ash, mockernut hickory, and shagbark hickory. In the subcanopy layer, species occurring are American beautyberry, persimmon, flowering dogwood, redbud, Chinese privet, and deciduous holly. Several woody vines were commonly found, rattan vine, wild yam, muscadine grape, summer grape, Virginia creeper, and roundleaf greenbrier. The herb layer contained mayapple, crane fly orchid, hairy bedstraw, and hound's tongue as well as several native and nonnative invasive species, such as poison ivy, Japanese stilt grass, and Japanese honeysuckle. (See Appendix Table C-1 for a complete list of species observed on the parcel.)

Forty-five percent of the property is considered to be eastern broadleaf deciduous forest with black gum, cherry-bark oak, southern red oak, tulip poplar, American beech, and sweetgum as the dominate species. Pawpaw, flowering dogwood, red maple, strawberry bush, sassafras, and wild black cherry were commonly found in the subcanopy layer with American lopseed, spotted wintergreen, naked tick trefoil, ebony spleenwort, broad beech fern, and Christmas fern in the herbaceous layer. A population of American ginseng (*Panax quiquifolius*) that is located within this forest community was identified in public comments received on the proposal. Even though American ginseng is not federally listed or state-listed as threatened or endangered, it is an important find due to its commercial exploitation by local collectors and buyers of the species for its medicinal purposes. Ginseng is actually more common than indicated in the public comments. The controversy of the species is because of commercial exploitation. The U.S. Fish and Wildlife Service (USFWS) does not regulate the harvest of ginseng, but rules and regulations are provided by the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Each state has its own monitoring program of ginseng, to ensure that these rules for the harvesting, sale, and purchase of these plants are followed. In the State of Alabama, ginseng is given an S4 classification. This system is based on rarity within the state, with S5 being very common and S1 being the most rare.

The remaining 5 percent of the parcel was palustrine forest dominated by black willow and silver maple, with silky dogwood and wild hydrangea in the shrub layer along with Chinese privet. The herbaceous layer contained jewel weed, smart weed, bog hemp, lizard's tail, southern lady fern, and self-heal.

Environmental Consequences

Under the No Action Alternative, the development would not take place and the communities would not be affected. Under the Action Alternative, there should be no significant impacts to terrestrial plant communities since there is no uncommon terrestrial plant communities associated with the development.

3.1.2. Natural Areas

The proposed action is not anticipated to impact Wild and Scenic Rivers or their tributaries or a stream on the Nationwide Rivers Inventory because no such designated waters occur at or adjacent to the project site. A review of the TVA Natural Heritage database indicated that the proposed action would not be within or immediately adjacent to any managed areas and/or ecologically significant sites. Four such features are within 3 miles of the proposed action: Long Oak Forest TVA Small Wild Area, Joe Wheeler State Park, Limestone County Park, and Elk River Lodge State Park. No impacts to these areas are anticipated as a

result of the proposed action because the distance is sufficient (0.5–3.0 miles). There is no potential for this project, as described, to contribute to the spread of exotic or invasive terrestrial plant species.

3.1.3. Terrestrial Ecology (Animals)

Affected Environment

The project site (Parcel 21) is approximately 91 acres of timber woodlands. Three intermittent streams traverse the property and empty into two coves that exist in the project area. These areas are periodically flooded and consequently contain a bottomland forest community. During dry periods, low-lying areas form vernal pool habitat. These pools are important breeding grounds for amphibians. Wood frogs, American toads, and southern leopard frogs were seen on the property. Other species such as marbled, spotted, small-mouthed, and tiger salamanders breed in vernal pools in bottomland forests and may be present on the project site.

Slopes and ridge tops are dominated primarily by oak/hickory forested habitat. This community includes white, southern red, and black oak; mockernut and pignut hickory; black cherry; tulip poplar ;and other species. These forests are important habitat for wild turkey, red-bellied woodpeckers, pileated woodpeckers, blue jays, American crows, white-breasted nuthatches, Carolina chickadees, eastern tufted titmice, and other birds. The thick understory provides additional habitat for Carolina wrens and northern cardinals. White-tailed deer, raccoon, eastern chipmunk, and gray squirrel are also found within this forest community. Eastern box turtles also nest on the site.

A small area in the northeast corner of the property contains saw-timber-sized loblolly pine. The loss of some trees to the southern pine bark beetle has allowed the encroachment of hardwoods to create a mixed pine/hardwood community. This community provides habitat for pine and yellow-throated warblers and brown-headed nuthatches in addition to the species listed above.

Environmental Impacts

Under the No Action Alternative, the marina and campground would not be built and, therefore, the property would continue to function as a forest. Forest succession would continue to old growth. Wildlife would respond in part by this change.

Under the Action Alternative, wildlife observed in the project area is considered common both locally and regionally. The construction of the marina would create approximately 5 acres of openings within the forest. These openings would be converted to parking lots, RV sites, roads, and other man-made structures. These areas have limited wildlife value, though the margins of openings if planted with native vegetation can serve as foraging sites for some wildlife. However, this benefit would be offset by the increased human activity in the area. The loss of riverside vegetation due to the addition of a boat ramp, boat slips, buildings, and a parking lot would reduce habitat for herons, turtles, snakes, and other animals, though the loss is considered minimal since similar habitat is found in Joe Wheeler State Park and other nearby properties. There are 178 caves known from the three surrounding counties. Only one of these caves is within a mile of the project site. This cave was flooded when Wheeler Reservoir was constructed. The proposed project would not result in adverse impacts to existing cave environments. Five heron colonies exist in the project area. None of these colonies are within a mile of the project site. No impacts are anticipated to these resources.

3.2. Threatened and Endangered Species

3.2.1. Plants

A review of the TVA Natural Heritage database indicated that no federally listed or state-listed plant species are known from within 5 miles of the project site in Lauderdale County, Alabama. On August 3, 2005, field inspections conducted on the project area revealed that there are no other rare plants on the tract.

Under the No Action Alternative, the development would not take place, and the sensitive species would not be affected. Under the Action Alternative, there should be no impacts to threatened and endangered plant species, since there are no known sensitive species occurring within 5 miles of the project area.

3.2.2. Terrestrial Animals

Affected Environment

Reviews of the TVA Natural Heritage database indicated that 4 federal and 14 state-listed animals are reported from the project area (see Table 3-1), which includes Lauderdale, Lawrence, and Limestone Counties, Alabama.

Table 3-1 Federally and State-Listed Terrestrial Animal Species Reported From Lauderdale, Lawrence, and Limestone Counties, Alabama

Common Name	Scientific Name	Federal Status	State Status
Amphibian			
Eastern Hellbender	*Cryptobranchus alleghaniensis alleghaniensis*	__	Protected
Green Salamander	*Aneides aeneus*	__	Protected
Tennessee Cave Salamander	*Gyrinophilus palleucus*	__	Protected
Reptiles			
Alligator Snapping Turtle	*Macrochelys temminckii*	__	Protected
Bird			
Bald Eagle	*Haliaeetus leucocephalus*	Threatened	Protected
Bewick's Wren	*Thryomanes bewickii altus*	__	Protected
Bewick's Wren	*Thryomanes bewickii bewickii*	__	Protected
Osprey	*Pandion haliaetus*	__	Protected
Red-Cockaded Woodpecker	*Picoides borealis*	Endangered	Protected
Mammals			
Eastern Big-Eared Bat	*Corynorhinus rafinesquii*	__	Protected
Gray Bat	*Myotis grisescens*	Endangered	Protected
Indiana Bat	*Myotis sodalis*	Endangered	Protected
Long-Tailed Weasel	*Mustela frenata*	__	Protected
Southeastern Bat	*Myotis austroriparius*	__	Protected
Invertebrates			
Beetle	*Batrisodes jonesi*	__	Tracked
Ground Beetle	*Rhadine caudata*	__	Tracked

Eastern hellbenders are found in large and mid-size, fast-flowing, rocky rivers at elevations below 762 meters (Petranka, 1998). Numerous historical records are known from the project area. **Green salamanders** inhabit moist crevices found in cliffs and rockface habitats, but have also been observed under loose bark of fallen trees (Petranka, 1998). The closest known green salamander populations in the project area are known from the Bankhead National Forest which is 50 miles to the south. **Tennessee cave salamanders** occur in wet caves including those formed in sinkholes. Numerous wet caves occur within the three counties covered by this Environmental Assessment, but none are known from the immediate project site. **Alligator snapping turtles** are typically found in deep water of large rivers and their major tributaries, but also can be found in lakes, ponds, and swamps (Ernst, Lovich, and Barbour, 1994). Alligator snapping turtles have been found in Lake Wilson and Pickwick Reservoir. **Bald eagles** typically nest near large bodies of waters including lakes, rivers, and riparian wetlands. Eagles are known to winter near the project area. The closest nest record is approximately 30 miles west of the project site. **Bewick's wrens** occur in brushy areas, thickets, and scrub in open areas. Both listed races are known from the project area. This species has experienced significant population and range reductions in the Southeast and may be extirpated from the project area. **Ospreys** nest on both human-made and natural structures in or near large bodies of water. They nest from March to early July. They are known to nest on Wilson Reservoir. **Red-cockaded woodpeckers** nest in pines infected with the fungus *Phellinus pini* in old-growth pine forests with an open, parklike understory. The loss of old growth pine forests in the project area has caused significant reductions in population and range. No red-cockaded woodpecker habitat is known from the project site. **Eastern big-eared bats** inhabit the forested regions of the South (Linzey, 1998). They roost in buildings, attics, hollow trees, mines, and caves (Linzey, 1998). One historical record exists for the project area. **Gray bats** roost in caves during all seasons and typically forage over open-water habitats. Seven caves used by gray bats are known from the project area. The closest cave is only 0.6 mile from the project site. This cave is no longer used by gray bats since it was flooded by the reservoir. The closest known active gray bat cave is 6.7 miles from the project site. **Indiana bats** roost in caves during the winter and form summer roosts under the bark of living and dead trees. Their summer roosts are found in forests with an open understory, usually near water. Indiana bats forage primarily in forested areas along streams or other corridors. They are known from only one cave within the project area. This cave is no longer used by bats since it was flooded by the reservoir. Indiana bat records in the region are largely restricted to the Bankhead National Forest. **Long-tailed weasels** inhabit farmland as well as woodlands and swamps (Linzey, 1998). Habitat exists for this species within the project site. **Southeastern bats** normally use caves as summer roosts but will use hollow trees, buildings, caves, mines, and other cavities for winter roosts. Roosts are always near rivers or other permanent bodies of water (Linzey, 1998). This species has been reported from Lawrence County. However, the species was not found in caves in north Alabama or Mississippi during surveys performed by Auburn University during the early 1990s. **Cave-dwelling invertebrates** are known from specific caves in the region. These species are not protected by state or federal law, but are considered rare by biologists in the region. Caves do not exist on the project site.

Environmental Consequences

The No Action Alternative is not expected to result in adverse impacts to threatened and endangered terrestrial animals. Currently, the project site has potential habitat for bald eagle and osprey. Under the No Action Alternative, this potential habitat would likely continue to exist.

Under the Action Alternative, habitats for most species listed in Table 3-1 do not exist in the project site. Since no caves exist on the property, Tennessee cave salamanders and cave invertebrates listed do not occur within the property boundaries. Habitat for eastern hellbenders no longer exists in the lower portions of the Elk River or main stem portions of the Tennessee River due to flooding of these waterways by Wheeler Reservoir. The pine woodlands within the parcel do not meet the specific requirements needed for red-cockaded woodpeckers. Habitat for green salamanders and Bewick's wrens is nonexistent on the property. Roost trees for state and federally listed bats are not known from the project site, but forest on the site contains older trees that may have suitable cavities for roosting bats. Dead, standing trees with suitable cavities are more typically found in forested wetlands. This habitat does not exist on the project site. Although some potential roost trees of moderate quality exist on the site, the overall habitat ranks as poor for Indiana bats. Considering that 5 acres of forested habitat would be disturbed, the project is not expected to result in adverse impacts to Indiana bats. Due to the lack of caves, gray bats do not roost on the project site. However, they do roost in caves along the Elk River and forage over the Tennessee and Elk Rivers. Considering the range of these bats (up to 32 kilometers), the construction of the proposed marina is not expected to result in adverse impacts to foraging gray bats. Alligator snapping turtle habitat does occur in the Elk and Tennessee Rivers. However recent records of this species from the Tennessee River are only known from Kentucky Reservoir. The proposed project is not likely to result in adverse impacts to this species. Bald eagles and ospreys are occasionally observed in the area. This was confirmed by the public comments received. Neither species nests or is known to winter on the project site. Members of the public expressed concern regarding the potential impacts to bald eagles and nesting bald eagles. Bald eagle numbers were greatly reduced in the Valley in the 1900s due to the use of DDT and direct persecution. In recent years, bald eagle numbers have increased throughout the Valley. Eagle populations in northwestern Alabama have been slower to recover compared to other populations throughout the Valley. Results of annual Valley-wide monitoring activities indicate that nesting bald eagle numbers are extremely uncommon in northwest Alabama. In fact, fewer than five nests are known along the Tennessee River from Decatur, Alabama, to the Mississippi state line. Post-breeding bald eagles are regularly observed throughout the reservoir system. Numbers increase in winter as eagles migrate into the area to forage over the mostly shallow main stem reservoirs. Observing bald eagles along the Elk River would not be unusual. Considering that two TVA biologists and a biologist accompanying the author of the comments have not observed a nest on the site, it is highly unlikely that bald eagles are nesting on this property. Bald eagle nests are very large and are usually easily observed from some distance. Potential nesting trees do exist within the project site. Some of these trees may have to be cut during the construction of the marina and associated facilities, though many suitable nesting trees would remain on the project site. Given the amount of habitat in the vicinity and the low numbers of eagles and osprey reported from northwest Alabama, the proposed project would not result in adverse impacts to these species. Under the action alternative, there would be no adverse affect to terrestrial threatened and endangered species.

3.2.3. Aquatic Ecology and Aquatic Threatened and Endangered Species

The embayment in which the proposed project is located, contains shallow to medium depth waters with mud/gravel bottom and numerous areas of wood debris. This habitat type is common throughout the Elk River embayment and the lower portion of Wheeler Reservoir. Lacustrine species such as gar (*Lepisosteus sp.*), common carp (*Cyprinus carpio*)-introduced, buffalo (*Ictiobus sp.*), catfish (*Ictaluridae*) and sunfish (*Centrarchidae*) are common in such habitats. These species are very adaptable to habitat changes, and

are regularly found around such man-made structures as docks, piers and constructed fish attractors. Loss of this habitat type due to the proposed action would be minimal. Spawning habitat would only be impacted in the immediate vicinity of the dredge.

Public comments concerning the loss of spawning habitat for several native fish species has been received. The waters adjacent to the proposed site provide spawning habitat for several species of cyprinids (minnows) and centrarchids (sunfish and bass). Although some habitat would be lost in the immediate vicinity of the marina, most of the cove would remain adequate for continued spawning. The structures at the marina would provide cover for young fish, and larger fish would be attracted to these structures as well. The lower portion of the Elk River provides many areas of gravel bottom coves and submerged islands capable of providing spawning habitat for these fishes. Historic development for private water-use structures throughout the Elk River embayment has not inhibited spawning and survival of these species. Anglers and commercial fishermen continue to use the waters in the lower Elk River with success.

Data from the TVA Natural Heritage database indicated that several state- or federally listed aquatic animal species potentially occur in the riverine portions of the Elk River upstream of the project area (Table 3-2). On-site examination of the area by TVA aquatic biologists has revealed that no suitable habitat for any of these is present in the area potentially affected by development of the recreation and resort areas. This portion of the Elk River is affected by the impoundment of Wheeler Reservoir, the embayment is heavily impacted by silt, and the overbank area flooded by Wheeler Reservoir does not contain habitat suitable for any of the species listed in Table 3-2.

Table 3-2 Sensitive Aquatic Animal Species Known to Occur in the lower Elk River Drainage (Limestone County, AL and Giles County, TN).

Common Name	Scientific Name	Status[1]	
		Federal	State
Fish			
Tuscumbia Darter	*Etheostoma tuscumbia*	-	Protected
Boulder Darter	*Etheostoma wapiti*	Endangered	Endangered
Snail Darter	*Percina tanasi*	Threatened	Threatened
Southern Cavefish	*Typhlichthys subterraneus*	-	Protected
Mussels			
Tennessee Pigtoe	*Fusconaia barnesiana*	-	NOST
Cracking Pearlymussel	*Hemistena lata*	Endangered	Endangered
Pink Mucket	*Lampsilis abrupta*	Endangered	Protected
Purple Lilliput	*Toxolasma lividus*	-	NOST
Snail			
Rugged Hornsnail	*Pleurocera alveare*	-	Protected

NOST = Considered sensitive, no legal status; Protected = protected by the State of Alabama

Public comment addressed concerns that the lower Elk River is habitat for the federally protect snail darter (*Percina tanasi*) and boulder darter (*Etheostoma wapiti*). These species occur in large, free-flowing rivers and have been recorded in the Elk River. A number of snail darters were released into the lower Elk River in 1980 as part of this species' recovery plan. No evidence for a surviving population has been found in this system since the transplant. The boulder darter has been recorded in large rivers and streams from the Elk River to Shoal Creek in northwest Alabama and southern middle Tennessee. Since these species require free-flowing waters, they do not occur in the impounded waters of the lowest portions of the Elk River, including the portion in the vicinity of proposed marina.

Because no sensitive aquatic animals are present in the vicinity of this proposed development, there would be no impacts from development on Parcel 21 or from development of the proposed marina. This area of the Elk River has been impacted by the impoundment of Wheeler Reservoir, and no areas of aquatic habitat suitable for any of these species are present. All work would be conducted using BMPs to ensure that impacts to aquatic resources in the Elk River (Wheeler Reservoir) are minimal. No effects to state-listed or federally listed aquatic animals would result from this proposed development.

3.3. Wetlands

Affected Environment

Wetlands are areas inundated by surface water or groundwater often enough to support 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.

TVA performed on-site wetland determinations according to USACE standards (Environmental Laboratory, 1987) for Federal Jurisdictional Wetlands, which are regulated under the CWA. The USACE wetland standards require documentation of hydrophytic vegetation (USFWS, 1996), hydric soil, and wetland hydrology. Broader definitions of wetlands, such as the wetland definition used by the USFWS (Cowardin et al., 1979), and the TVA Environmental Review Procedures definition (TVA, 1983), were also considered in this review. Wetlands were classified according to the Cowardin system (Cowardin et al. 1979). The wetland boundaries were identified and flagged using pink wetland delineation flagging. Each flag was identified with the wetland ID and consecutively numbered. Routine wetland determination data forms are presented in Appendix C.

Wetlands were categorized by their functions, sensitivity to disturbance, rarity, and irreplaceability using a TVA-developed modification of the *Ohio Rapid Assessment Method* (ORAM) (Mack, 2001). TVA has developed a version (TVARAM) of the ORAM specific to the TVA region for use in guiding wetland mitigation decisions consistent with TVA's independent responsibilities under the National Environmental Policy Act (NEPA) and the Wetlands Executive Order (EO) 11990. The categorization was used to compare impacts between individual wetlands and to determine the appropriate levels of mitigation for wetland impacts. A copy of the TVARAM data form completed for each identified wetland is presented in Appendix C. The ORAM is designed to distinguish between three categories of wetlands. Category 1 wetlands are described as "limited quality waters." They are considered to be a resource that has been degraded, has limited potential for restoration, or is of such low functionality that lower standards for avoidance, minimization, and mitigation can be applied. Category 2 includes wetlands of moderate quality and also wetlands that are degraded but could be restored. Avoidance and minimization are the first lines of

mitigation. Category 3 generally includes wetlands of very high quality and wetlands of concern regionally and/or statewide, such as wetlands that provide habitat for threatened or endangered species. All practicable attempts would be made to avoid any disturbance of Category 3 wetlands and their buffer zones.

The proposed recreation easement is located on the west bank of the Elk River approximately 2 miles upstream of its confluence with Wheeler Reservoir. The site is dominated by topographic uplands, which support mature, second-growth stands of pine and mixed hardwoods. The site also contains two prominent inlets that receive flow from a number of drainageways that enter from west and northwest. Despite being shown as perennial blue-line streams, observations made in the field instead suggest that they are intermittent in nature and do not possess deep groundwater connections. Periodic overbanking of these drainages, coupled with hydrologic input from the impounded sections of the Elk River has given rise to two wetland areas. The southernmost, labeled Wetland "A," is centered at N34.78300, W87.28490, while the northernmost, labeled Wetland "B" is centered at N 34.78500, W87.27880 as determined by global positioning system coordinates. Each is summarized in Table 3-3 and briefly characterized below.

Table 3-3 Wetlands Identified in the Proposed Elk River Resort Project Area

Wetland ID	Wetland Type [a]	Acreage	TVA RAM Score/Category	GPS Location
A	PEM1Ch/PFO1Ch/PSS1Ch	4 acres	60/Category 2	N34.78300, W87.28490
B	PEM1Ch/PFO1Ch/PSS1Ch	1.2 acres	61/Category 2	N 34.78500, W87.27880

[a] Based on Cowardin et al. (1979)

Wetland Area A encompasses a total of 4 acres. An estimated 70 percent of the area (2.8 acres) meets USACE wetland standards and contains positive signs of wetland hydrology, a dominance of vegetation adapted to growing in saturated conditions, and hydric soils. Nearly all of the property meeting USACE standards comes under the hydrologic influence of the Elk River during summer pool. About 1.5 acres occur on seasonally inundated flats that are dominated by emergent annual or short-lived perennial vegetation. Common species here include river seedbox (*Ludwigia leptocarpa*), Walter's marsh St.-John's-wort (*Triadenum walteri*), and small-spike false-nettle (*Boehmeria cylindrica*). A number of aggressive introduced species are also present and include alligator weed (*Alternanthera philoxeroides*), Uraguay seedbox (*Ludwigia uruguayensis*), and marsh dewflower (*Murdannia keisak*). Such areas were characterized as palustrine emergent wetlands (PEM1Ch). The remaining 1.3 acres support a mixture of good quality palustrine forested and palustrine scrub/shrub habitat and were characterized as PFO1Ch and PSS1Ch. Vegetation includes black willow (*Salix nigra*), red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), buttonbush (*Cephalanthus occidentalis*) and silky dogwood (*Cornus amomum*). The remaining portion of Wetland A lies farther inland and away from the strong hydrologic influence of the river. Such areas lack hydric soil indicators, and, as such, only meet the criteria set forth by the USFWS and EO 11990 (see wetland map in Appendix C). The absence of hydric soils may be because they are relatively porous, and because the primary sources of hydrology come only from periodic overbanking of intermittent streams and precipitation input. All of these streams, too, have been impacted to some degree by all-terrain vehicle (ATV) traffic. Non-USACE wetlands contain relatively mature second-

growth stands of “facultative” and “facultative wetland” trees. Typical canopy species include yellow poplar (*Liriodendron tulipifera*), sweetgum (*Liquidambar styraciflua*), and loblolly pine (*Pinus taeda*). The herb layer contains three principal species: spotted touch-me-not (*Impatiens capensis*), Nepal microstegium (*Microstegium vimineum*), and cespitose knotweed (*Polygonum cespitosum*). The latter two are introductions that are known to colonize mesic woodlands aggressively. Neither is tolerant of long-term inundation. Wetland A was assessed using TVARAM protocols and assigned an overall score of 60, which places it in Category 2.

Wetland B is centered approximately 0.36 mile northeast of Wetland A. Like Wetland A, it falls at the head of a pronounced inlet that receives hydrology from both the Elk River and intermittent drainage from the northwest. Although this wetland encompasses only about 1.2 acres, it is structurally and functionally very similar to Wetland A. About 80 percent (1 acre) of the site meets USACE wetland standards. Such areas lie within the zone of hydrologic influence of the Elk River. Wettest areas classified as palustrine emergent wetlands (PEM1Ch) are very strongly dominated by river seedbox. Other seasonally flooded areas contain narrow bands of scrub/shrub and forested habitat (PSS1Ch and PFO1Ch). Scrub areas are dominated by buttonbush and silky dogwood, while forested lands contain relatively mature stands of sweetgum. Minor occurrences of open water also occur in this locale. Wetlands associated with intermittent drainage lack hydric soils and, consequently, do not contain all of the requisite parameters to meet the USACE wetland definition. Such areas encompass only about 0.25 acres. They are largely delimited by “facultative” species such as yellow poplar and sweetgum in the overstory and Chinese privet (*Ligustrum sinense*) in the understory. Dominant herbs are the same as non-USACE wetlands in Wetland A. Because they lie above the average high water level of the river, soils rarely become inundated or saturated for extended periods of time. This may be the reason that a dirt access road and several recent ATV trails have become established. Wetland B was assessed using TVARAM protocols and assigned an overall score of 61, which places it in Category 2.

Environmental Consequences

Under the No Action Alternative, Tract XWR-21PT would remain undeveloped until other development proposals are received. There would be no wetland impacts associated with the No Action Alternative.

Under the Action Alternative, a total of 5.2 acres of wetlands is present on the proposed project site; of this total, approximately 3.8 acres is classified as jurisdictional wetland, regulated by the USACE. The remaining 1.4 acres are nonjurisidictional wetlands subject to analysis under EO 11990.

Development of Wetlands A and B and the surrounding upland buffers may result in the complete or partial loss of the resource and its functions due to direct and/or indirect impacts. Direct impacts could potentially include introduction of fill material or the dredging of wetlands and adjacent waters for shoreline improvements. Indirect impacts may include sedimentation from highly erodible uplands and possible contaminant input from adjoining infrastructure. Examples include sewage leaks, fuel leaks, and runoff from impermeable surfaces. Impacts to forested wetlands are of special concern because of the historic high rate of loss, and continuing losses, of this type of wetland and the long time period necessary to replace forested wetlands and their functions (Dahl, 2000). It is unlikely that these impacts could be avoided if either of these two areas were developed. However, under the proposed action, the wetland areas would not be developed nor include any fill or dredging thereby avoiding these impacts.

The federal "no-net-loss" policy for wetlands states an interim goal of no overall net loss of the nation's remaining wetlands and the long-term goal of increasing the quality and quantity of the nation's wetlands resource base (White House Office on Environmental Policy, 1993). The Bush Administration's 2003 National Wetlands Mitigation Action Plan reaffirms the policy of no net loss of wetlands (U.S. Environmental Protection Agency [USEPA], 2002).

To facilitate meeting the overall goal of the federal policy of no net loss of wetlands and of EO 11990, to "take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands," the areas designated as both jurisdictional and nonjurisdictional wetlands should be avoided. Under the proposed action, the applicant would avoid the wetlands. To protect wetland areas during construction, orange mesh fencing will be installed around the wetland boundaries prior to any construction so that they are not inadvertently impacted by heavy equipment, etc.

3.4. Cultural Resources

Human occupation of northern Alabama has occurred from the Paleo-Indian to the Historic Periods. In northern Alabama, prehistoric archaeological chronology is generally broken into five broad time periods: Paleo-Indian, Archaic, Gulf Formational, Woodland, and Mississippian. Prehistoric land use and settlement patterns vary during each period, but short- and long-term habitation sites are generally located on floodplains and alluvial terraces along rivers and tributaries. Specialized campsites tend to be located on older alluvial terraces and in the uplands. European interactions with Native Americans associated with the fur trading industry in this area began in the 17th and 18th centuries. The first permanent occupation of northern Alabama by Europeans, Euro-Americans, and African Americans occurred in the late 18th century. Various excursions and temporary settlements by the British, French, and Spanish occurred prior to this period. From the 1840s to the mid-20th century, northern Alabama was a major cotton-growing area. Settlement and land use of the area remained primarily rural until the mid-20th century, at which time industry and urbanization increased. Numerous archaeological sites associated with these occupations have been identified within the Wheeler watershed.

Section 106 of the National Historic Preservation Act requires federal agencies, including TVA, to (1) consider the effect of its actions on historic properties and (2) allow the Advisory Council on Historic Preservation an opportunity to comment on the action. Section 106 involves four steps: (1) initiate the process, (2) identify historic properties, (3) assess adverse effects, and (4) resolve adverse effects. This process is carried out in consultation with the State Historic Preservation Officer (SHPO) of the state in which the undertaking takes place and with any other interested consulting parties, including federally recognized Indian tribes.

Archaeological sites, historic sites, and historic structures are evaluated in terms of their ability to meet the criteria for eligibility for the National Register of Historic Places (NRHP). Sites can be considered eligible for the NRHP if they meet at least one of the following criteria:

a. They are associated with events that have made a significant contribution to the broad patterns of history.

b. They are associated with the lives of persons significant in the past.

c. They embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic value; or represent a significant and distinguishable entity whose components may lack individual distinction.

d. They have yielded, or may be likely to yield, information important in prehistory or history.

In addition to these criteria, the property must possess integrity of location, design, setting, materials, workmanship, feeling, and association.

TVA Cultural Resources staff defined the area of potential effects (APE) to be the 91 acres of land planned for proposed commercial recreation easement development. A Phase I archaeological survey was conducted by TRC Solutions (Wild, 2005) to determine if any historic properties were present within the APE. Two archaeological resources (1LU681 and 1LU682) were identified as a result of this survey. These sites were both identified as late nineteenth century to early 20th century historic homesteads dating to the period of occupation prior to TVA acquisition (1933). These types of homesteads are common in the area and do not contain sufficient data to provide information on the occupation of this region. Therefore, these sites fail to meet the criteria for eligibility for listing on the NRHP. No evidence of Native American occupation was found during the survey. TVA conducted a survey along the shoreline in this area during an archaeological survey of the Wheeler Reservoir in 1990-1991 (Shaw 2000). This survey did not identify any archaeological resources along the exposed shoreline (survey was conducted during low winter pool elevation). Due to public concern, TVA would confirm that no archaeological resources are present in this zone by revisiting the site during the upcoming winter drawdown. The No Action Alternative or the proposed Action Alternative would have no effect on historic properties. TVA submitted these findings to the Alabama SHPO by letter dated September 19, 2005 (see Appendix C).

Members of the public were concerned that the applicant had broken laws regarding archeological resources when he conducted preliminary soils testing on the requested land for septic system suitability. The Archaeological Resources Protection Act prohibits the excavation, removal, damage or other alteration or defacement of any archaeological located on public lands, including TVA-managed lands, without a research permit. Archaeological resources are defined as any material remains of human life or activities that are at least 100 years of age and are of archaeological interest. The applicant had permission to access TVA property and since his intentions were not to dig for or remove archeological resources, a research permit was not needed. The minor soil disturbance resulting from applicant's performing a perk test did not damage archaeological resources.

3.5. Visual Resources

As proposed, TVA would grant an easement to the applicant. Subsequently, the applicant would construct water-use facilities (including wave attenuation, fueling, service, dry docking, and other ancillary facilities), primitive and developed camping areas, rental cabins, restroom facilities, and a restaurant. Construction activity associated with Phase I of the development would be visible to recreational lake users and shoreline residents from within the foreground (within 0.5 mile from the observer) viewing distance as the proposed roadway, fishing pier, launching ramp, and restroom facilities are constructed. Views of proposed structures and water-use facilities, such as the incremental additions to the marina would increase to the middleground (0.5 mile to 4 miles from the observer) viewing

distance. Recreational lake users, as well as shoreline and near-shore residents would have views of the proposed facility along the shoreline and in context with surrounding shoreline development. Shoreline residents and recreational lake users would have foreground and middleground views of increases in boat and light vehicle traffic in the near vicinity due to the addition of an improved lake access point, marine fueling station, and long-term docking facilities. The discernable increase in the number of vehicles and water vessels would remain in context with the surrounding landscape character. The additional traffic associated with the typical lake-use season from Memorial Day to Labor Day would result in temporary visual discord. The construction of resort amenities would potentially result in an adverse impact on the existing visual resources. However, given the current land allocation, the concept of a "natural" theme for this proposed development, and incorporation of best practices to meet visual management objectives, the impacts to visual resources associated with the proposed action would be insignificant.

The Plan allocated Parcel 21 to not only Commercial Recreation, but also Visual Management. The Plan included guidance that management or development proposals for tracts allocated for visual management would include provisions for maintaining or enhancing the quality of the visual resources. The goal being to ensure that the development is compatible with the natural landscape through context sensitive design. Therefore, given the dual allocation for visual management, TVA would provide the applicant with visual management practices to incorporate in the final design, subject to TVA approval, to make the proposed development visually compatible with the remaining natural landscape. Such provisions would include minimizing the height of structures to prevent protrusion above the tree line, requiring land-based structures or facilities constructed within 250 feet of the shoreline and all water-use facilities to be analogous in color to the surrounding environment so as not to directly contrast with the surrounding landscape character. Dark-sky issues are increasing throughout the country and are routinely being addressed by using lighting styles with full cut-off optics in order to minimize light trespass and glare.

3.6. Water Quality

The portion of Wheeler Reservoir in the project vicinity is classified by the Alabama Department of Environmental Management for public water supply, swimming and other whole body water-contact sports, and fish and wildlife uses. The Elk River embayment downstream of Anderson Creek is listed on the state Section 303 (d) list as partially impaired (i.e., not fully supporting its designated uses) due to pH and organic enrichment/dissolved oxygen from pasture grazing and nonirrigated crop production.

TVA initiated a Vital Signs Monitoring Program in 1990 to monitor the ecological conditions of run-of-the-river (mainstream) and tributary storage reservoirs systematically using indicator parameters to judge overall ecological "health." Wheeler Reservoir was monitored annually from 1991 through 1995 to establish a baseline and is now monitored every other year. Samples are taken from the forebay at TRM 277.0, from the transition zone at TRM 295.9, and from the Elk River embayment at ERM 6.0. Parameters used as indicators are dissolved oxygen, chlorophyll, sediment quality (sediment toxicity tests and/or sediment chemical analyses including heavy metals, pesticides, and polychlorinated biphenyls [PCBs]), and benthic macroinvertebrate and fish communities. Wheeler Reservoir had an overall "fair" rating in 1999, 2001, and 2003 (TVA, 2005). In 2003, dissolved oxygen levels rated good at the mid-reservoir and Elk River embayment locations and fair near Wheeler Dam due to a small area of low dissolved oxygen (less than 2 milligrams per liter) in the lower water column in August. At the forebay and Elk River sampling locations, chlorophyll

concentrations were high during most sampling periods in 2003 and rated poor. Chlorophyll rated good at the mid-reservoir location. The fish community rated good at the forebay site and fair at the other sites in 2003. The bottom life rated poor at the forebay and Elk River embayment and fair at the mid-reservoir site. Sediment quality rated good at the forebay and Elk River embayment. No pesticides or PCBs were detected, and the concentrations of metals were within background levels. The mid-reservoir site rated fair due to the presence of low levels of chlordane. There are no state advisories against swimming in Wheeler Reservoir. Fecal coliform bacteria levels in 2003 were within Alabama's guidelines for water contact.

Since no actions would be taken under the No Action Alternative, surface water quality would not be impacted. Under the Action Alternative, eroded soil or sediment is the most prevalent pollutant associated with construction activities. The erosion process begins with the dislodgment of soil particles. These particles are then transported as sediment to areas of deposition. Free-falling raindrops impact the soil with much greater energy than does an equal amount of flowing water. If land surfaces have no vegetative cover or other protective debris to cushion the impact, the total energy of falling rain is expended on dislodging soil particles. Loose particles are easily moved and, under certain conditions, carried away by overland water flow. The volume of overland flow that develops from a given rainstorm is related to a soil's physical factors that influence the infiltration and movement of water through the soil.

In reservoir shoreline settings, this process is accelerated. As the energy in the water (waves, generated by wind, personal and commercial watercraft, etc.) comes in contact with the shoreline, the erosion process begins. In shoreline erosion and associated bank failure, however, the sediment is immediately deposited in the reservoir, where it can adversely impact water quality, aquatic organisms, and detract from the natural appearance and value of shoreline properties.

Many factors influence the rate and amount of soil loss. In general terms, areas with highly erodible soils, sparse vegetation, steep topography, and occasional intense storms will exhibit the highest erosion levels. Human activity can frequently intensify or accelerate erosion rates, particularly if they entail vegetation removal, grading, concentrating runoff, or soil disturbance. In reservoir areas available to recreational boating, the shoreline is also vulnerable to higher wave energy levels associated with propeller wash.

BMPs are practices chosen to minimize soil erosion and prevent or control water pollution resulting from land disturbances such as construction sites. If properly applied, BMPs help protect the quality of receiving waters by keeping the sediment on site. BMPs can be tailored to a site and modified if necessary as the project progresses. The following examples of types of BMPs are not intended as specific requirements, but are provided as guidance for the applicant:

- Preconstruction plan that outlines soil erosion and sediment control measures
- Timing of construction (season or weather) as well as phased construction
- Structural controls such as sediment traps, silt fences, straw bale barriers, etc.
- Vegetative controls, i.e., minimizing clearing, maintaining existing vegetation, establishing buffers, timely reseeding disturbances with both temporary and permanent vegetative cover

The proposed level of land construction is similar to several other existing and proposed developmental projects throughout the Tennessee River system. The state-of-the-art approaches for minimizing soil erosion and subsequent sedimentation from such sites are adequate preconstruction planning and properly selecting, installing, and maintaining specific BMPs. The Alabama Department of Environmental Management is responsible for enforcement of state standards for construction sites through the NPDES program for regulating stormwater associated with construction activities. Thus, soil erosion and sedimentation would be minimized through selection, installation, and maintenance of BMPs.

The proposed development would require construction activity to take place along the shoreline. During this construction phase, turbidity levels could be elevated locally. Following construction activities, turbidity levels and sedimentation into the reservoir originating from the marina site should return to preconstruction levels or below due to the stabilization of the currently unprotected shoreline. BMPs and proper management of storm water runoff from roads, parking areas, the fuel storage area, and roofs are expected to result in insignificant impacts to reservoir water quality.

Construction of the proposed action marina would concentrate that traffic, which could increase local wave energy levels. Shoreline stabilization, if properly implemented, should protect the immediate harbor area from excessive erosion. The higher concentration of watercraft around the proposed marina would likely contribute to an insignificant acceleration of erosion of surrounding areas of unprotected shoreline, which would diminish with increasing distance from the marina.

Inadequate facilities for the collection, treatment, and disposal of domestic wastewater can result in adverse impacts to water quality and aquatic life. Septic systems that are not properly designed for the local soil conditions can result in surface breakout, runoff of sewage, or seepage through the soil into the reservoir. Treatment and disposal of wastewaters in compliance with TVA, state, and local requirements would minimize potential impacts from sewage and other liquid wastes. Preliminary testing of the site soils b the applicant, indicate that soils are adequate for appropriately-sized septic systems. Proper design, construction, and operation of the proposed marina development are not expected to result in significant increases in reservoir pollutant, nutrient, or fecal coliform bacteria levels.

Participation of the planned marina in TVA's Clean Marina Initiative in part of the applicant's proposal and would require proper BMP's to address potential impacts from shoreline erosion, fuel spills, on-site septic systems and marina sewage disposal. TVA's Clean Marina Initiative requires certified marinas to make concentrated efforts to maintain a stable shoreline, either through rip rap revetment or native shoreline vegetation protection. Site design and landscaping aspects also require efforts to minimize on-site erosion by use of proper construction BMP's, post-construction grounds maintenance and native vegetation protection and enhancement. Fuel management requires additional protection measures to minimize accidental fuel spills and leaks. Requirements include nozzle pad use, low-flow pumps and/or staff-only fuel pumping, on-site oil-absorption equipment and adequate system maintenance to avoid leakages. Sewage wastes are controlled by requiring properly maintained waste water treatment facilities (septic system or sewage treatment facilities) and sewage pump-out facilities for boat operators. Requirements also include restrictions on dumping of treated wastes in local waters and prohibitions for dumping untreated wastes.

3.7. Recreation and Recreational Boating Safety/Congestion

The proposed development site is approximately 91 acres on the western bank of Elk River approximately 1.7 miles above the confluence of the Elk River with the Tennessee River on Wheeler Reservoir. The Wheeler Reservoir Land Management Plan allocated this parcel for Commercial Recreation and Visual Management. There are no developed land or water facilities on the parcel, and there is no public road access. The applicant has purchased private landrights from CR 77 to the northern edge of the parcel for purposes of future access.

The parcel currently receives sporadic informal recreation use such as off-road vehicles and occasional bank fishing. The parcel is heavily wooded with a dense understory. It is approximately 3 miles downstream from the U.S. Highway 72 (US 72) bridge over Elk River. The land between the bridge and the parcel on the west bank is developed private residential, and the majority of the houses have private water-use facilities along the shoreline. The same is true of the area downstream from the parcel up to the Tennessee River. There is no development on the eastern bank between the bridge and the parcel and no water-use facilities on the shoreline. The land along the eastern shoreline from the bridge consists of three parcels of TVA-retained land and is allocated for Visual Management, Visual Protection, Small Wild Area, Forest Management, Wildlife Management, Minor Commercial Landing (near the bridge) and Public Recreation. Downstream of the retained parcels is a private community-slip facility associated with a residential development. Between that development and the mouth of the Elk River is a TVA retained parcel allocated for Navigation Safety Landing, Informal Recreation, Forest Management, Wildlife and Visual Management.

The Elk River at this location is over 2,100 feet wide and broadens to approximately 1-mile wide at the mouth of Elk River. Elk River embayment of Wheeler Reservoir extends up river for approximately 25 miles. Upstream from that, the river is navigable by smaller fishing vessels and nonmotorized vessels. The Tennessee River is over a mile wide at the mouth of the Elk River. The Tennessee River offers a navigable channel for over 650 miles from Paducah, Kentucky, to Knoxville, Tennessee, in addition to offering a navigable connection to the Gulf of Mexico via the Tennessee-Tombigbee Waterway at TRM 215. Recreational vessel use of this section of the Elk River is relatively sporadic. Summer holiday and weekend traffic are the busiest periods. A powered watercraft count was conducted September 3, 2005, the Saturday of the Labor Day weekend (see Section 3.10). The proposed marina would add a total of 100 boat slips and dry storage. A survey of six marina owners/managers was conducted in 1999 as part of another marina Environmental Assessment on the Tennessee River. This survey estimated that 25 to 50 percent (33 percent average) of boats in wet slips are used on the busiest weekend days, such as the fourth of July. Other estimates were 10 to 40 percent usage (20 percent average) for a typical weekend day and 5 to 10 percent use (7 percent average) for a weekday. Applying these average usage rates to the proposed 100 slips at the marina gives an additional 34 watercraft on the busiest weekend days, 20 more on typical weekend days, and 8 per day during the week. This assumes the worst case scenario in which all slips are leased and have powered watercraft. These additional watercraft would be dispersed throughout the day and when compared to the watercraft count, these are minor increases. Due to the relative width of the water bodies and the lack of development on the eastern shore, conflicts between boaters are sporadic and short term.

Recreation demand is primarily influenced by population growth and demographics. The primary market for the proposed development would be a 50-mile radius. The population of

this area is projected to be 902,118 in 2005. By 2015, the population is expected to be 983,751, for an increase of 81,633 or 9 percent. Western portions of Limestone County and eastern portions of Lauderdale County have been experiencing growth in recent years, and the trend is expected to continue. The trend data from the National Survey on Recreation and the Environment 1982-2001, places developed camping and motorboating in the second fastest-growing group of sports with growth rates for the period of 86.4 percent and 62.3 percent, respectively. Developed camping in Alabama has a participation rate of 20.8 percent, while motorboating has a participation rate of 25.4 percent. These participation rates when applied to the population growth would reflect a 10-year increase in demand for developed camping of approximately 16,980 individuals participating in camping and 20,735 individuals participating in motorboating. Only a portion of these individuals would own their own campers or motorboats, as many of these participants would camp and/or boat with family or friends.

Table 3-4 below indicates facilities within 10 river miles of the mouth of the Elk River that offer camping and/or marina services. There is no public marina or fuel facility on the Elk River embayment of Wheeler Reservoir. Within ten river miles of the proposed project, there are only two recreational developments marinas facilities, Bay Hill and Joe Wheeler State Park. Bay Hill Marina is in a closed harbor with fixed harbor limits and is not likely to add additional slips in the future. Joe Wheeler is a State of Alabama resort park featuring cabins, golf, camping, marina, lodge, and related facilities. It is regionally significant and attracts users from within and outside the Tennessee Valley. Joe Wheeler State Park is planning to add 26 additional large marina slips during 2006 and has plans to build additional upscale rental cabins in the future. Since Bay Hill Marina is not likely to expand, and Joe Wheeler is only currently planning to add 26 large slips, the increase in demand would require additional facilities such as those proposed for Elk River Resort.

Table 3-4 Facilities Within 10 River Miles With Camping and/or Marina Services

Inventory of Marina and Camping Facilities									
Area Name	**River Mile**	**Campsites Water/ Electric**	**Campsites Without Water/ Electric**	**Marina Parking Spaces**	**Wet Slips**	**Dry Storage**	**Fuel**	**Boat Repair**	**Number of Cabins**
Bay Hill Marina	287.0 R	0	0	150	150	209	1	1	5
Elk River Group Lodge	284.5 R	0	0	0	16	0	0	0	0
Joe Wheeler State Park	277.0 R	116	50	110	158	20	1	0	26
Lucy's Branch Resort	287.0 R	168	0	0	0	0	0	0	0
Mallard Creek Recreation Area	294.8 L	56	0	0	0	0	0	0	0
Wheeler Northside Campground	275.0 R	33	0	0	0	0	0	0	0
Total		**373**	**50**	**260**	**324**	**229**	**2**	**1**	**31**

L = Left
R = Right

Table 3-5 Lake Access Areas Within the Vicinity

Lake Access Facilities		
Area Name	**Tennessee River Mile**	**Elk River Mile**
Joe Wheeler Cabin Sites Ramp	275.6L	
Joe Wheeler SP First Creek Ramp	277.0R	
Spring Creek Ramp	283.5L	
Mouth of Elk River Ramp	284.5R	0.2R
Barnett Landing Ramp	284.5R	2.2R
US 72 Ramp	284.5R	4.9R
Elk River Lodge Ramp	284.5R	5.0L
Anderson Creek Ramp	284.5R	5.8R
Goldfield Branch Ramp	285.1L	
Lucy Branch Ramp	287.0R	

L = Left
R = Right

From the public comments, it was noted that the proposed site contains equestrian trails used by the public and that there are no other equestrian trails in the general area that offer comparable equestrian aesthetics. This type of activity being an informal use, such as occasional informal camping, would be displaced by the development unless the applicant voluntarily accommodates equestrian use. Informal equestrian use happens in many places on TVA property. The Zone 3 and 4 properties directly across Elk River are also available for hiking, biking, equestrian use, etc.

Under the No Action Alternative, the proposal would not be implemented. Under the Action Alternative, the new camping and marina facility would be developed as previously described. Based upon market growth, additional facilities such as rental cabins and restaurant would be provided. The recreating public would have more convenient services and facilities on Elk River and this section of the Tennessee River. The increase in wet and dry slips would not significantly impact the number of recreational vessels and subsequent boater congestion and conflict. TVA would require that Clean Marina guidelines as well as American with Disabilities Act guidelines be followed for all appropriate facilities.

3.8. Navigation

Affected Environment

The proposed development site is located on TVA Wheeler Reservoir Tract 21 near the mouth of the Elk River in Lauderdale County, Alabama. This tract is located between ERMs 1.7 and 2.1 on the right descending bank and includes two small embayments.

The Elk River is a navigable tributary of the Tennessee River, which is itself a part of the 10,000-mile integrated, commercial Inland Waterway System. The U.S. Coast Guard (USCG) maintains buoys and daybeacons in aid of commercial navigation on the Elk River from the mouth to the US 72 bridge at ERM 4.9. Beyond that, TVA maintains navigation aids for recreational boating to the Elk River Mills Bridge at ERM 14.5. There is no regular commercial navigation activity on the Elk River at this time with the exception of marine construction companies building private dock facilities and periodic bridge inspection and

maintenance for the Alabama Department of Transportation. There is an inactive grain terminal just above the US 72 bridge at ERM 5.3L, but the facility is in a state of considerable disrepair. As noted in Section 3.11, the property has been sold and is being developed into a subdivision. There is a condominium development adjacent to the terminal site, and it seems unlikely that this facility would ever reopen for commercial activity. The tract adjacent to Tract 21 on the upstream side, Wheeler Reservoir Tract 22, is zoned for industrial/commercial, but does not currently have direct road access. Tract 22 has not been given a potential barge terminal site, but dredging could make this a potential industrial/terminal location for the City of Rogersville.

In the lower Elk River where the proposed development would take place, the river is approximately 2,000 feet across. Depths here are sufficient to support commercial navigation and, in fact, are in excess of 18 feet at normal summer pool elevations of 556 feet above mean sea level. While these depths are available for much of the width of the river here, the navigation channel itself is the standard commercial width for tributaries of 300 feet and is delineated for commercial and recreational vessels alike by the USCG buoys. At the mouth of the Elk River, the navigation channel hugs the right descending bank but then crosses the river between ERM 1.4 and ERM 2.0 to hug the left descending bank. At the lower (southern) property line of the tract on which the proposed development is to take place, the navigation channel is in the middle of the river. At the upper (northern) end of the tract, the channel is adjacent to the opposite (left) bank. No navigation aids are present on the Tract 21 shoreline or immediately offshore. A green (can) buoy marking the port side (left side as looking upstream) of the navigation channel is stationed at ERM 2. At the same river mile, a red daybeacon marking the starboard side of the channel (right side as facing upstream) is fixed in the water near the shoreline just outside and upstream of the cove in which the private-use community dock facility for the residential development called The Pointe is located.

Environmental Consequences

Under the No Action Alternative, there would be no impact to existing navigation conditions. If the Action Alternative was selected, the development would take place as described in Section 2.2. Two components of this proposed development have the potential to impact navigation in the area–the lakeward extent of the marina structures and the requested harbor limits.

With regard to marina structures, the applicant has included a trash break structure to be constructed perpendicular to the Tract 21 shoreline on the upstream side of the tract at river ERM 2.0. The trash break as proposed would be 800 feet long. The placement and distance from the shoreline for this structure has not been specified, although the drawings indicate it would not abut the shoreline, but rather allow room for boats to pass between the shoreline and the structure. Thus, the lakeward extent of this structure would be some distance greater than 800 feet, perhaps as much as 900 feet or more. This would be the longest structure in the marina complex. (The longest dock structure would be 283 feet, plus an unspecified walkway length from the shore, with the potential for expansion at a later date.) Similarly, on the downstream side of the marina, the applicant plans a wave break structure with a length of 400 feet, to be placed diagonal to the marina complex. It appears that the placement would be roughly parallel to the navigation channel as the channel crosses the river to the left descending bank. In addition, the applicant has indicated a preference for harbor limits to extend to 1,000 feet from the shoreline, presumably to create a no-wake zone for the marina area.

The total width of the Elk River at this location is slightly less than 2,000 feet. If the trash break structure is built and placed as in the proposed development, it would create a lakeward extent of nearly half the distance across the river. As a general rule, TVA has maintained a commitment to restricting marina development to one-third or less of the distance across a river span or embayment so as not to impede the safe flow of vessels traveling up- and downstream. TVA also typically sets harbor limits that are defined by the configuration of structures for a commercial facility and not to extend beyond those structures.

Under these circumstances, then, TVA would not approve the proposal as planned because of the proximity of the marina complex to the navigation channel. The can (green) buoy marking the port side of the navigation channel is 1,000 feet from the shoreline of Tract 21 and lies on the same perpendicular plane as the proposed trash break. A trash break with an overall lakeward extent of 800+ feet and harbor limits of 1,000 feet are in excess of one-third of the width of the river and would create unsafe navigation conditions on the waterway.

After discussion of these issues, the applicant has agreed to reduce the harbor limits to 550 feet, which is less than one-third the width of the river. The harbor limits would be to the limits of the structures, which is where the no-wake zone would start. This would still allow some expansion if necessary. The trash break would be reduced from 800 feet to 550 feet (see Figure 3-1 for approximate location). These revised parameters for the location of the harbor limits and the trash break would ensure that navigation is not adversely impacted.

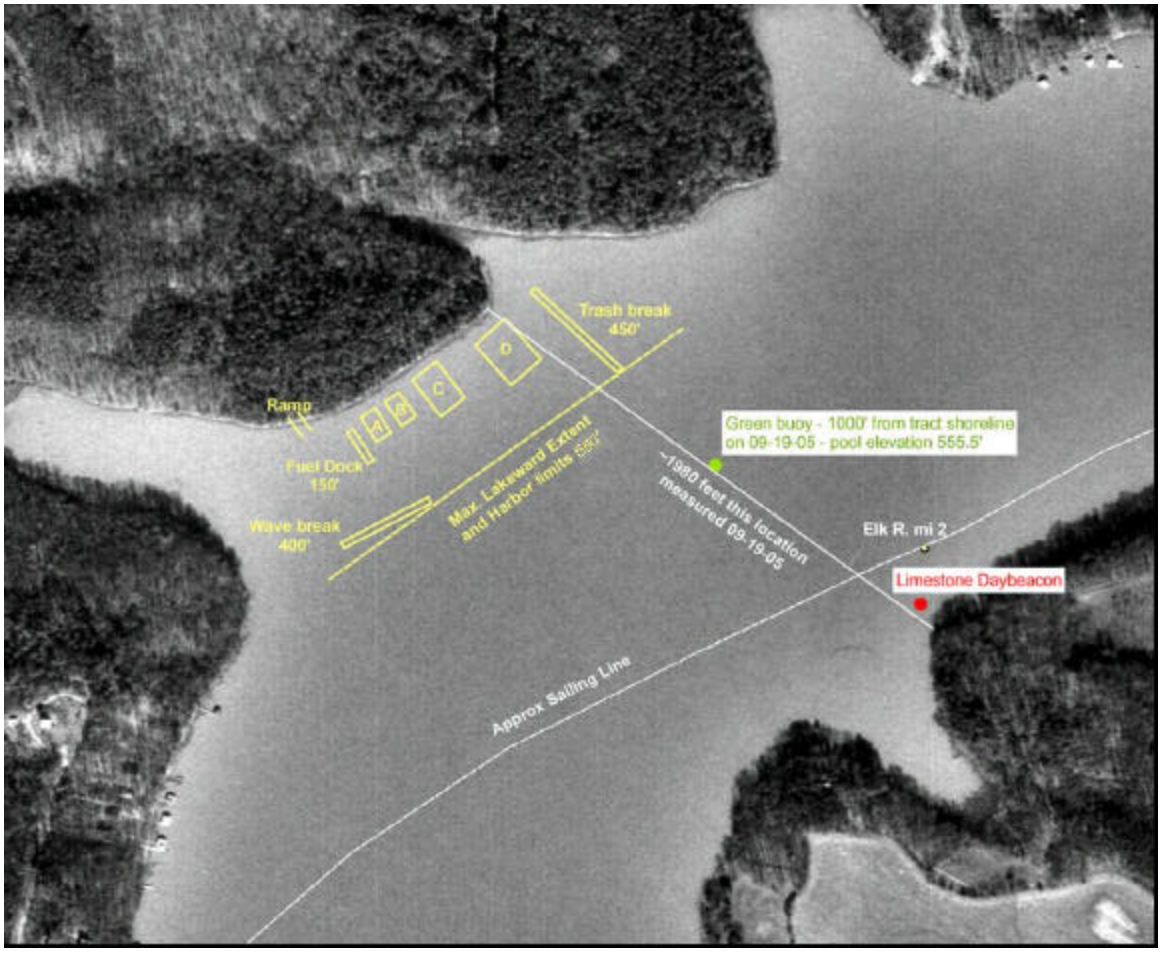

Figure 3-1 Aerial of Revised Marina Layout

3.9. Floodplains

The proposed project involves floating boat slips, fishing piers, wave break, and fuel dock; boat-launching ramp; riprap and retaining wall; dredging; dry boat storage building; ship's store/office; cabins; restaurant; bathhouse; fuel storage tanks; RV park and camping areas; parking lot; and access road. The floating boat slips, fishing piers, wave break, and fuel dock; boat-launching ramp; retaining wall; riprap; dredging; and access road would involve construction within the 100-year floodplain. For compliance with EO 11988, these are considered to be repetitive actions in the floodplain that should result in minor impacts provided the excavated material is spoiled outside of the floodplain. All excavated material would be spoiled above the TVA Flood Risk Profile elevation. The dry boat storage building, ship's store/office, cabins, restaurant, bathhouse, fuel storage tanks, RV park, camping areas, and parking lot would be located on existing ground outside of the 100-year floodplain and above the TVA Flood Risk Profile elevation. The project would comply with the TVA Flood Control Storage Loss Guideline, because there would be less than 1 acre-foot of displaced flood control storage. The Section 26a approval would require the applicant to:

- Agree to securely anchor all floating facilities to prevent them from floating free during major floods.

- Construct or place all portions, on average, no more than 2 feet from the existing shoreline at normal summer pool elevation, for the purposes of shoreline bank stabilization.
- Agree that spoil material would be disposed of and contained on land lying and being above the 557.3-foot contour and use every precaution to prevent the reentry of the spoil material into the reservoir.
- Contact local government official(s) to ensure that this facility complies with all applicable local floodplain regulations (specifically for the access road).

3.10. Noise

Environmental noise is the total noise present and projected from all sources including current background noise from human and natural sources and potential intruding noise from projected human activity. The significance of the potential intruding noise comes from the incremental increase it adds to the present environmental noise level. Whether incremental noise increase is significant is very subjective and based on the backgrounds and attitudes of the receptor population at the site. This is especially true for episodic noise, such as an airplane taking off over a residential area. People who work at the airport might not mind the intruding noise, but people who have no financial connection might strongly object to it. Additionally, the mere presence of an intruding noise from a new source might make some people complain regardless of its level because the intruding noise is an indicator of an unwanted development.

There are no standards or laws regulating noise in Lauderdale County at the proposed facility site. Neither is noise directly regulated under the state or federal law. EPA issued a guidance document in 1974 that is still used, but it is directed toward industrial and not recreational application.

The proposed facility would not be located in pristine wilderness and since the area is moderately used for informal, multipurpose recreation. There is abundant evidence of four-wheel ATV use with at least two “hill climb” areas. Observation of tracks also show horse riding and off-road motorcycle use, and there is a deer-hunting stand near the western fence line. There is a walk-in entrance to the area from the south at the end of Hidden Valley Road and another multiuse entrance through TVA Tract 22 to the north. It appears that the southern entrance was recently chained closed to prevent vehicle entry.

The north fence line borders farmland and scrub forest with the nearest residence about 1,200 feet to the north-northeast along Barnett Road. To the west is forested for about 300 feet and then another 300 feet of field to the nearest residence. The southern border is moderate-density lakefront and sparsely populated forest area. The nearest southern residences are about 30 feet from the property line on the lakefront and 50 feet away in the forest area. This is the end of the Hidden Valley Road area. Most of the east boundary is Elk River waterfront with about 300 feet bordering TVA Tract 22. The nearest eastern residence is about 1,600 feet to the east, northeast along Barnett Road. Across the river is the new The Pointe waterfront, residential community.

Current noise sources include:

- Community noise from the Hidden Valley Road area, such as vehicles, residential air conditioners, and outside maintenance/landscaping such as lawn mowers.

- Occasional ATV use.
- Distant traffic noise, probably from US 72.
- Distant industrial noise coming from the south-southwest, probably from the International Paper Mill.
- Powered watercraft, especially from the Barnett Road boat landing and transit watercraft from the two highly used boat landings near the US 72 bridge and from the residences in the Hidden Valley Road area.

A powered watercraft count was conducted September 3, 2005, the Saturday of the Labor Day weekend. The count area was defined by the approximate, hypothetical perpendicular lines from the north and south TVA Tract 21 shoreline boundaries on the west across the Elk River to the east shoreline. It was a 10-hour count beginning at 7:00 a.m. and ending at 5:00 p.m. Three categories of powered watercraft activity were used for the count: transit, crossing both count area boundaries; fishing, remaining in the count area while fishing; and sport, continuous powered activities such as jet-ski use or tubing within the count area. Results of the count are Transit – 144, Fishing – 13, and Sport – 27, for a total of 184.

Additional powered watercraft activities were noted before 7:00 a.m. After 5:00 p.m., the watercraft activity appeared at the same level as in the 4:00 p.m. to 5:00 p.m. time increment. Weather conditions during the watercraft count were sunny, calm to light winds, and temperature beginning at 74 degrees Fahrenheit (°F) and warming to 88°F.

Potential noise sources at the proposed Elk River Resort include the following:

Phase 1	Construction
	RV/campground (100 sites)
	Boat launch
	Playground/recreation area
	Store
Phase 2	Construction
	Wet boat slips (50, 40 covered)
Phase 3	Construction
	RV/campground (additional 100 sites if demand increases)
	Wet boat slips (additional 50 if demand increases)
	Additional traffic on Barnett Road (if demand increases)
Phase 4	Construction
	Dry storage for watercraft
Phase 5	Construction
	Cabins

Construction noise impacts would generally be during daylight hours and the usual business weekdays. Heavy equipment used for road building, site clearing and preparation, and dredging would generate noise that would be clearly heard along Barnett Road and moderately heard across the river and in the Hidden Valley Road area. Most people understand that construction noise is short term, and because of the limited building construction after the site preparation, the construction period of the proposed resort would

be very limited. This short construction period along with construction activities taking place during usual business hours reduces the noise consequences to an insignificant level over the life of the project.

The Phase 1 noise would include the noise from air conditioning from RVs and buildings, powered watercraft from the boat launch, and playground activities. Most resort usage would be in the summer when neighboring residents have their air conditioners operating and their windows closed. Typically, closed windows reduce intruding noise by about 24 decibels (dB) according to USEPA. Noise from nearby air conditioners at the residences and their neighbors would be much louder than intruding noise from the resort, and the closed windows would reduce the intruding noise to an insignificant level. The for-fee boat launch at the resort would not increase day-use watercraft activity because of the three nearby free boat launches. Possible boat activity could increase from watercraft associated with the RV/campground. Although hard to estimate, the impact of this additional boating activity would not be significant since it would occur at the same time as the time of maximum boating use of the river system.

Phase 2 would add 50 boat slips with their associated powered watercraft operation noise. A survey of six marina owners/managers was conducted in 1999 as part of another marina Environmental Assessment on the Tennessee River. The survey estimated that 25 to 50 percent (33 percent average) of boats in wet slips are used on the busiest weekend days, such as the fourth of July. Other estimates were 10 to 40 percent usage (20 percent average) for a typical weekend day and 5 to 10 percent use (7 percent average) for a weekday. Applying these average usage rates to the proposed 50 slips at the marina gives an additional 17 watercraft on the busiest weekend days, 10 more on typical weekend days, and 4 per day during the week. This assumes the worst case scenario in which all slips are leased and have powered watercraft. When compared to the watercraft count, these are minor increases.

Phase 3 would increase the boat slips by 50 doubling these worst-case numbers to about 34 on the busiest days of the weekend and 20 and 8, respectively, on the other day categories. These increases are 18 percent, 11 percent, and 4 percent of the watercraft count and would not be significant to the local residents because they participate in similar activities and expect to hear powered watercraft noise in the summer. Phase 4 could add more watercraft from dry storage at a usage rate lower than the wet-slip rate.

The Phase 5 cabins would generate air conditioning noise that is similar to the residential air conditioning. Because of the distance from the property boundary and similar noise from adjacent residential areas, the noise would not be significant outside the resort area.

In summary, the proposed site is currently a multipurpose, moderately used, informal recreation location with significant watercraft usage in front of the shoreline and ATV traffic inland. Intruding noise from vehicle traffic, watercraft, and industrial sources are heard at the site and in neighboring areas. If approved and built, construction noise for the proposed resort location would be noticeable for a short time, and there would be increases in noise from land-based and water-based sources over the long term. Because of the current background noise, the potential for only modest increases in similar noise, and the similar activities undertaken by neighboring residents, the environmental noise consequences would be insignificant.

3.11. Land Use (Including Security Concerns and Property Access/Property Values)

This site, containing approximately 91 acres, is located on the west bank of the Elk River approximately 0.5 mile upstream from Wheeler Reservoir. Wheeler Reservoir produces a variety of benefits, including flood control, navigation, power generation, recreation, and resource protection/management. TVA seeks to balance these benefits as it considers requests such as the Elk River Resort. The Wheeler Reservoir Land Management Plan (Plan) was completed in 1995 to provide TVA guidance toward achieving a balance between development and protection of our natural resources. The Plan provides TVA resource management and property management decisions on 11,284 acres of land around Wheeler Reservoir that are under TVA stewardship and control. It identified the most suitable uses for 203 tracts of TVA public land, providing sites for recreation, industry, navigation, wildlife and forest management, cultural and environmental preservation, and agriculture. Broad land management goals established in the Plan include: (1) improvement of public recreation opportunities, (2) protection of the natural and cultural environment, and (3) enhancement of economic development opportunities. One objective of the Plan was to help provide for a diversity of quality recreation opportunities on Wheeler Reservoir. The Plan identified four tracts (Tracts 21, 67, 88, and 91) for future quality commercial recreational development. Tracts allocated for Commercial Recreation may include marinas, docks, launching ramps, rental cabins, trails, lodges, pools, campgrounds, restaurants, and other tourism-related outdoor recreation facilities. This proposal for Tract 21 includes an RV park with utilities and sanitary facilities, camping areas, nature trails, a marina including a ship's store and, ultimately, cabins, a restaurant and a dry storage for boats, which is consistent with the planned use in the Plan.

The applicant is requesting a 30-year easement with the option to renew at the end of the term. TVA would receive compensation from the applicant for the use of this property during the term of the agreement. This site would be monitored by TVA staff to make sure it complies with all guidelines and conditions set forth in the easement. If the easement is not renewed or is cancelled by either the applicant or TVA, the applicant would be required to remove the facilities and restore the land to its original condition. If this is not completed in an agreed amount of time, TVA would have the option of completing the removal at the applicant's expense or leaving the facilities in place and obtaining another individual to continue operation of the property.

The property does not currently have public access, except for those who own private property adjacent to this site for those having a boat to access the site by water. The proposal indicates access to the property would be across land the applicant has purchased off CR 77. Legal access is not available on the south side of this property due to a strip of private property that is owned at the end of Lakeview Drive. The proposed Elk River Resort would provide access to the public.

Comments received during the public scoping period expressed concerns about security. The property is secluded and accessible through one road. The proposal requests permission to place a heavy gate capable of being locked at the entrance. The hours of operation would be posted and the gate would be closed after hours. According to the Chief of Police for Rogersville, part of Parcel 21 is located in the Rogersville Police Department jurisdiction and the other portion is within the Lauderdale County Sheriff's Department jurisdiction. Both departments back each other on emergency calls. The proposal states the Lauderdale County Sheriff and TVA Police would become familiar with

the location and operation of the facility through annual invitations to luncheons. The Rogersville Police Department would be included also.

The proposal indicates that 75 percent of the campground sites would be available for long term and 25 percent would remain short term. All campground sites would be required to remain truly mobile. The marina property and water-use facilities cannot be used for full-time residential purposes. Several responses compared this proposal with Lucy's Branch/Bay Hill. In 1947, TVA sold the tract of land, known as Lucy's Branch, with a deed restriction limiting the site to cabins for public recreation purposes. This restriction was later removed from this privately-owned land. The Elk River Resort proposal is asking TVA to grant a 30-year easement for the use of the property for commercial recreation purposes. The fee ownership of this tract of land would remain with TVA. TVA would require that all facilities and services must be made available to all members of the general public without discrimination or distinction because of race, color, national origin, age, or handicap.

The Plan states that floating debris, carried by Elk River, gathers at the back of the embayment at this location. This tract has been restricted to public access for many years making it difficult to clean this debris. The proposal would allow easier access for shoreline cleanup of this debris. The applicant is requesting to stabilize the shoreline by placement of riprap or retaining wall. This would provide protection of the shoreline and the TVA property by stopping further erosion that was previously identified in the Plan.

The proposal states that a caretaker/manager will be on site at all times during normal and seasonally extended business hours to supervise activities allowed at the site. The applicant should take all reasonable precautions to prevent and suppress forest, grass, and other fires by requiring campfires to be restricted to designated areas within fire rings. During the public comment period, several individuals expressed that there was inadequate police patrols and protection in the area. The police department does patrol these areas and the proposed development would be within police jurisdiction.

Residential property values can be affected by many diverse factors or conditions, such as supply and demand, view, water frontage, accessibility, availability of shopping and services, economic conditions, and a vast number of other factors. It is often difficult to isolate the effect of any single variable. In addition, the relative importance of each of these factors or conditions may be unique to each individual property and can reflect the personal values of the purchaser or seller. Representatives from area financial institutions believe that based on their experience with other marinas, property values could increase in the surrounding areas as this would initiate additional property development as people would want to locate near the convenience of a marina. Overall, TVA does not believe that property values would be adversely affected.

During the public scoping period for this proposal, individuals expressed issues related to the cantilevered structure located at the former Wheeler Grain Company site. The proposal is not related to this structure or site but is addressed in the following information. In 1983, the Wheeler Grain Company obtained an easement from TVA for the right to load and off-load products across TVA property. The company constructed a steel-cantilevered structure on the easement area. The company is no longer in business, and the structure is no longer being used. The back-lying property has since been sold and is being developed as a subdivision. TVA is currently pursuing legal means to remove this structure.

3.12. Roads/Traffic and Solid Waste Disposal

3.12.1. Roads and Traffic

The proposed marina development is located in Lauderdale County, off CR 77 (Barnett Road), and right-of-way access has been purchased for access to the area from CR 77. This development is within close proximity to Elk River State Park and is southeast of Rogersville, Alabama. CR 77 (Hooie Lane) connects with US 72 north of Elk River State Park. From US 72, the site can be accessed from a variety of other locations, but the most direct and most probable route is via CR 77 (Hooie Lane changes to Barnett Road at its intersection with CR 70). The area surrounding the routes leading to the proposed marina site is both residential and rural farmland, with the majority being farmland. The nearest interstate highway is Interstate 65, which runs between Nashville, Tennessee, and Birmingham, Alabama, and is approximately 20 miles to the east. Portions of the existing transportation network are shown in Figure 3-2.

Figure 3-2 Street Map

A site visit was made on September 9, 2005, to evaluate the transportation network near the proposed development. US 72 is a multilane highway, with some portions having a center turning lane while the remaining portions are divided with a median. US 72 has recently been resurfaced and is in very good condition with excellent lane and shoulder widths. CR 77 is a 100 percent no-passing, two-lane, rural road. CR 77 has no shoulder area, with 10- to 11-foot driving lane widths, and a low-posted speed limit. The section of CR 77 from US 72 to CR 70 (Hooie Lane) has level terrain while the remainder of CR 77 (Barnett Road) has rolling terrain.

The average annual daily traffic (AADT) for US 72 is 12,010 vehicles per day, according to Alabama Department of Transportation 2004 traffic data. Traffic volumes for the local roads were not available. Peak-hour trip ends were estimated for CR 77 using the methods published by the Institute of Transportation Engineers (ITE) in *Trip Generation*, Sixth Edition. According to the ITE methods and TVA assumptions, CR 77 currently has 65 vehicles per peak hour on weekdays, 61 vehicles per peak hour on Saturdays, and 57 vehicles per peak hour on Sundays.

The proposed resort development consists of five construction phases. Upon the completion of Phase 5, the development would include wet boat storage, dry boat storage, a ship's store, an RV park, camping areas, nature trails, cabins, and a restaurant. There would be a total of 200 campsites and 100 wet slips for boat storage. The trips generated by the proposed development were predicted using the same ITE methods as mentioned above. The marina development would generate 70 vehicles per peak hour on weekdays, 40 vehicles per peak hour on Saturdays, and 101 vehicles per peak hour on Sundays. These values reflect the assumption that there would be a 60 percent utilization rate of the development and that 20 percent of daily trips take place during the peak hour period. The additional traffic generated by the development would be minor when compared to the existing traffic on US 72. The projected traffic levels on CR 77 if the development is constructed (135 vehicles per peak hour on weekdays, 101 vehicles per peak hour on Saturdays, and 158 vehicles per peak hour on Sundays) are much lower than the capacity (3,200 vehicles per hour) that the *Highway Capacity Manual* (Transportation Research Board, 2000) projects for two-lane, rural highways.

The proposed Elk River Marina development would generate and distribute additional traffic to the existing transportation network, but would not create any significant changes or overloading to the network. The current traffic volumes in the area appear to be at levels well below what the facilities can manage.

3.12.2. Access Road

Comments received from the public identified that in Exhibit D of the joint public notice, the applicant proposed a 48-inch diameter drainage culvert for the proposed access road. If this diagram is accurate and to scale, then it appears that the hydraulic drainage cross-sectional area is being reduced from approximately 32 square feet to approximately 12.5 square feet.

The applicant clarified that Exhibit D showing a 48-inch culvert is for illustration only. To obtain preliminary road cost and construction types, the applicant requested an engineering firm in Florence, Alabama, to design the road. Since the adjoining parcel, Parcel 22, is allocated to industrial use, the design was specified to meet federal, industrial standards to ensure the quality of the road in the event the road would have to cross the industrial-allocated parcel. The calculations were made using only a topographic map. The design

engineers specified a 72-inch culvert, which would be on privately owned access property; all other culverts would be 36-inch culverts throughout Parcel 21. Final designs for the road would include a more detailed assessment, which would be verified when better visual inspection is possible after initial clearing and grubbing.

3.12.3. Solid Waste

Lauderdale County provides countywide solid waste collection services to all businesses and residents located within the county. Collected waste is transferred within the county for hauling to Lawrence County, Alabama, for disposal in a permitted landfill. The life of the Lawrence County landfill is estimated to be roughly 20-30 years. Construction wastes generated within Lauderdale County can be disposed in a permitted construction and demolition landfill operated by and located within the county. In addition, several commercial waste hauling firms offer contractual services to clients within Lauderdale County for the collection and disposal of solid waste. In addition, two community-based recycling centers are located within approximately 20 miles of the proposed resort—one in Florence (in Lauderdale County) and one in Athens (in adjacent Limestone County). These centers provide an alternative to disposal and enable recyclable materials to be diverted away from the waste stream.

Under Alternative A, no additional solid waste would be generated. Under Alternative B, additional solid waste would be generated during construction and operation of the resort. Subsequently, waste would be generally during operation of the resort commensurate with the size of the facilities. The resort would have readily available and environmentally acceptable solid waste collection services and disposal options. Therefore, as a result of its reliance on available collection and disposal services, the impact of solid waste generation would be insignificant. In addition, presence of area recycling operations would provide the opportunity for the resort to participate in recycling of some materials. Use of appropriate equipment to receive and collect recyclable waste would facilitate delivery of recyclable materials to an area recycling center for processing and thus further reduce the amounts and impacts of solid waste disposal.

3.13. Summary of TVA Commitments and Proposed Mitigation Measures

TVA proposes the following commitments to mitigate adverse effects of this proposal.

- All marina facilities, to include harbor limits shall be reduced to a distance of 550 feet from the shoreline.

- To protect wetland areas during construction, orange mesh fencing will be installed around the wetland boundaries prior to any construction so that they are not inadvertently impacted by heavy equipment, etc.

- TVA will require that no future development occur in the wetlands present on the site.

- To make the proposed development visually compatible with the remaining natural landscape, TVA will provide the applicant with visual management practices to incorporate in the final design, which will be subject to TVA approval.

CHAPTER 4

4. LIST OF AGENCIES AND PERSONS CONSULTED

Federal Agencies

Mr. Ron Gatlin, Chief
U.S. Army Corps of Engineers
Nashville District, Regulatory Branch
3701 Bell Road
Nashville, Tennessee 37202-1070

Mr. Larry E. Goldman, Field Supervisor
U. S. Fish and Wildlife Service
Post Office Drawer 1190
Daphne, Alabama 36526

Mr. Robb Hurt
U.S. Fish and Wildlife Service
2700 Refuge Headquarters Road
Decatur, Alabama 35603

State Agencies

Mr. Timothy C. Boyce
Alabama Forestry Commission
Post Office Box 302550
Montgomery, Alabama 36130-2550

Mr. DeWayne Freeman, Director
Department of Economic and Community Affairs
P.O. Box 5690
Montgomery, Alabama 36103-5690

Mr. Keith Jones, Executive Director
Northwest Alabama Council of Local Governments
P. O. Box 2603
Muscle Shoals, Alabama 35662

Mr. M. Barnett Lawley, Commissioner
Department of Conservation and Natural Resources
64 North Union Street
Montgomery, Alabama 36130

Mr. Elizabeth Brown, Acting Executive Director
Alabama Historical Commission
468 Perry Street
Montgomery, Alabama 36130-0900

Mr. James W. Warr, Director
Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

Individuals

Connie Adam, Athens, AL
Richard H. Adam, Athens, AL
Sam R. Allen, Muscle Shoals, AL
Mark and Kim Anderson, Rogersville, AL
Gary G. Anderson, Rogersville, AL
Jeff Andrews, Selma, AL
Selby Andrews, Rogersville, AL
Joe Anglin, Rogersville, AL
Ann Anglin, Rogersville, AL
Rick Armstrong, Tanner, AL
Regina Aycock, Muscle Shoals, AL
Marvin Babin, Rogersville, AL
Randall A. Baker, Waverly, TN
Corey Ball, Rogersville, AL
Helen Ball, Rogersville, AL
Troy L. Barnett, Rogersville, AL
Terry Barnett, Athens, AL
Kerri Barnett, Rogersville, AL
Fannie L. Bates, Rogersville, AL
Lonnie D. Bates, Athens, AL
Michael D. Beddingfield, Athens, AL
Gabriel Belue, belue002@yahoo.com
Audra Belue, belue002@yahoo.com
Gordon and Myra Belue, Rogersville, AL
Cory Bennett, Athens, AL
Joe Benson, JBenson@rackley.com
Nathan Blackburn, Florence, AL
Bob E. Blanks, Rogersville, AL
Peter Blum, Athens, AL
Danny Borden, Cherokee, AL
Jimmy H. Borden, Russellville, AL
Reco S. Bowens, rsbownes@tva.gov
Marty W. Boyd, Athens, AL
Joe Boyd, Decatur, AL
E. V. Bradford, Rogersville, AL
Dennison Bretherick, Athens, AL
Wayne Bretherick, Florence, AL
James Brewer, Pulaski, TN
John R. Broadhead, Rogersville, AL
James L. Brooks, Tanner, AL
Jim Brown, Guntersville, AL
Joe Brown, Rogersville, AL
Linda Brown, Rogersville, AL
Ken Brown, Rogersville, AL
Jerry D. Brown, Athens, AL
Allison Bruce, Pulaski, TN
Pete Brunson, Killen, AL
Robin Burchfield, Rogersville, AL
Billy Burford, Athens, AL
Lynn Burgess, Anderson, AL
Billy C. Burney, Decatur, AL
Billy C. Burney, Moulton, AL
Jason Burroughs, Rogersville, AL
Rachel Bush, Athens, AL,
Elk River Users
W. Steve Butler, Rogersville, AL
Kenneth Butler, Lexington, AL
Scott Butler, Florence, AL
Craig A. Campbell, Killen, AL
Art Carnes, Killen, AL
Paul Caruso, Decatur, AL
Wyman Cash, Athens, AL
Jim and Sherry Cashion, Rogersville, AL
Milford Chambers, Leighton, AL
Michael and Stephanie Chandler,
mschand@comcast.net
Marsha Chandler, Rogersville, AL
Kenneth Cheek, Decatur, AL
James Clark, Lexington, AL
Keith Clark, Muscle Shoals, AL
Teresa Clemons, Rogersville, AL
Gary Clifton, Rainsville, AL
Arlon B. Clifton, Rainsville, AL
Bama Clines, Rogersville, AL
Sammy Colburn, Athens, AL
David Cole, Rogersville, AL
Dee Collins, Rogersville, AL
Ann Comer, Rogersville, AL,
Jesse Comer, Rogersville, AL
Scott E. Conboy, Madison, IN
Michael Conley, Tanner, AL
Mike Conlon, Rogersville, AL
Joe Coosenberr, Muscle Shoals, AL
Diann Copeland, Athens, AL
S. L. Copeland, Athens, AL
Jay Copely, Rogersville, AL
Jay C. Copley, jccopley@tva.gov
Ruth Covington, Killen, AL
Fred Covington, Killen, AL
David Covington, Rogersville, AL
Tina Covington, Rogersville, AL
Calvin Crabtree, Athens, AL
Ronnie Crews, Rogersville, AL
Charles & Randi Crouser, Athens, AL,
Regions Bank
William L. Crowson, Killen, AL,
Twin Dell Land Owners Association
Jeffrey Curtis, Cherokee, AL
Donnie Daniel, Iron City, TN,
Tennessee Valley Authority
Steve Davidson, Enterprise, AL
Jim Davis, Jackson, AL
Joe E. Davis, Athens, AL
Amanda Davis, Rogersville, AL
Glenn Davis, Athens, AL,
Bubba's Marine Construction
Bill Davis, Tanner, AL

Johnnie Davis, Athens, AL
Connie Davis, Athens, AL
Ray Dawson, Leighton, AL
Edward F. Dean, Tanner, AL
John Del Villan, Rogersville, AL
Mary Ann Del Villan, Rogersville, AL
Thomas Dickerson, Muscle Shoals, AL
Billie Dobbs, Rogersville, AL,
Pinedale Homesites Property Owners
Bubba Doss, Rogersville, AL
Dave Duca, Rogersville, AL
Donald Dunn, Trinity, AL, Wild Law
Jack DuPuy, Rogersville, AL
Susan Roessel Dura, Rogersville, AL
Victor P. Dura, Rogersville, AL
Dusty Eady, Rogersville, AL
Cynthia Elkins, Whitethorn, CA
Ronnie Elledge, Athens, AL
Dallas Embry, Rogersville, AL
Michael Ezell, Rogersville, AL
Alan Faulkner, Pulaski, TN
Shirley F. Favors, Rogersville, AL
Larry Favors, Rogersville, AL
Robert Favors, Rogersville, AL
Rodney Favors, Rogersville, AL
Jason Ferrell, Rogersville, AL
David Fink, Rogersville, AL
Gene Flanagan, Town Creek, AL
Don B. Fletcher, Tanner, AL
Carl Ford, Decatur, AL
Robert F. Freeman, Rogersville, AL
Al Frey, Rogersville, AL
Troy Fulks, Lexington, AL
Connie Fuqua, Rogersville, AL
Hazel Garner
Jimmy Garner, Rogersville, AL
Thom Garrett, Killen, AL
Carol Gatlin, Rogersville, AL
Verlon Gatlin, Rogersville, AL
Richard A. Gerberding, Rogersville, AL
Charles Giers, Valhermoso Springs, AL
Roy Gifford, Florence, AL
Horace C. Gifford, Florence, AL
James D. Gilliam, Lester, AL
Stephanie Gillings, Town Creek, AL
Chris Graham, Florence, AL
Bob Graves, Taylorsville, KY
Robert Gray, Rogersville, AL
Barry J. Gray, Killen, AL
Guy A. Green, Athens, AL
Barry Green, Rogersville, AL
Lynn Greer, Rogersville, AL
Woodfin and Carla Gregg, Athens, AL
Peggy Grose, Rogersville, AL
Mary Ham
Chris Hamilton, Athens, AL
Kenneth J. Hammond, Rogersville, AL
Mike Hammond, Rogersville, AL
Brent Hardy, Tuscumbia, AL
Tonna and Steve Hargrove, Athens, AL
Ronny Hargrove, Florence, AL
C. W. Harmon, Harriman, TN
Bruce Harris, Rogersville, AL
Gene Hassett, Decatur, AL
Robert T. Helton, Athens, AL
Jim Henard, Decatur, AL
J. Scott Henard, Decatur, AL
J. M. Henry, Rogersville, AL
Jim Herston, Rogersville, AL
Richard Herston, Rogersville, AL
Larry J. Hillman, Muscle Shoals, AL
Jeff Hodges, Rogersville, AL
Dennis M. Hoffman, Athens, TN
Joe Holland, Athens, AL
Lisa Hollandsworth, Rogersville, AL
Roger Hollandsworth, Rogersville, AL
Richard R. Holt, Pulaski, TN
Steve Holt, Florence, AL
Linda B. Holt, Pulaski, TN
Gerald Howard, Rogersville, AL
Shawn Howell, Anderson, AL
John C. Hudson, Rogersville, AL
Andrea M. Huff, Athens, AL
Audra Hughes, ahughes@sain.com
Chris Hulsey, Leighton, AL
Terry Hunt, Florence, AL
Robert L. Hyde, Russellville, AL
Jack Ingram, Rogersville, AL
Tommy F. James, Rogersville, AL
Coty Johns, Loretto, AL
Genne Johnston, Athens, AL
Glen Jones, Huntsville, AL
Larry Jones, Athens, AL
Gary Jones, Smyrna, TN
Mary Lindsey Jones, Pulaski, TN
Eric M. Kelso, Rogersville, AL
Roger Keyes, Athens, AL
Elna Killen, Florence, AL
Mary Ann Kindle, Florence, AL
Nicholas Krugh, Lexington, AL
Billy Kujala, Prospect, TN
Roger Landis, Athens, AL
Pelmer and Ginger Lansdell, Rogersville, AL
Neil Larkins, Leighton, AL
Greg Larson, Athens, AL
Penne J. Laubenthal, Athens, AL
Larry Legg, Athens, AL
Morris T. Lentz, Rogersville, AL
Richard Letson, Lexington, AL
Steve Lingle, Dexter, KY
David Lyle, Athens, AL
Mitzi Malone

Patrick Malone
Teresa Manley, Rogersville, AL
George P. Martin, Huntsville, AL
Dan Martin, Rogersville, AL
Bobby Mason, Rogersville, AL
Jeff Mason, Rogersville, AL
Jeff Masonia, Rogersville, AL
Sondra Mattox, Sheffield, AL
James May, Lutts, TN
Davina Maynard, Huntsville, AL
J. Carey McCollum, Rogersville, AL
Ty McConnell, Rogersville, AL
Katie McGee, Killen, AL
Jeff McGill, Pulaski, TN
Amanda McGrew, Elkmont, AL
Garry McGuire, Huntsville, AL
Morris McKee, Rogersville, AL
Kenny McKinney, Rogersville, AL
Andrew McMillan, Rogersville, AL
Bill McMillian, Decatur, AL
Mark Michael, Madison, AL
Mike and Beth Miller, Rogersville, AL
Beth Miller, Athens, AL
Michael D. Miller, Athens, AL
Lori Beth Miller, Athens, AL
Susan Miller, Hazel Green, AL
Terry W. Mitchell, Florence, AL
David Montgomery, Rogersville, AL
Bruce Moon, Huntsville, AL
Greg Moore, Rogersville, AL
Billy and Theresa Moore, Rogersville, AL
Nick Moore, St. Joseph, TN
Jonathan Moore, Loretto, TN
Walter Morris, Tanner, AL
Ray Murphy, Rogersville, AL
Susan L. Murphy, Rogersville, AL
Sara Murrey, Pulaski, TN
Beverly Murrey, Rogersville, AL
Kenneth Nance, Tanner, AL
J. C. Nelms, Anderson, AL
Richard S. Nelson, Athens, AL
Sandra Nichols, Montgomery, AL
Kenneth C. Nichols, Tullahoma, TN
Justin Owens, Moulton, AL
Charles Owens, Huntsville, AL
Stephen Pace, Florence, AL
Judy Palmer, greerllc@bellsouth.net
Michael Papageorgiou, Muscle Shoals, AL
Frank Patterson, Rogersville, AL
Susan Patterson, Rogersville, AL
Krista Peden, Anderson, AL
Stephen Pennington, Rogersville, AL
Kenny Phillips, Madison, AL
Ken Phillips, Pulaski, TN
Dean Phillips, Rogersville, AL
Vicki Pitts, Rogersville, AL,
William R. Poppie, Killen, AL
Susie Porch, Huntsville, AL
Becky Porter, Beckysue52@aol.com
Steve Porter, Rogersville, AL
Jerry Don Powell, Pulaski, TN
Chris Pride, Florence, AL
Ann Putman, Rogersville, AL
David Ramsey, Elkmont, AL
Leonard Reedus, Town Creek, AL
Leonard and Ellen Reid, Rogersville, AL
James Rich, Rogersville, AL
Lisa Rich, Lisa.Rich@athens.edu
Mary Rich, Rogersville, AL
Randall Richards, Athens, AL
Doris Riley, Rogersville, AL
Jeannie Riley, Rogersville, AL
Angie Roberson, Rogersville, AL
Virginia Roberston, robervc@auburn.edu
Ralph E. Robertson, Huntsville, AL
Jessica Robertson, Rogersville, AL
Charles Rose, Florence, AL
Gregory J. Ruane, Athens, AL
Cheryl Ruffin, Decatur, AL
Mary I. Russ, Tanner, AL
David Russ, Tanner, AL
Kristy Schumaker, Athens, AL
Kurt C. Schumaker, Athens, AL
Joe and Jackie Serocki, Rogersville, AL
Stephen Sgro, Decatur, AL
Mike and Carol Shelton, Rogersville, AL
Larry Shelton, Rogersville, AL
David Shook, Rogersville, AL
Chris Sides, Athens, AL
April Simpson, Rogersville, AL
James Slayton, Hoover, AL
Larry Don Sledge, belue002@yahoo.com
Jerry Smith, mikes@isco-pipe.com
Milton Smith, Sheffield, AL
Amanda Smith, Tuscumbia, AL
James A. Smith, Athens, AL
Steve Smith, Athens, AL
M. B. Smith, Killen, AL
Cathryn C. Snoddy, Rogersville, AL
Sharon Sollie, Madison, AL
Greg Sollie, Rogersville, AL
Danny South, Florence, AL
Greg Staggs, Muscle Shoals, AL
Greg Stephens, Hollytree, AL
Jim Stiles, Huntsville, AL
Charles Strickland, Athens, AL
Luke Sweat
Mike A. Swinney, Florence, AL
Tommy and Cathy Tackett, Rogersville, AL
Gary V. Talley, Athens, AL
Jonathan Tate, Athens, AL
Bill Tate, Rogersville, AL

Jeffrey Taylor, Union Grove, AL
Loren Tays, Killen, AL
Jeffery Thibodeaux, Athens, AL
Nick Thigpen
William F. Thomas, Athens, AL
Thomas W. Thompson, Rogersville, AL
David Thornton, Rogersville, AL
Johnny Tidwell, Rogersville, AL
Sharon Tidwell, Rogersville, AL
Corwyn Tiede, Rogersville, AL
J. A. Todd, Rogersville, AL
Buddy Todd, Rogersville, AL
Mike Toole, Killen, AL
Kathy Tucker, Killen, AL
Ernest Tucker, Rogersville, AL
James T. Turner, Athens, AL
Frank Upchurch, Athens, AL
Deborah Vaughn, Athens, AL
Jamie Walker, Rogersville, AL
Stacy Wallace, Rogersville, AL
P. J. Washington, Killen, AL
Theresa Webb, Huntsville, AL
Chris Weigart, Anderson, AL
Partick White, Rogersville, AL
Machelle White-Fink, Rogersville, AL
Adelco, Inc.
Larry Whitehead, Athens, AL
Jason Wilder, Gardendale, AL
Tillman Williams, Huntsville, AL
Joe Wilson, Florence, AL
Tommy Woodham, Athens, AL
Steve Wren, wrens@bellsouth.net
Billy and Milly Wright, Florence, AL
William Wright, Florence, AL

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CHAPTER 5

5. SUPPORTING INFORMATION

5.1. List of Preparers

John (Bo) T. Baxter

Position: Senior Aquatic Biologist, TVA Resource Stewardship, Knoxville, Tennessee
Education: M.S. and B.S., Zoology
Experience: 15 years in Protected Aquatic Species Monitoring, Habitat Assessment, and Recovery; 5 years in Environmental Review
Involvement: Aquatic Ecology/Threatened and Endangered Species

Stephanie A. Chance

Position: Biologist, Aquatic Endangered Species, TVA Resource Stewardship, Knoxville, Tennessee
Education: M.S., Environmental Biology; B.S., Fisheries Biology
Experience: 5 years in Aquatic Biology; 2 years in Environmental Reviews
Involvement: Protected Aquatic Animals

Edward E. Clebsch

Position: Contract Biologist, TVA Resource Stewardship, Knoxville, Tennessee
Education: Ph.D., Botany; M.S., Botany; A.B., Botany
Experience: 55 years in Field Botany and Plant Communities of Conservation Concern
Involvement: Endangered Species – Terrestrial Plants; Terrestrial Ecology

Patricia R. Cox

Position: Botanist, TVA Resource Stewardship, Knoxville, Tennessee
Education: B.S. and M.S., Biology; Ph.D. Botany (Plant Taxonomy and Anatomy)
Experience: 27 years in Plant Taxonomy at the Academic Level; 1 year with TVA Heritage Project
Involvement: Sensitive Plants

V. James Dotson

Position: Civil Engineer, TVA Fossil Power Group, Chattanooga, Tennessee
Education: M.S. and B.S., Civil Engineering
Experience: 1 year in Site Engineering with TVA; 1 year in Field Engineering/Inspection with TDOT
Involvement: Transportation

James H. Eblen

Position: Contract Economist, TVA Environmental Policy and Planning, Knoxville, Tennessee
Education: Ph.D., Economics; B.S., Business Administration
Experience: 38 years in Economic Analysis and Research
Involvement: Socioeconomics and Environmental Justice

Jerry Fouse

Position:	Recreation Manager, TVA Resource Stewardship, Knoxville, Tennessee
Education:	M.B.A.; B.S., Forestry and Wildlife
Experience:	30 years in Natural Resource - Recreation Planning and Economic Development
Involvement:	Recreation

Travis Hill Henry

Position:	Senior Terrestrial Zoologist, TVA Resource Stewardship, Knoxville, Tennessee
Education:	M.S., Zoology; B.S., Wildlife Biology
Experience:	16 years in Zoology, Endangered Species, and NEPA Compliance
Involvement:	Wildlife

John M. Higgins

Position:	Water Quality Specialist, TVA River Operations, Chattanooga, Tennessee
Education:	Ph.D., Environmental Engineering; B.S. and M.S., Civil Engineering; Registered Professional Engineer
Experience:	30 years in Environmental Engineering and Water Resources Management
Involvement:	Surface Water and Wastewater

M. Carolyn Koroa

Position:	Senior Geographic Analyst, TVA River Operations, Knoxville, Tennessee
Education:	M.S. and B.A., Geography
Experience:	15 years in Geographic Analysis; 7 years with TVA Navigation Program
Involvement:	Navigation Planning

Roger A. Milstead

Position:	Manager, TVA Flood Risk and Data Management, Knoxville, Tennessee
Education:	B.S., Civil Engineering; Registered Professional Engineer
Experience:	29 years in Floodplain and Environmental Evaluations
Involvement:	Floodplains

Jason M. Mitchell

Position:	Natural Areas Biologist, TVA Resource Stewardship, Knoxville, Tennessee
Education:	M.P.A. (Environmental Policy); B.S., Wildlife and Fisheries Science
Experience:	11 years in Natural Resource Planning and Ecological Assessment with Emphasis on Sensitive Resources for Nongovernmental, State, and Federal Organizations
Involvement:	Natural Areas

Philip J. Mummert

Position:	Regional Planning Specialist, TVA Research & Technology Applications, Knoxville, Tennessee
Education:	Ph.D. and M.S., Urban and Regional Planning
Experience:	35 years Environmental Planning and Economic Development
Involvement:	Solid Waste

H. Lynn Petty

Position:	Civil Engineer (Principal), TVA Fossil Power Group, Chattanooga, Tennessee
Education:	M.S. and B.S., Civil Engineering; Professional Engineer
Experience:	27 years in Civil/Site, Highway, and Railroad Engineering
Involvement:	Transportation

Richard L. Pflueger

Position:	Recreation Specialist, TVA Resource Stewardship, Muscle Shoals, Alabama
Education:	M.B.A.; B.S., Accounting
Experience:	28 years in Recreation Resources and Economic Development
Involvement:	Recreation

Kim Pilarski

Position:	Senior Wetlands Biologist, TVA Resource Stewardship, Knoxville, Tennessee
Education:	M.S., Geography
Experience:	11 years in Watershed Assessment and Wetland Regulation and Assessment
Involvement:	Wetlands

Erin E. Pritchard

Position:	Archaeologist, TVA Resource Stewardship, Knoxville, Tennessee
Education:	M.A. and B.A., Anthropology
Experience:	7 years in Archaeology and Cultural Resource Management
Involvement:	Cultural Resources

Jon C. Riley

Position:	Landscape Architect, TVA Resource Stewardship, Muscle Shoals, Alabama
Education:	Bachelor of Landscape Architecture, Associate Member American Society of Landscape Architects
Experience:	7 years in Site Planning, Design, and Visual Resource Management
Involvement:	Land Use and Visual Resources

J**an K. Thomas**

Position:	Contract Natural Areas Specialist, TVA Resource Stewardship, Knoxville, Tennessee
Education:	M.S., Human Ecology
Experience:	10 years in Health and Safety Research, Environmental Restoration, Technical Writing; 2 years in Natural Area Reviews
Involvement:	Managed Areas and Sensitive Ecological Sites

Charles R. Tichy

Position:	Historic Architect, TVA Resource Stewardship, Knoxville, Tennessee
Education:	B.S., Architecture; M.A., Historic Preservation
Experience:	36 years in Historic Preservation; 25 years with TVA Cultural Resources
Involvement:	Historic Structures

Allan J. Trently

Position:	Contract Terrestrial Zoologist, TVA Resource Stewardship, Knoxville, Tennessee
Education:	M.S., Biology; B.S., Environmental Resource Management
Experience:	12 years in Field Biology
Involvement:	Threatened and Endangered Species; Wildlife

5.2. Literature Cited

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetland and Deepwater Habitats of the United States. U.S. Fish and Wildlife Publication FWS/OBS-79/31, Washington, D.C.

Dahl, T. E. 2000. Status and Trends of Wetlands in the Conterminous United States 1986 to 1997. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1. U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, Mississippi.

Ernst, C. H., J. E. Lovich, R. W. Barbour. 1994. Turtles of the United States and Canada. Smithsonian Institution Press, Washington, D.C.

Institute of Transportation Engineers. 1998. Trip Generation, Sixth Edition.

Linzey, D. W. 1998. The Mammals of Virginia. The McDonald and Woodward Publishing Company, Blacksburg, Virginia.

Mack, John J. 2001. Ohio Rapid Assessment Method for Wetlands Version 5.0, User's Manual and Scoring Forms. Ohio EPA Technical Report WET/2001-1. Ohio Environmental Protection Agency, Division of Surface Water, 401/Wetland Ecology Unit, Columbus, Ohio.

Muncy, J A. 1999. A Guide for Environmental Protection and Best Management Practices for Tennessee Valley Authority Transmission Construction and Maintenance Activities (revised). Technical Note TVA/LR/NRM 92/1. Tennessee Valley Authority, Norris, Tennessee. Chris Austin, Chris Brewster, Alicia Lewis, Kenton Smithson, Tina Broyles, Tom Wojtalik, editors.

Petranka, J. W. 1998. Salamanders of the United States and Canada. Smithsonian Institution Press, Washington, D.C.

Tennessee Valley Authority. 1983. Instruction IX Environmental Review. Available at <http://www.tva.gov/environment/reports/pdf/tvanepa_procedures.pdf> (date of access undetermined).

Tennessee Valley Authority. 1995. Wheeler Reservoir Land Management Plan.

Tennessee Valley Authority. 2004. Aquatic Ecological Health Determinations for TVA Reservoirs - 2003. TVA Resource Stewardship.

Transportation Research Board. 2000. Highway Capacity Manual.

U.S. Environmental Protection Agency. 2002. National Wetlands Mitigation Action Plan, 2003. Dated December 24, 2002. Available at http://www.epa.gov/owow/wetlands/guidance.

U.S. Fish and Wildlife Service. 1996. Draft Revision. National List of Vascular Plant Species that Occur in Wetlands: National Summary. Available at <http://wetlands.fws.gov/bha/list96.html>.

U.S. Fish and Wildlife Service. 2001. Report to Congress on the Status and Trends of Wetlands in the Conterminous United States 1986 to 1997. U.S. Fish and Wildlife Service.

White House Office on Environmental Policy. 1993. Protecting America's Wetlands: A Fair, Flexible, and Effective Approach, August 24, 1993. Available at <http://www.wetlands.com/fed/aug93wet.htm>.

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APPENDIX A – APPLICATION PACKAGE

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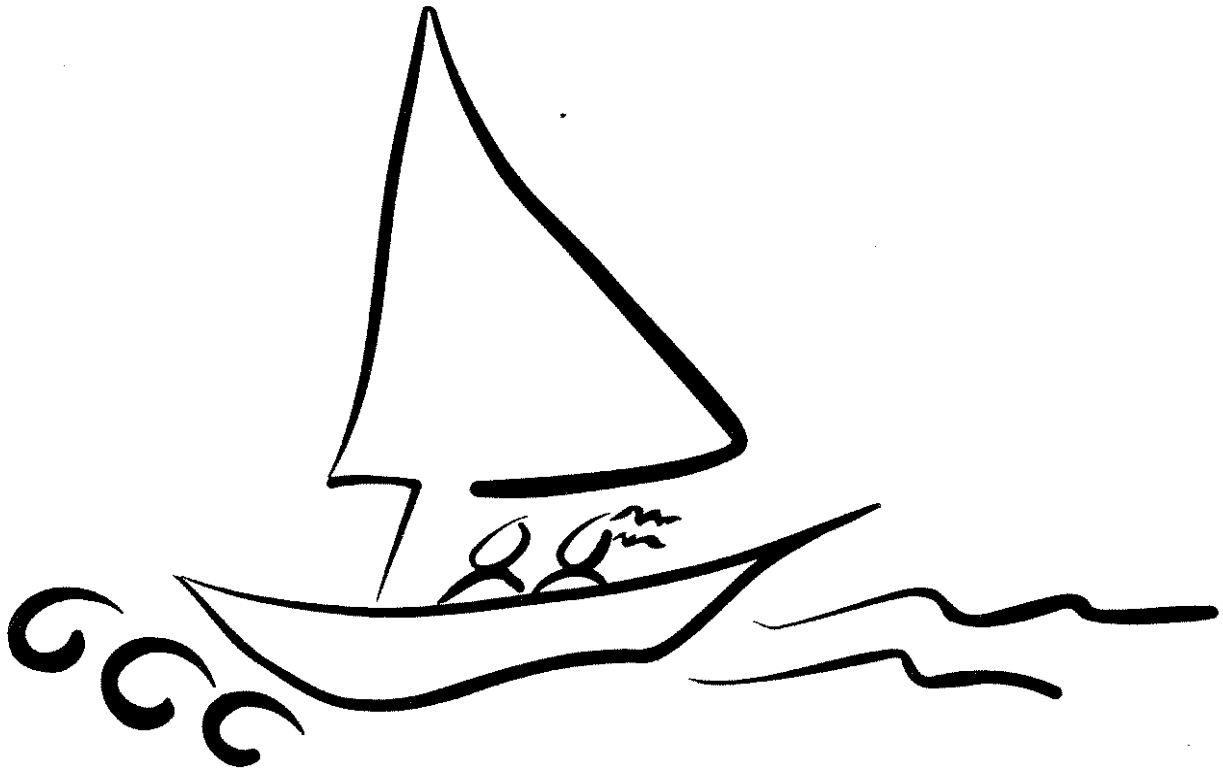
Elk River Resort, LLC



Proposal to lease for Recreational Operation

Gilbert F. "Bubba" Doss III 256-247-1373 (Home 256-757-1477)

Dba Bubba's Marine Construction, LLC
2400 Highway 101
Rogersville, AL 35652

Overview

This project will create a high quality recreation and resort area on Parcel 21 of the TVA Wheeler Reservation under a term-easement agreement. The land use will include a modern RV park with utilities and sanitary facilities, camping areas, nature trails, a Marina including a ship's store and ultimately cabins, a restaurant and a dry storage for boats.

The owner applicant will first construct the resort relying on years of similar experiences, and then operate the facilities as a "must see" for the public while providing a positive cash flow back to TVA and make the land available to the public.

This development will sustain TVA's growth initiatives by creating public land access, public infrastructure, job opportunities and demonstration of best management construction practices and clean marina initiatives. This land currently has access by way of Lakeview Drive off of County Road 91 (Lambs Ferry Rd.), a congested narrow road that travels through some residential neighborhoods. The owner of Elk River Resort has been successful in purchasing property that will connect Parcel 21 in a more direct path to County Road 77 off of Highway 72. This is a straight road, which would safely handle any increase in traffic caused by this development.

Proposal

Parcel 21 of the TVA Reservation is located on the West bank of the Elk River approximately ½ mile up stream from Wheeler Lake. It now consists of approximately 92 acres of low hills with virgin timber woodlands and Elk River shoreline. There is limited access to the site from Lakeview Drive off of Lauderdale County Road 91. Fortunately, the owner has made another, more direct access available to Hwy 72 by way of County Rd. 77, through the purchase of other tracts of land. The riverbank forms a protected slough running generally east to west with an estimated 5,500 feet of waterfront.

This is an area of considerable natural beauty, which should be made accessible to the public in a way that will allow their presence and participation while preserving the area for future generations.

The project will consist of four major attractions:

1. A paved two-lane road will be constructed from the current end of County Road 77 through the property to give access to the rest of the features. Vehicle parking lots will be built to accommodate campers and patrons as well as day-use fishermen.
2. A modern RV park will be built on a portion of the property providing both "in transit" and "destination" parking for at least 100 vehicles. The sites will have level slabs for parking, individual electrical connections, water and sanitary connections and other amenities normally associated with modern first class RV parks. Most sites will have river views and will be easily accessible to the hiking/nature trails and all will have access to fishing piers.
3. A nature/hiking trail and camping area will be built on a portion of the property with the possibility of cabins and a chalet/restaurant in coming years.
4. A Marina with ship's store will occupy a portion of the property consisting of at least 40 covered boat slips accommodating boats of popular sizes and 10 uncovered slips for sailboats and a dry storage building will be available to accommodate smaller boats. A boat launching ramp and parking lot will be adjacent to the Marina. The store will provide campers and boaters with food, ice, supplies and fuel and will be the office and headquarters for the project.

The owner will build all of the facilities using their considerable experience in land and shoreline improvements as evidenced in numerous successful projects in the area. Strict environmental conservation and sensitivity to the considerable natural beauty of the forest and river will be maintained throughout construction and during operations. The applicant is a 21-year resident of Lauderdale County and lives on Lake Wilson so has high stake in the success of this project.

Development

Elk River Resort will be developed in phases of construction, allowing near immediate use of the property to begin. Construction in phases will allow adjustments in planning and needs based on public input throughout the process.

Phase I

The first phase will be burdened with the construction of a road accessing Parcel 21 from County Road 77, just off of Highway 72. The power and water will also take this route, and then an RV/Campground will begin to be developed. In this phase, 100 campsites will be developed along with bathhouses, fishing piers, launch ramp, playgrounds, hiking trails and a ships store. The store will be multi-function including an office, retail sales, public relations, restrooms, and storage of maintenance equipment, such as; lawn mowers and tractors. Ultimately, the Marina office will handle the rental of boat slips and fuel sales.

Phase II

In this phase, the Marina will be developed and begin to accommodate boat owners with a safe mooring area, with all the necessary amenities such as; water, electricity, sewage disposal and sales of such items as; gasoline, diesel, food, ice and tackle for the fishermen. This phase will include approximately 50 boat slips for rent and transient dock as well.

Phase III

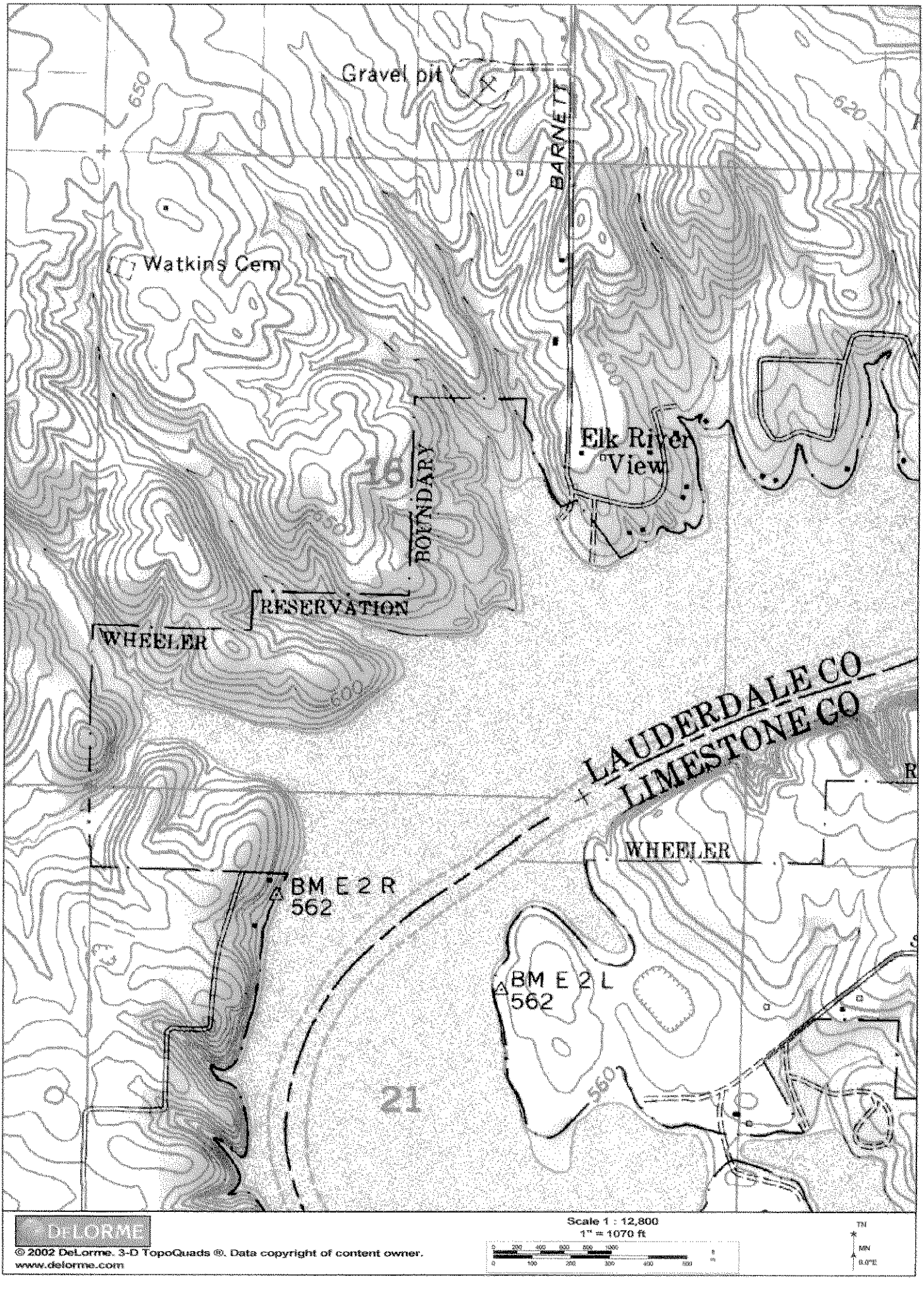
After the resort has been in operation, and the occupancy levels justify expansion, another 100 campsites and additional 50 boat slips will be built. Although, the size of Parcel 21 would allow 10 times this expansion, careful consideration will be given not to over crowd this development, which would possibly harm the natural beauty that is presently there.

Phase IV

In this phase, preparations will be made enabling the construction of a dry storage building.

Phase V

As the development matures and the demands grow, a specialty restaurant will be built and open to the public, which will offer catering to large rallies, reunions and church groups. Additionally, some number of camping cabins will be considered to accommodate visitors who wish to enjoy the camping experience, but do not own their own campers.


Gravel pit
BARNETT
Watkins Cem
Elk River View
ROUNDARY
RESERVATION
WHEELER
LAUDERDALE CO
LIMESTONE CO
WHEELER
BM E 2 R
562
BM E 2 L
562
21
DeLorme
Scale 1 : 12,800
1" = 1070 ft
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Environmental Plan

Environmental Impacts

Initial land clearing and excavation for access road right of way, location of maintenance building and marina parking areas would directly affect approximately five acres on Parcel 21 of the Wheeler Reservation. There are no unusual conditions present on this site that would impair any significant component of this project. No endangered plant or animal species are known to inhabit the site or are there any known archaeological or historical sites. Should new information be discovered during construction, work would be suspended and TVA notified. Excavated areas would be sowed with seed prior completion in order to stabilize banks and prevent erosion into Elk River.

During construction activities, every effort will be made to minimize the impact of construction upon the flora and fauna of the site. A Best Management Practices Plan will be produced upon award of the lease and before construction begins. Additionally, all required permits and approvals from Federal, State, County and Local jurisdictions will be obtained before construction begins.

Parcel 21 has been restricted to public access for many years. Unfortunately, man made liter and debris have accumulated on the riverbanks as no apparent system has been implemented for shoreline clean up in this area. A natural theme for this proposed resort would require maintenance infrastructure and therefore positive environmental impact in general.

The proposed marina will actively partner with TVA as a leader in the Clean Marina Program (Appendix D). Sewage pump out service will be available for customers and required of tenants. The marina store will offer and promote environmentally friendly nontoxic products for cleaning and maintenance. The marina staff will participate in the education of boaters on sewage, fuel and bilge management. Recycling and disposal of petroleum and other solid waste would be available at this facility. Clean marina and responsible boating practices together will improve river water quality (Appendix D).

Economic Impacts

Construction Costs

Construction costs estimated for Phase I and Phase II of the Elk River Resort Proposal is $890,000, which includes 100 RV Campsites and 50 Floating Marina Slips. Funding for the project will be from an initial capital injection by the applicant and from a bank loan. Construction time required for Phase I would be approximately 6 months.

The applicant's long-range plan for Elk River Resort includes a Phase III expansion of 100 RV Campsites and 50 Floating Marina Slips in the year 2008, or as required by demand. Construction costs estimated for Phase III of the project are $550,000. Phase IV of the project would include a boat dry storage facility. In Phase V a restaurant and cabins will be constructed. The cost of construction for Phases IV and V are not yet determined. The construction of all Phases will be done by local workers and vendors creating a positive economic impact and also additional sales for local stores by permanent campers.

New Jobs

Jobs created in the near-term resulting from Elk River Resort development would be numerous as workers from all trades would participate in construction as well as engineers, draftsman, forestry and road workers, truck drivers and equipment operators to name some others.

Long-term jobs created would be numerous as well. Operation of the park 365 days per year will require superintendent, office, and marina store attendants, maintenance and clean up workers, with an estimate of 8 to 10 park employees initially with the opportunity to triple those numbers with the addition of Phase III, IV and V within 6 years. Other job opportunity will most likely arise from the development as individual owners of boats and RV's employ maintenance, repair and cleaning help. Local business may enjoy additional sales to newcomers, which would eventually boost employment.

Growth Initiative

Elk River Resort development will sustain TVA's growth initiatives by creating public land access, public infrastructure, job opportunities and demonstration of best management construction practices and clean marina initiatives. Investors in this project expect to earn a reasonable long-term return on their monetary investment.

Socioeconomic Impacts

Elk River Resort development would be located in a secluded area on the river, it's development would create unusual traffic on County Road 77 from Highway 72 to the park entrance at some times. This situation may be considered a negative socioeconomic impact by some affected homeowners.

Elk River Resort development can have a positive socioeconomic impact by creating jobs for the area, plus it will also bring in revenue for current business owners by the number of people that the resort will bring into the area. When the resort is completed it will be a vacation spot that will attract many people to our area, causing the area to grow and be more appealing to tourist and local residents. Elk River Resort will be unique in the fact that it will be able to provide numerous campsites, boat slips and other first class amenities in a beautiful serene and secluded area with lots of water frontage for viewing and enjoying water sport activities.

Operation

1. Number of employees, duties and supervision:
   There will be a caretaker/manager on site at all times during normal and seasonally extended business hours. The duties of the manager are to supervise the safe and enjoyable activities allowed by the site and to collect fees. The normal location of the manager will be in the store, but additional personnel will be needed to allow the manager to perform other functions as necessary. Clean up personnel and landscape crews in the summer months will be provided to keep the grounds in an attractive and enjoyable condition.
2. Fee collection:
   The manager is responsible for collecting and accounting for all fees. Upon entry to the site an attractive sign will direct the public to come to the store for permits. Periodically the manager will tour the site to ensure that all participants have paid their fees.
3. Security:
   The property is secluded and accessible through one road. A heavy gate capable of being locked will be provided at the entrance. Hours of operation will be posted and the gate will be closed after hours. The Lauderdale County Sheriff and the TVA Police will become familiar with the location and operation of the facility through annual invitations to luncheons. The applicant will take the necessary precautions to prevent offensive or illegal activity on the site. All of the premises and facilities will be kept in a safe and good condition with repairs made as needed in a timely manner.
4. Cleaning, mowing, and maintenance of facilities and premises:
   Trash or garbage receptacles will be located through out the facility and emptied daily or as deposits require. Litter will be picked up daily. Mowing during the growing season will be at least weekly or as required by rainfall. Premises will be maintained in a condition to inspire appreciation for this location, its accessibility to virgin woodlands and the incomparable beauty of the river.
5. Storage and maintenance of material and equipment:
   Maintenance equipment will be kept in a building adjacent to the store which will be built with complimenting architecture and construction.
6. Preservation System:
   The shoreline will be maintained in a natural condition except for the marina and boat launching facility. No wetlands or shoreline will be altered or disturbed except as described in this proposal and all activities including construction will be conducted on the site in accordance with the Clean Water Act and all other Federal, State and Local rules and laws. All reasonable precautions shall be taken to prevent and suppress forest, grass and other fires. The use of herbicides and pesticides will be minimized and all precautions taken to prevent entry of them into the river. Removal of trees and vegetation will be minimized to keep the natural beauty of the site and to prevent erosion.

7. Operation of the boat launch ramp:
   A competitive fee will be charged for launching boats, except for the paid campers, which will be able to launch without a fee. Collection of the fee will be the responsibility of the site manager.
8. Other:
   All facilities and services shall be available to all members of the general public without discrimination or distinction because of race, color, national origin, age or handicap.

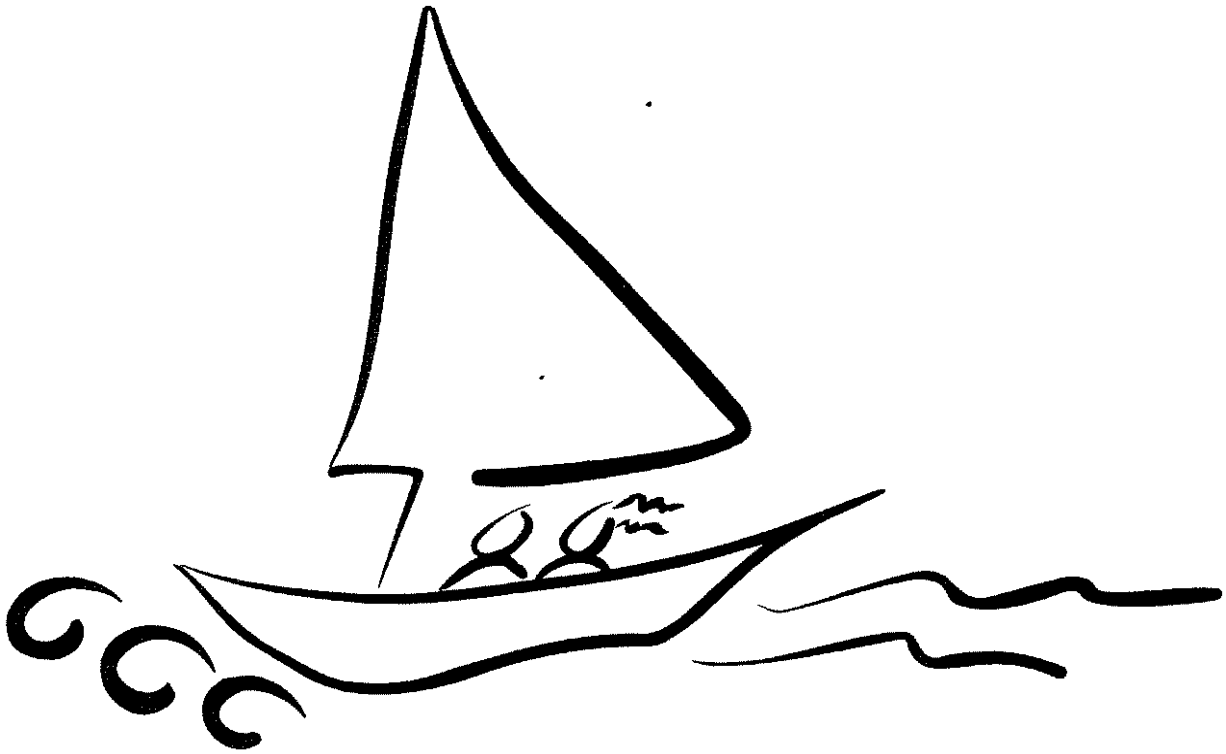
Proposal to Lease

Elk River Resort will acquire Parcel 21 from TVA under a term easement agreement for a 40-year period. Elk River Resort will have an option to renew the easement agreement for an additional 40 years, for compensation in return for the easement agreement. Elk River Resort will operate a resort area that will be open to the public, furthering TVA's commitment to create public lands available. In addition, some monetary compensation will be provided to TVA to aid in administrative cost associated with this type venture. Payment will be made to TVA at a rate of five percent of gross sales that is generated by the resort. An effort was made to estimate fair market value or compensation for the easement agreement, although a large amount of compensation will be provided through the development and investment by a privately owned Company, into public lands, as well as the creation of jobs and public access to recreational areas, monetary compensation seems justified.

A certified appraiser has been hired to find the most accurate value of this particular agreement. The appraiser used many of TVA's existing recreational areas and existing agreements to arrive at a reasonable compensation that TVA should expect from this agreement. The two sites found to be most similar to Parcel 21 are May Springs and Fall Creek, which show an average income of $15,000.00 annually to TVA. The appraiser concluded his report by saying that the Parcel 21 was different from the existing sites, primarily in the fact it is totally unimproved where as the existing sites were already improved when the agreements were made. The Parcel 21 tract will require a major cash injection for development. The appraiser felt it necessary to find a value by using the indirect comparison approach. This was done by a comparison of the data of similar sites recently sold. He arrived at a fair market value that was based on the lands possible uses, then finding a fair rate of return on an investment. There were some good comparisons found and he produced a value. He then applied a rate of return on investment, totaling an annual amount of $32,000.00, although no other sites were found that was producing this much income for TVA.

The gross sales of Elk River Resort in Phase I & II are expected to be in excess of $350,000.00 (Appendix A) at 50% occupancy, which would produce an income of $17,500.00 for TVA at the rate of five percent, which is similar to the existing agreements. The value of making this land available to the public should be considered a large amount of compensation to TVA. This benefit along with the added five percent of gross sales is a generous amount of compensation and should be considered a part of the agreement.

Elk River Resort, LLC



Executive Summary

Elk River Resort is a high quality nature oriented public recreation and resort area designed for public enjoyment as well as a natural beauty that will preserve the environment for future generations. The modern RV park/campground will offer campers a clean, first-class campsite to enjoy various activities, such as playgrounds, water parks, etc. The RV park will have large spacious campsites and some pull throughs will be available, all will have access to bathhouses with hot showers. The Floating Marina will have a fuel dock with a sewage pump out system that will provide a long-term environment for boaters to store their boats, and a ship's store that will be multi-function, including an office, retail sales, public relations, and restrooms. Strict environmental conservation would be maintained throughout construction and during operation of the resort. The Company's long-range plan would include a boat dry storage facility, restaurant and rental cabins.

Market Demand

The potential demand for such a resort and marina is outstanding, considering the need for extra campsites in our area, plus the growing need to store boats near the water. The property where Elk River Resort will be developed is unique. This property will have adequate space for the campgrounds and any expansions that may be needed in the future, along with adequate water frontage to support a marina. Two events will drive demand: 1) the need for clean campsites with amenities provided. 2) the convenience of having your boat accessible whenever you need it. Reports from the United States Census Bureau, and the Alabama Department of Conservation & Natural Resources, and the Alabama Department of Motor Vehicle Division, and Tennessee Wildlife Resource Agency indicate that 96,568 boats (Appendix B) and 17,390 RV's (Appendix C) are registered within 75 to 100 miles of Elk River Resort.

Major Investor

The resort will be owned and operated by Gilbert F. (Bubba) Doss III. Mr. Doss is a general contractor licensed by The State of Alabama and specializes in marine construction and shoreline improvements (Appendix E & F).

Staffing

Mr. Doss, an experience owner and contractor of a marine construction business, will construct and develop the resort. He will also oversee the entire operation. He has an existing staff, experienced in business and people management, which will handle the administrative portion of the business. Additional full time employees will be hired to help manage the maintenance, customer service, fuel dock, etc., and all day-to-day operations.

Marketing

The resort will be marketed via an Internet website as a "must see attraction" for transient as well as destination campers and boaters. Billboards will also be utilized both local and area wide and relationships will be established with the area RV clubs, Travel Clubs, Rally Groups and Local Tourism Boards to promote rallies and reunions. We will meet with the area RV camper sales facilities, manufacturers, and make arrangements to accommodate their needs.

Potential Revenue

After completing Phase I and Phase II, Elk River Resort will have 100 RV Campsites and 50 Marina Slips. At 100 % capacity Elk River Resort has the potential revenue of over $700,000 per year (Appendix A). When Phase III is completed, Elk River Resort will have 200 RV Campsites and 100 Marina Slips, which will double the revenues. Additional revenue will be generated through fuel and the ship's store. When Phase IV is completed the resort will also have a dry storage facility, restaurant building and rental cabins that will bring in additional revenue.

Management and Staffing

Developer/Owner

Gilbert F. Doss III brings nineteen years of management experience to Elk River Resort, where he will assume the role of developer/owner, overseeing all daily operations of the resort. An experienced manager/contractor specializing in marine construction and shoreline improvements, Mr. Doss intends to offer high quality service to the campers and boaters of Elk River & Wheeler Lake Area.

Permanent Staff

Permanent Staff will be hired gradually as business increases in order to meet customer needs. Mr. Doss has hired one administrative professional to manage the business at the beginning of Phase I, with additional staff needed at the completion of this phase. At the end of Phase III, approximately 10 permanent staff will be needed.

Seasonal Staff

Due to the seasonality of the Marina/RV Industry, Elk River Resort will use seasonal staff. This staff will assist the permanent staff during the peak seasons. They will perform duties such as cashier, dock master, property upkeep, supply shop attendant, and maintenance. Approximately 10 seasonal staff members will be needed at the completion of the first three phases.

Market Analysis

The Marina/RV Industry

The Marina/RV Industry has changed over the years. Today's Boating Industry is producing larger boats than ever before, increasing the need for people to store their boats near the water. In the RV Park/Campground, the need for clean campsites with additional amenities is greatly needed. The Elk River and The Tennessee River offer a great deal of recreation to families who wish to stay close to home to vacation. It will be very appealing to a family interested in outdoor sports to be able to camp, boat, hike, swim, etc... at a place that is maintained-at a first-class level, close to home allowing weekend visits as well as extended visits. Extended visits will be welcomed, although approximately 25% of available sites will be used as nightly rentals only to attract transient campers.

Demand

Because people are purchasing larger boats it is making it difficult for them to store them at home, so they are looking to store their boats near the water at a reasonable price. They are also looking for alternative ways to vacation, entertain their children and incorporate exercise into their daily lives. A place that offers activities that are fun, economical, and promote a healthy lifestyle is of great importance.

Location

Parcel 21 is approximately 92 acres of timber woodlands located on the west bank of the Elk River about 1.5 miles upstream from Wheeler Lake on the Tennessee River. The riverbank forms a protected slough running generally east to west with an estimated 5,500 feet of waterfront. Roadway access to Parcel 21 is proposed from County Road 77 and around the perimeter of Parcel 22 where it would enter the park, approximately 3,200 feet, built to county specification for road takeover. Beyond the park entrance the road would continue approximately 1,600 feet across Parcel 21, ending at the proposed marina site. Land clearing required for access road construction would be approximately 5 acres. Other secondary roads to campsites beyond the marina area will be planned around existing growth and terrain where possible.

Market Size

The market for Elk River Resort will live within 75 to 100 miles of the resort. This includes the counties of Lauderdale, Lawrence, Marshall, Franklin, Limestone, Madison, Morgan, Cullman, Jefferson, Colbert, Blount, Jackson, Dekalb, Marion, and Winston in the State of Alabama and the counties of Giles, Lawrence, Lincoln, McNairy, Wayne, Hardin, and Franklin in the State of Tennessee. According to statistics from the United States Census Bureau and the State of Alabama Department of Conservation & Natural Resources and the State of Alabama Department of Motor Vehicle Division, there are 85,629 boats (Appendix B) and 17,390 RV's (Appendix C) registered in this market in these 15 northern counties of Alabama alone. According to the United States Census Bureau and the State of Tennessee Wildlife Resource Agency there are 10,939 boats registered in this market in the 7 southern counties of Tennessee alone (Appendix B). In the first two phases of the development, the resort will be able to accommodate 50 boats and 100 RV's; according to the Market Analysis the 8 closest marinas and the 10 closest campgrounds only accommodate 1,295 boats wet/dry storage and 1,081 RV's (Appendix A). This represents less than 1.5% of the boat market and less than 7.5% of the RV market. With around 97% of the market untapped by local parks/resorts, Elk River Resort will be able to attract customers without an adverse effect on the established parks/resorts.

Pricing

Elk River Resort will be a place where everyone can go and enjoy a weekend getaway or an extended vacation stay at an affordable price. The great advantage about camping is that you have an endless number of recreational activities that are available and almost everyone will be able to afford and enjoy. The marina will offer affordable prices for people who want to keep their boats close to the water, where it will be more convenient for them to use them. Elk River Resort will charge an average of $19.00 a night per campsite and an average of $150.00 per boat for (wet-covered) monthly storage for a 26 ft. boat. Research from local parks/resorts and marinas indicate that their pricing range on an average is $19.00 a night per campsite, and $147.50 per boat for (wet-covered) monthly storage for a 26 ft. boat (Appendix A).

Business Description

Facilities

The RV Campsites will feature large level pad with full hook-ups, which include electric, water and sewage connections. A modern bathhouse with hot showers will service each 50 campsites. An office/maintenance building (3,750 square feet) close to the marina docks, will serve as a park office, maintenance area and ships store. This building will also contain public restrooms and bathhouse for boaters. The marina will have a boat launch ramp, a public fuel dock with sewage pump out system and private floating ships with water and shore power connections. Some of the slips will be covered and some will be uncovered for sailboats.

Growth

Elk River Resort is located in a secluded area on the river, which will be an asset for families that are looking for a quiet place to get away for the weekend or for visitors that are looking to vacation in a beautiful serene atmosphere. The resort would attract people to this area so that they can take advantage of the resources offered by Tennessee Valley Authority (TVA). TVA expects that demands for water-based recreation activities will increase as a result of continuing residential development of privately owned land and increases in population in the surrounding area (TVA 2001). Because of the growing population and the increase of water sport activities and the popularity of sport fishing, Parcel 21 would be an ideal place to develop Elk River Resort.

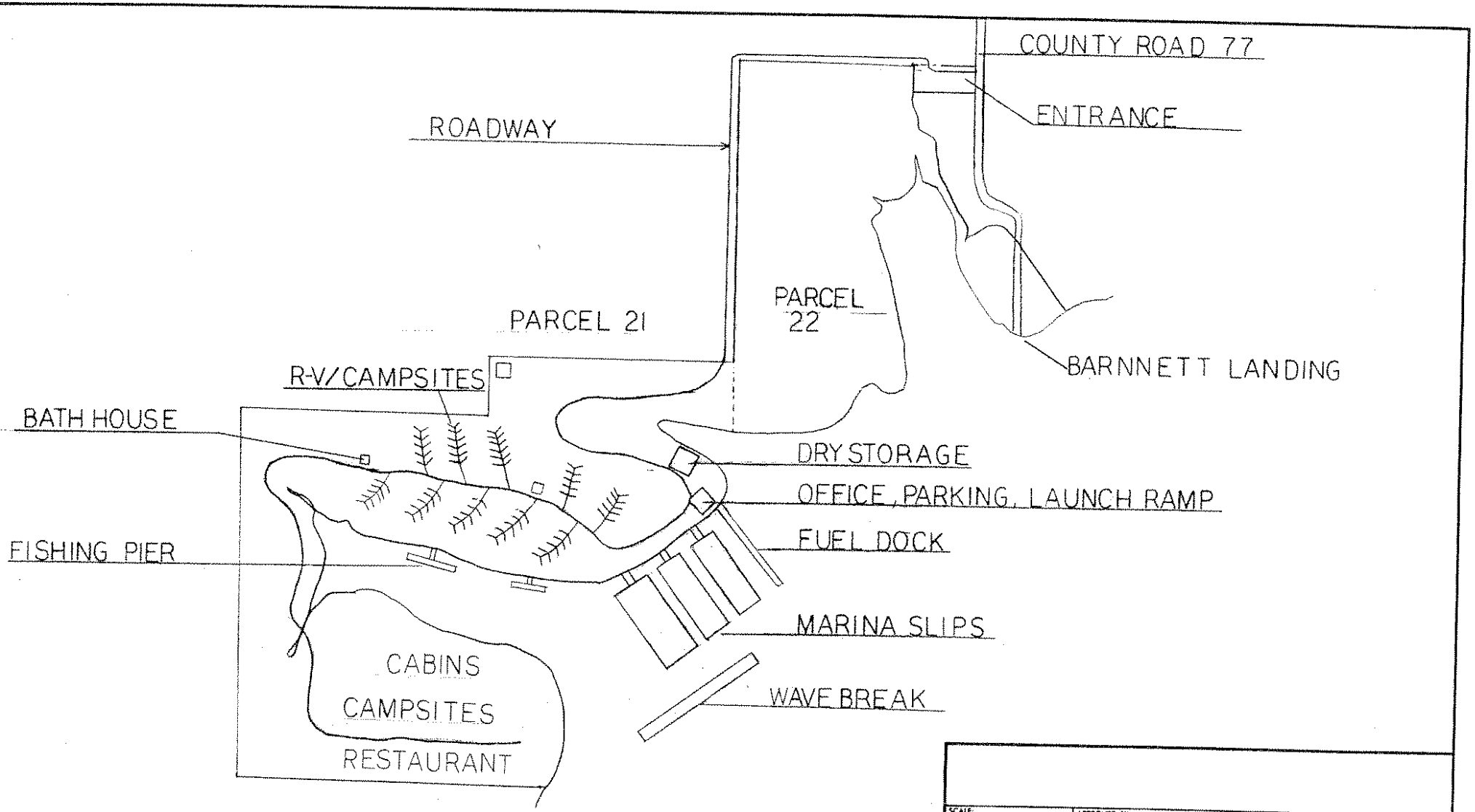
Services

There will be many services available, such as full hook-ups, which include electric, water and sewage at the RV Campsites, plus a modern bathhouse with hot showers. The Marina will have a boat launch ramp, public fuel dock with sewage pump out system and private floating slips with water and shore power connections. There will be a ships store, maintenance area, public restrooms and bathhouse for boaters. These added conveniences would make any boater or camper have a more relaxed and enjoyable get away/vacation.

Advantages of Elk River Resort

There are several key advantages to developing Elk River Resort. They are as follows:

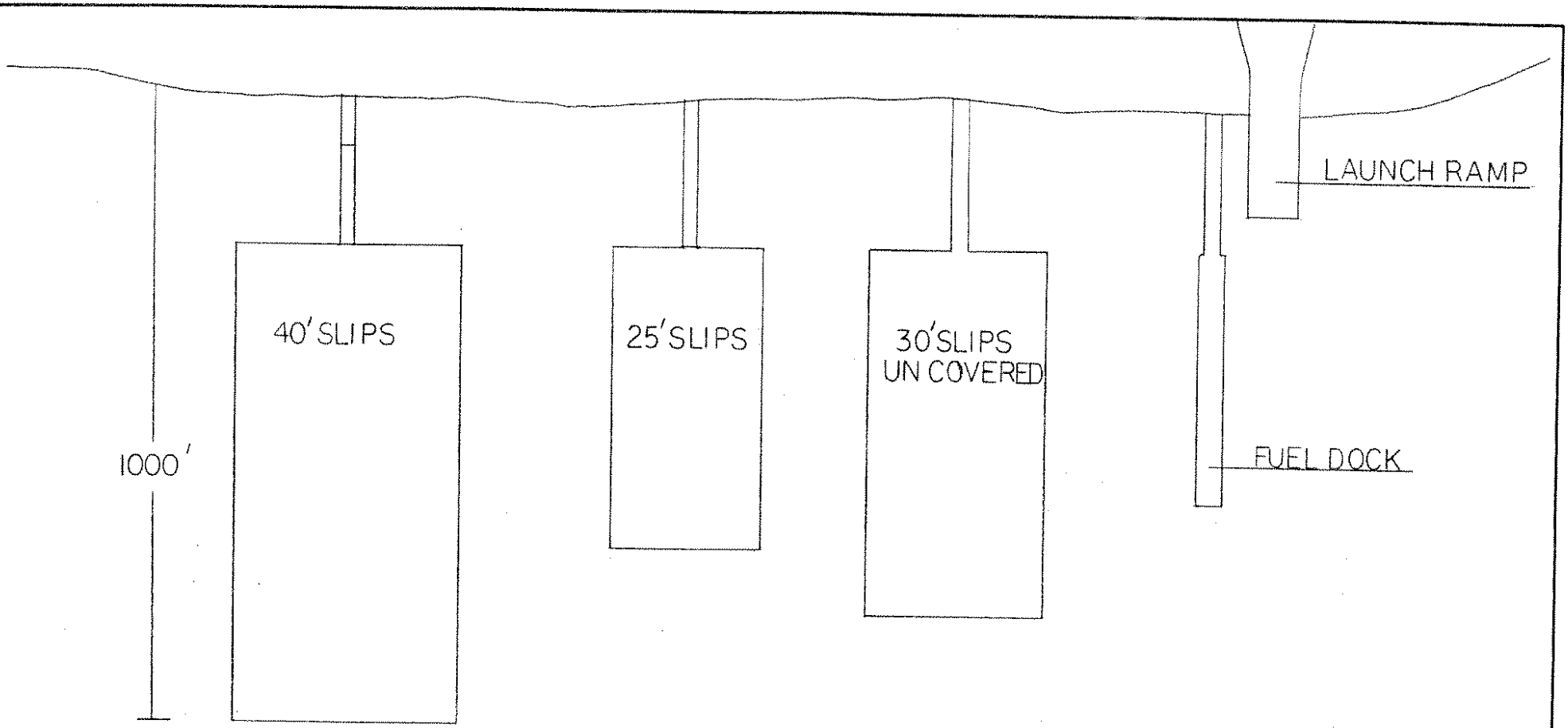
- Elk River Resort will be located in a secluded and very scenic area on Elk River.
- Elk River Resort will offer a beautiful place for the public to go and enjoy recreational activities with many conveniences.
- Elk River provides boating that is available more number of days throughout the season, because of its sheltered location from wind and waves, which causes problems at other area marinas.
- Fishing and boating activities are limitless on Elk River and the Tennessee River, which is only one mile away.
- The site is large enough for extensive growth when the demand arises. The site will be great for a campground, because the site is located in a very scenic and secluded area.
- Gilbert F. Doss III is an experienced (Hands-On) General Contractor that manages a marine construction business, which includes business management, and people management. He specializes in marine construction and shoreline improvements; which will be of great importance to developing the resort.
- The campsites have large pads and are equipped with modern hook-ups.
- The campsites have access to a modern bathhouse with hot showers.
- A boater can launch and retrieve his/her boat an unlimited amount of times for no additional charge.
- Prices will be very competitive.
- Elk River will be a great place to camp, hike, swim, and have a get together or a reunion.



SCALE:	APPROVED BY:	DRAWN BY
DATE:		REVISED

ELK RIVER RESORT

DRAWING NUMBER



MARINA PLANS

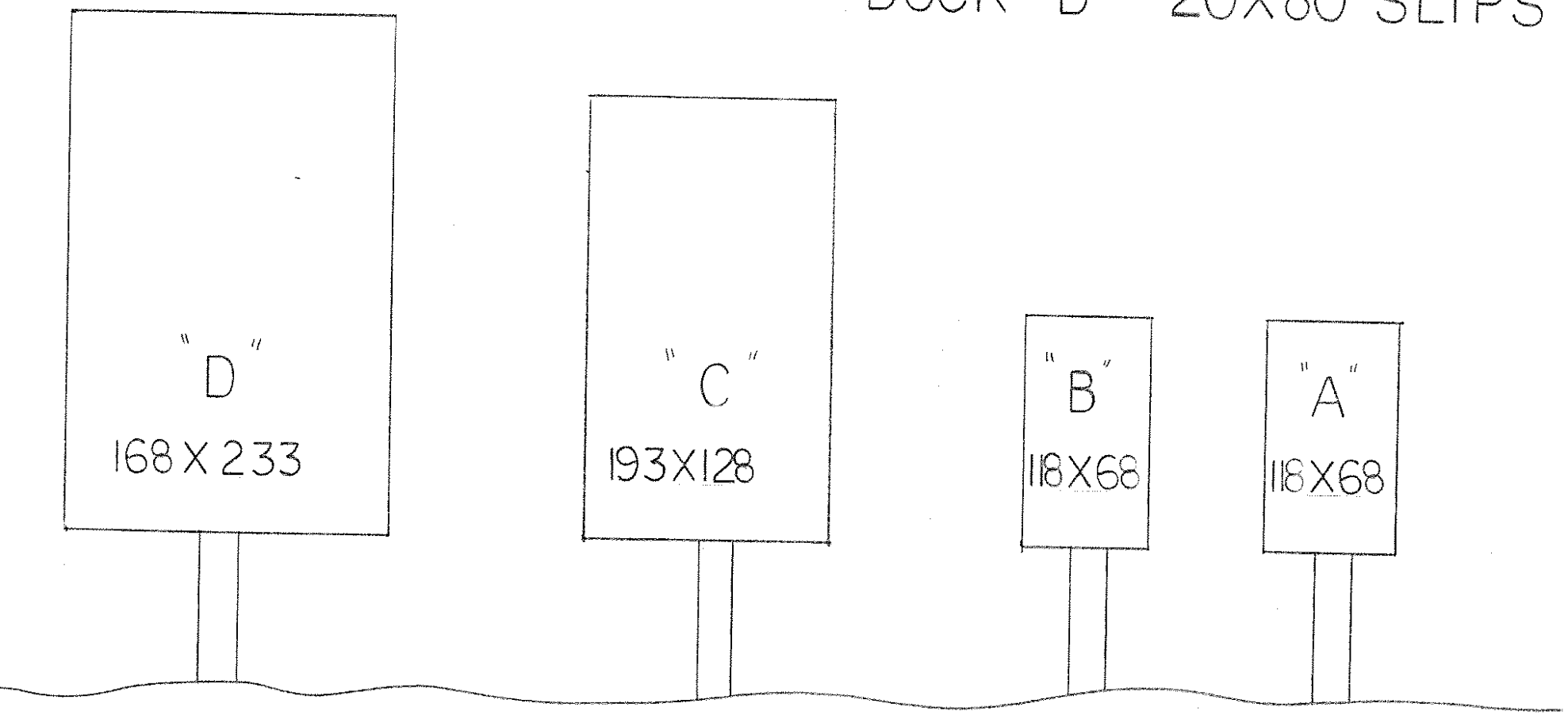
SCALE:	APPROVED BY:	DRAWN BY
DATE:		REVISED

ELK RIVER RESORT

DRAWING NUMBER

NO 002

DOCK A 10 X 30 SLIPS
DOCK B 10 X 30 SLIPS
DOCK C 20X60 SLIPS
DOCK D 20X80 SLIPS



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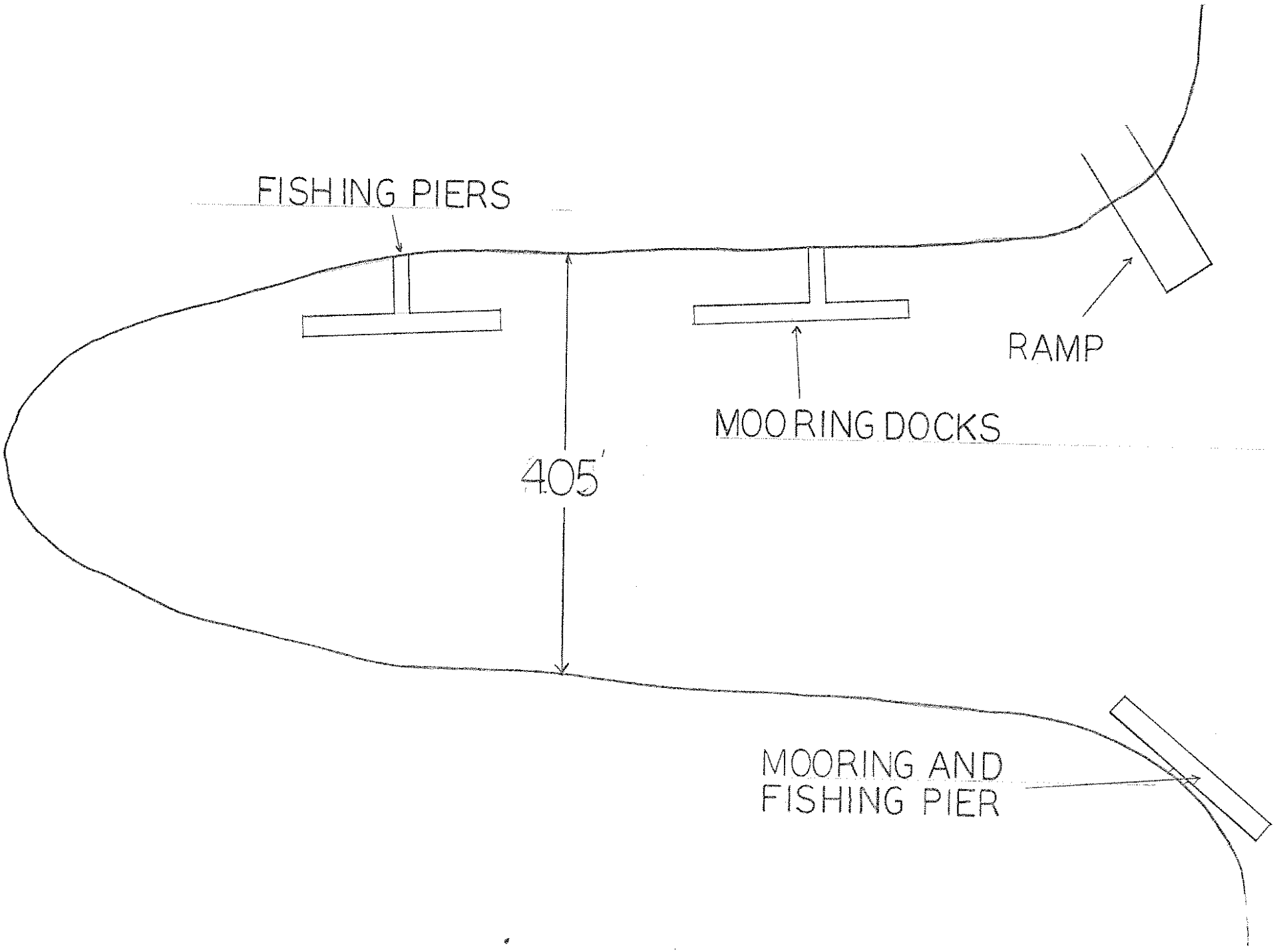
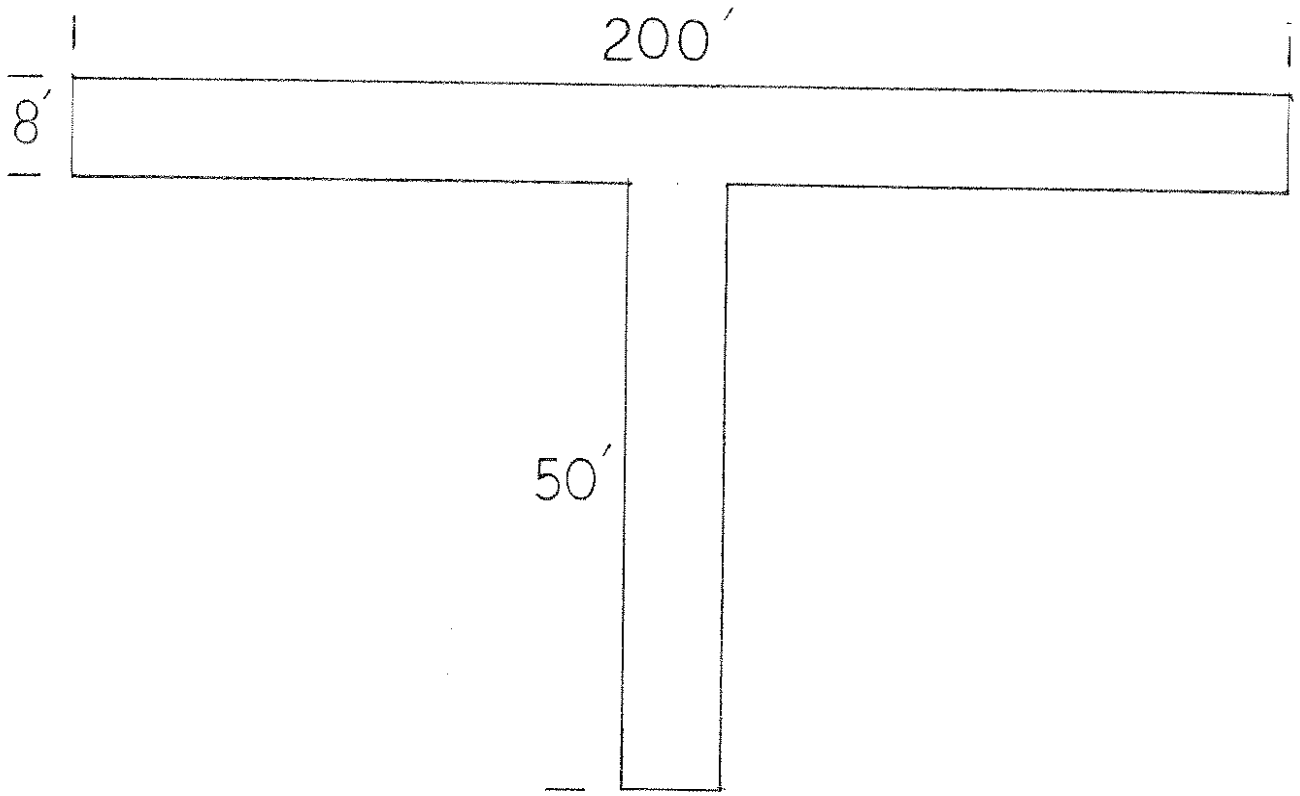

FISHING PIERS
RAMP
MOORING DOCKS
405'
MOORING AND
FISHING PIER

NO 003A



ELK RIVER RESORT

FISHING PIER

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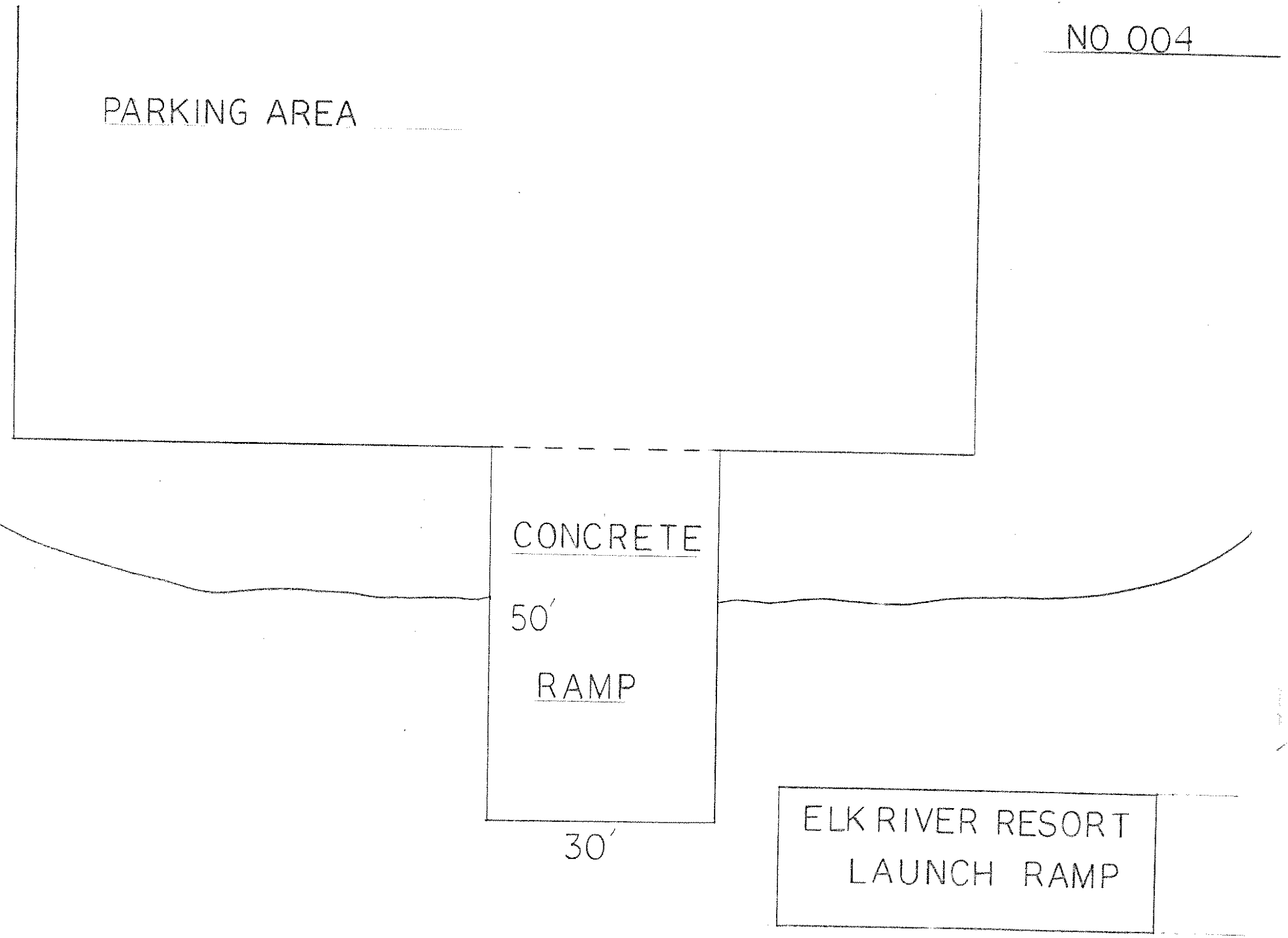
PARKING AREA
CONCRETE
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RAMP
30'
ELK RIVER RESORT
LAUNCH RAMP

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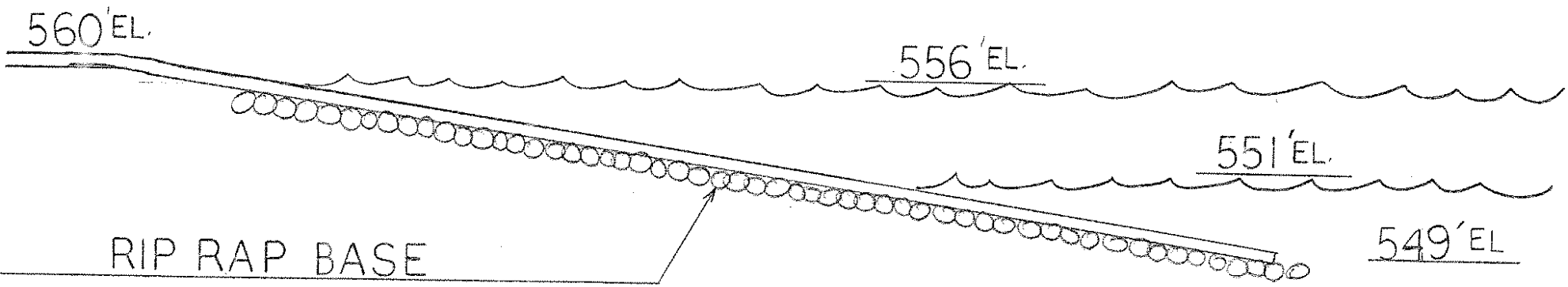

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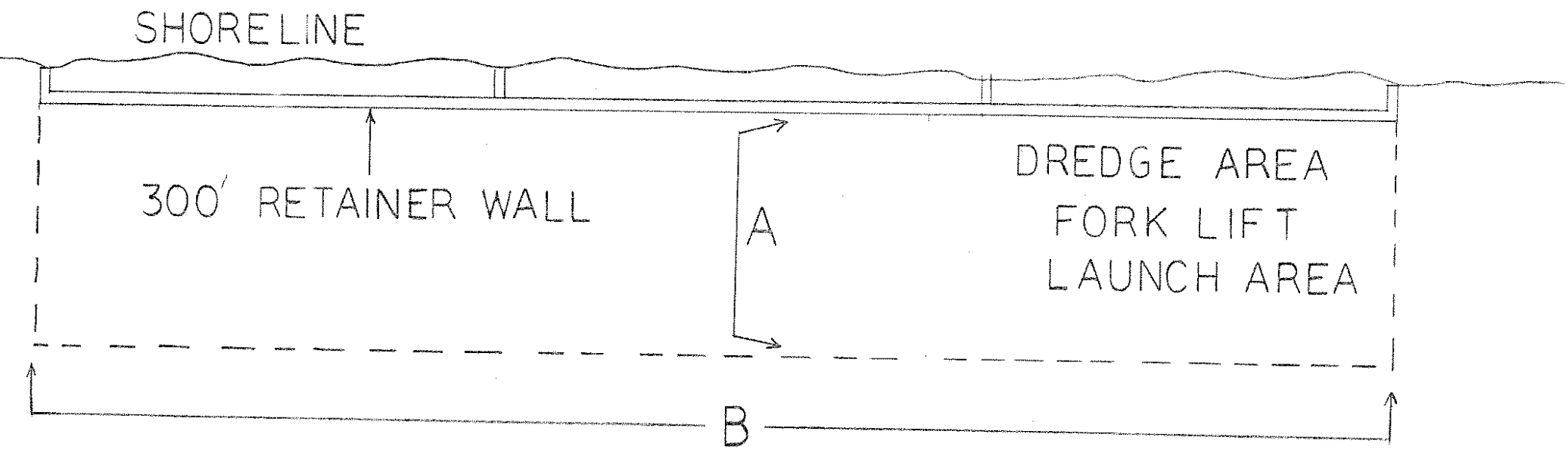

SHIP STORE / DRY STORAGE LAUNCH AREA

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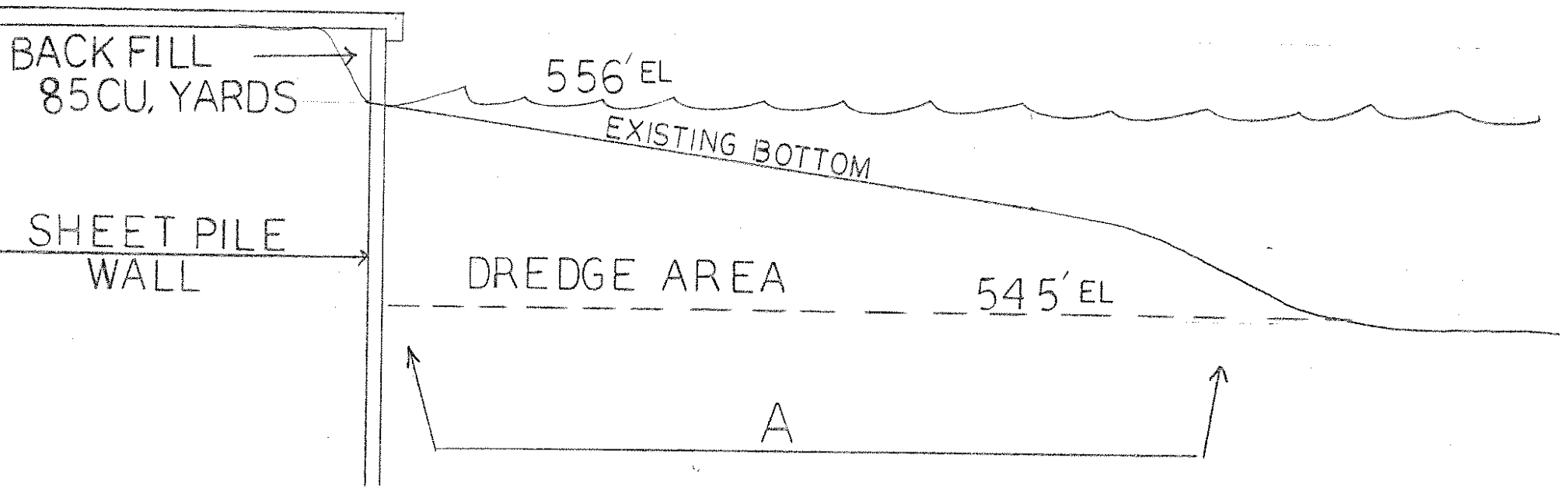

DRY STORAGE FORK LIFT LAUNCH

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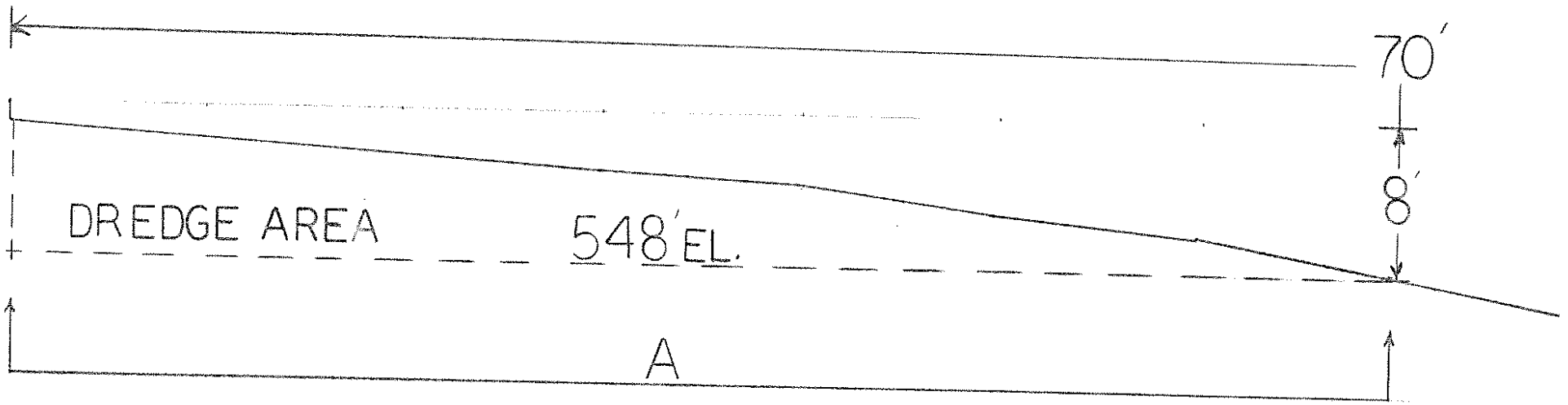
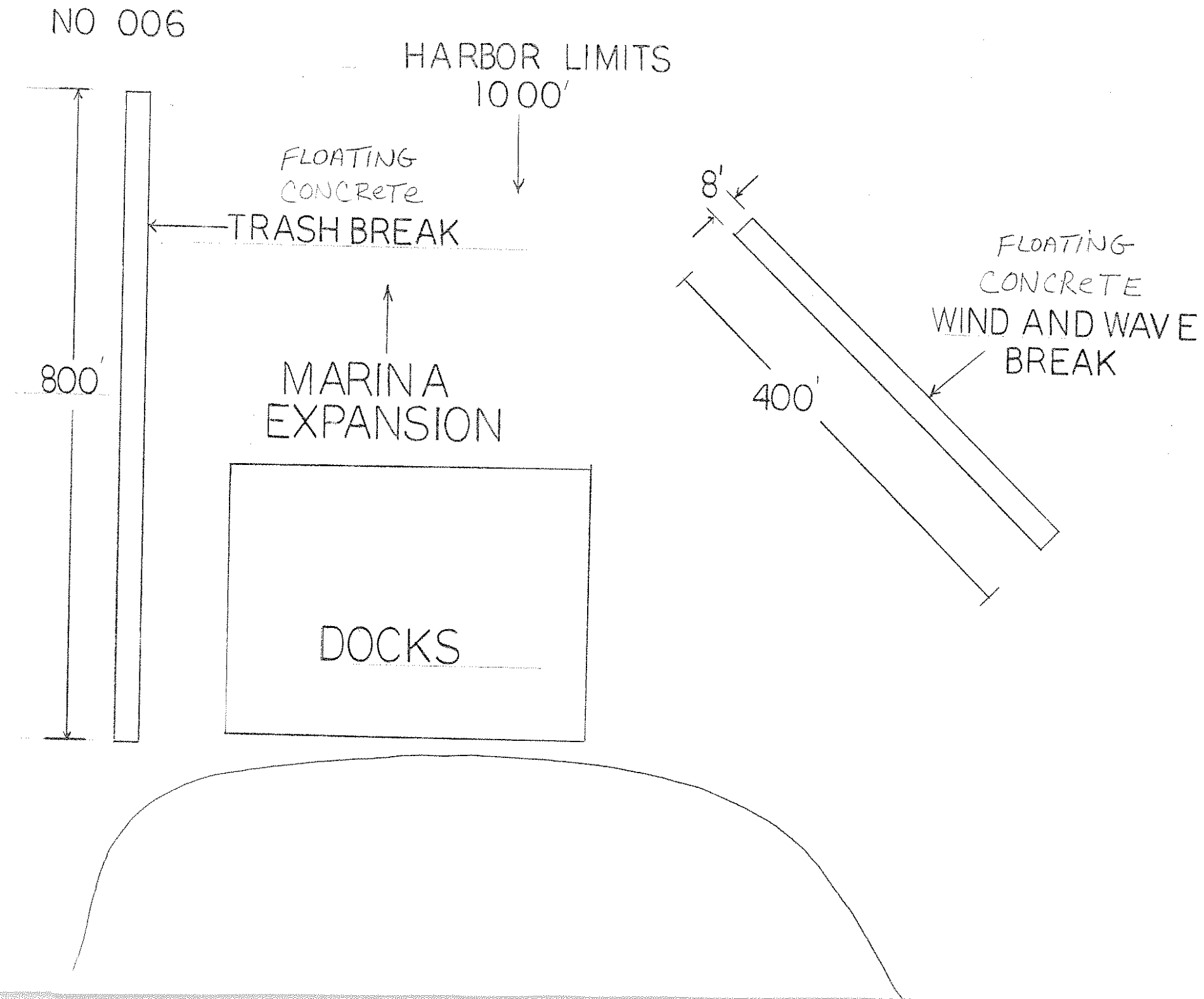


2700 YARDS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FLOATING
CONCRETE
TRASH BREAK
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MARINA
EXPANSION
DOCKS
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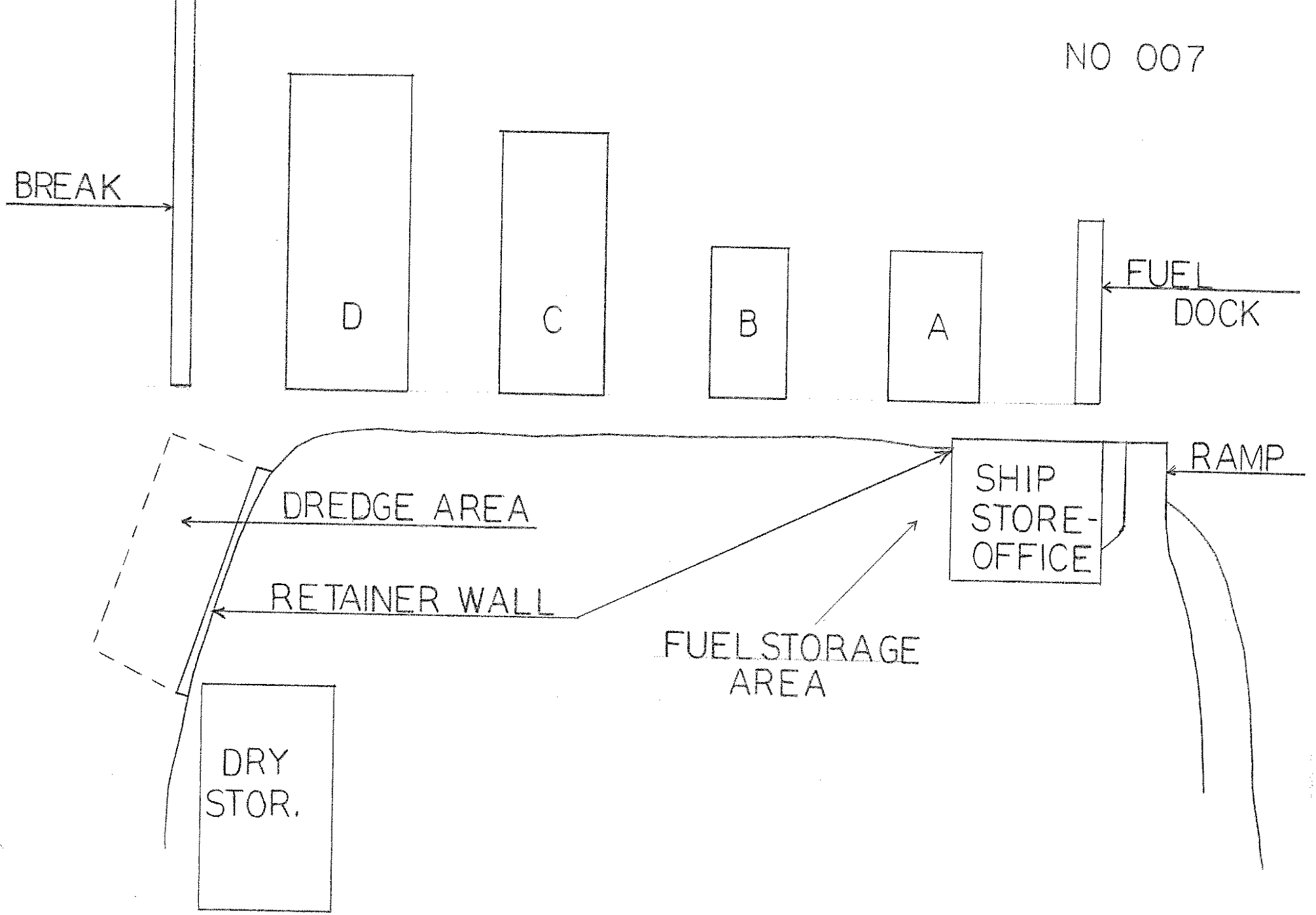
FLOATING
CONCRETE
WIND AND WAVE
BREAK
400'

NO 007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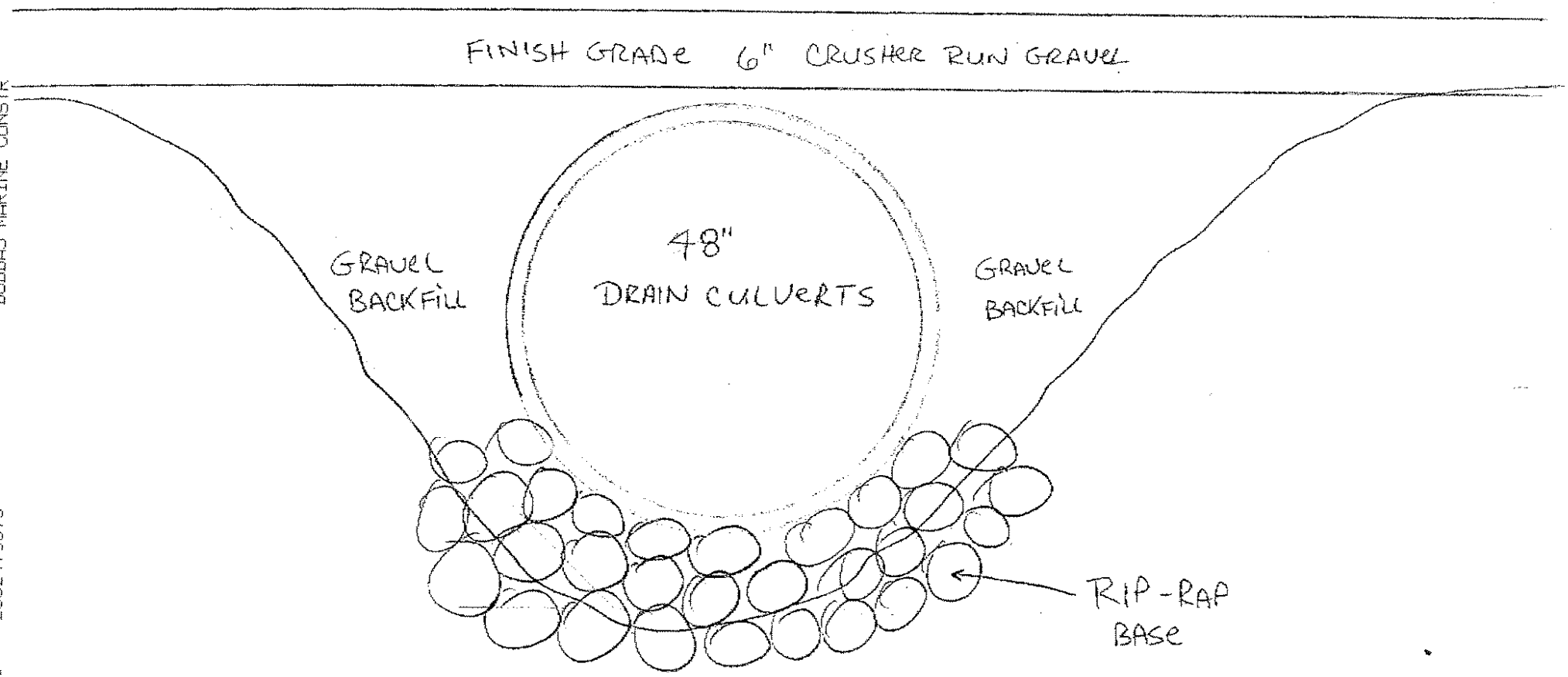
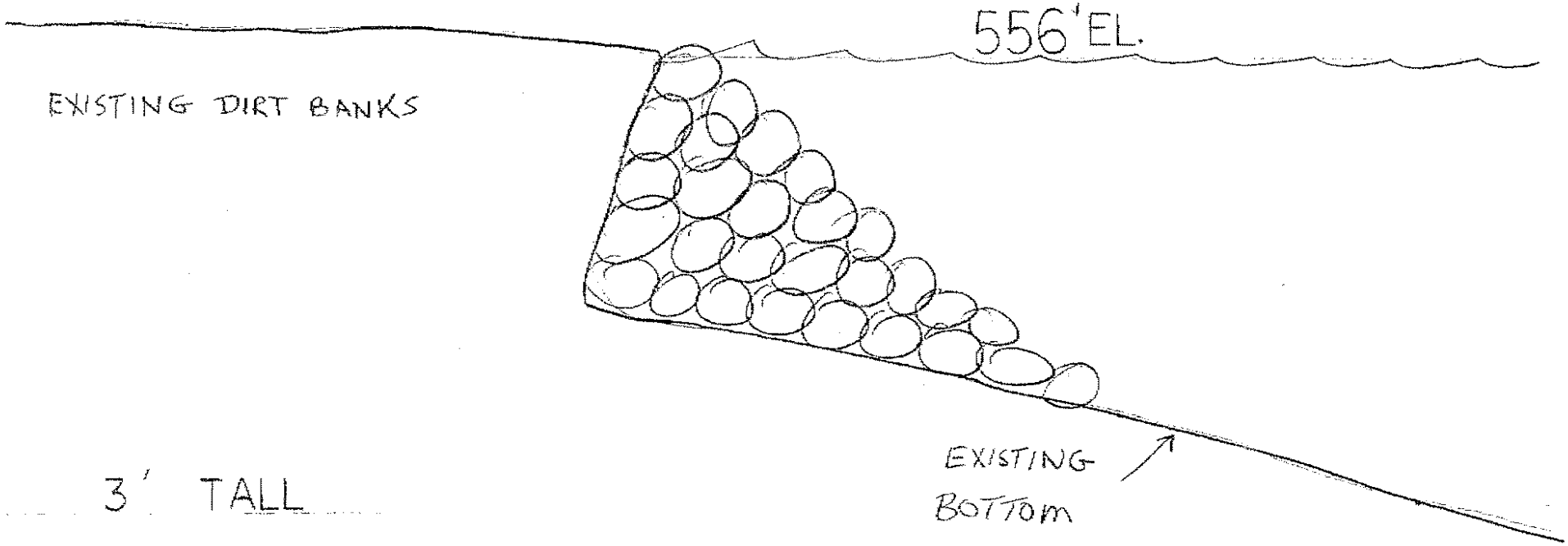


ELK RIVER RESORT



3' TALL

4' WIDE

300' LONG

67 FILL (YARDS)

APPENDIX B – PUBLIC COMMENTS

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Summary

TVA solicited comments on the proposed action by publishing notices in the local newspaper. The public notice appeared in the *Florence Times Daily* on June 26, 2005. It also ran the following Wednesday. Another local paper, *East Lauderdale News*, also ran the information on Thursday, June 30, 2005. The comment period ran through July 29, 2005. TVA accepted comments through August 19, 2005. TVA received comments from 93 individuals who were opposed (24 of which were form letters), 19 who were in favor of the proposal, and a petition in opposition to the proposal with 259 signatures. On August 26, 2005, TVA and the United States Army Corps of Engineers (USACE) issued a joint public notice, soliciting public comments on the proposal, specifically including detailed plans for the proposed marina facilities. Additionally, USACE mailed the public notice to all who had previously expressed an interest in the project. The public notice was posted on USACE's and TVA's Web sites. Commenters were provided the opportunity to submit their comments online through TVA's Web site, in addition to mailing and/or faxing their comments to either or both agencies. Thirteen additional comments were received; no new issues were identified. Issues identified were for the following resource areas: recreation, navigation and boating safety/congestion, water quality, roads/traffic, terrestrial ecology/natural resources, threatened and endangered species, cultural resources, solid waste disposal, visual resources, noise, security concerns, property access/property values, and land use. These comments were grouped into issue categories and are summarized below:

Recreation

Need for Marina/Facilities

- Marinas are at Wheeler Lodge and Dam. the point and Bay Hill, developed and/or being developed.
- No real need for this marina. The land is already available to the public and currently has numerous trails running through it suitable for hiking. The public already has full access for hunting and fishing and there is also a boat launch available on the Barnett Road for access to the water. There are numerous boat launch facilities available in the area and Joe Wheeler Park is only minutes away.
- There is no need whatsoever for the facilities Mr. Doss proposes to build. As Ken Thompson, the representative from Joe Wheeler State Park, clearly pointed out, the Park is doing a splendid job of providing a marina and camp ground for the area. It also has a group lodge on the Elk River itself. Since 1995, when TVA designated the 91 acres in question "commercial recreation", the Pointe directly across the river has now taken a huge piece of privately-held shoreline away from its natural state and is developing it with houses and condominia. The Point has also built a large marina almost directly opposite the one Mr. Doss would build. The Pointe has changed the situation on the lower Elk dramatically and TVA's designation from 1995 is no longer pertinent.
- The Park already has in existence plenty of camp sites, boat slips, boat launches and other recreational areas, including a restaurant available for the public. With 2400 acres available to the Park, I am sure that they will be able to keep up with the public's recreational needs for some time. Joe wheeler state park is located about 3 miles from the proposed site, and offers marina slips, campsites and a nice restaurant.

- While the residents on the Elk River need a marina, they don't need several. When one of them should fail, it will leave an eyesore, just like the 'old granary from Mr. Wheeler! Our boats can use Bay Hill or Joe Wheeler for gas, food, etc.
- The proposed site contains equestrian trails used by the public. There are no other equestrian trails in the general area that offer comparable equestrian aesthetics in such a bucolic setting. These activities will be displaced by the proposed development.
- Need for another marina located within 20 minutes (by watercraft) of the existing Bay Hill Marina (public marina on the west bank of the Tennessee) and just across the Elk River from the private marina associated with the The Pointe development.
- I personally think this marina is a great idea for the community and the river in general. since the closure of elk river state park gas dock, there are no accessible areas for gas or even a telephone for emergencies
- Bay Hill Marina already provides adequate services to the public and more are planned for the future.
- Lucy's branch is located about 4 miles from this area by water, they also offer the same amenities.
- On this point, you can check with the State Parks and you will find that they are normally not full, except on big holiday weekends. The rest of the year, they have plenty of available places for people to go.
- If turned into a boating and camping area it would only compete for business with the other parks in the area which are never filled.
- The following nearby facilities have increased their marina facilities, Bay Hill Marina, Joe Wheeler State Park and The Pointe. The Pointe plans call for a total of 146 boat slips just across Elk River from Tract No. 21.
- The additions of these proposed facilities are needed to serve the growing population in this area of the river. I know that Mr. Doss's facility will be a welcomed asset to the community and travelers on the river.
- Joe Wheeler State Park, a 2500 acre preserve, provides all of the proposed facilities plus more, in a safe, clean, affordable and controlled setting; further, this park is in the process of expanding to accommodate future needs. Wheeler Dam State Park and Wheeler State Park at the Highway 72 Elk River Bridge provide additional water based recreation.
- Absolutely no information is available regarding the proposed restaurant except that this would probably be the last thing constructed. Please note there are several restaurants in the community and the restaurant at Bay Hill has closed and reopened several times in the past few years. The community does not need it and obviously does not support it.
- If TVA persists with the approval of the requested easement, then I would suggest that TVA establish a set of strict rules governing the management of the property. These rules should include limits on the duration of RV visits, ATV and motorcycle usage, noise abatement, neatness, safety, and environmental concerns. If RV park provisions is retained in the propose, then the local residents believe that is it is TVA's responsibility to ensure that the standards for the park operation are comparable to those established at Joe Wheeler State Park.

Recreational Activities, Boating Safety

- Homeowners have relinquished the waterway to the many jet skis and boats already using the river.
- This somewhat narrow area of the Elk River is a heavily traversed waterway to the Tennessee River and quite congested with the fishing tournaments, homeowners boating activities, other boats from above and below the Elk River Bridge, established development sprawl and boat ramps already provided in the area
- our experience with water traffic thru the years I think it would be safe to estimate at least 50 additional watercraft vehicles on the Elk River each day. It would lead to more pollution of the water way as well as more accidents by inexperienced people driving watercraft on the river.
- Increased pollution decreases recreation opportunities such as fishing, swimming, and wildlife viewing.
- The beauty of the Elk River is the lack of water traffic that you encounter on the river compared to the Tennessee River and Guntersville Lake area. We truly believe the water traffic in the other areas is a direct result of the marinas located in these area.
- (Boat) Traffic on the Elk has become more populated. The proposal is just going to add to this.
- The beauty of the Elk River is the lack of water traffic that you encounter on the river compared to the Tennessee River and Guntersville Lake area. We truly believe the water traffic in the other areas is a direct result of the marinas located in these area.
- My children swim daily during the summer months in this river and I truly concerned about the additional pollutants.
- This entire area is already over-developed and over-crowded and there are fewer and fewer places where one can just fish and enjoy nature.
- On the TVA website TVA recommends ways to care for the environment on and around the river. I do not understand how you can be so contradictive of yourselves. In my opinion, this marina project goes against what TVA is putting on their website in trying to preserve the environment. According to your website, “TVA is committed to protecting the environmental resources of the valley.”
- The current use of the land provides horseback riding and hiking trails that allow access to the area without endangering plants and wildlife.
- This facility would be privately owned and controlled. The campground could very easy turn into a trailer park as is the case of Lucy Branch campground, allowing storage lockers, tool sheds, disabled vehicles and other unsightly things.

Navigation and Boating Safety/Congestion

- This marina could possibly cause navigational problems and hazards.
- Another concern of mine relative to the marina is: what will be the construction of the proposed wave break and how far it will extend out into the river. Any form of wave break will further degrade the river by not allowing the natural floating matter to rebuild the riverbed structure. Excluding the floating debris from its natural collection points in the sloughs will impact river front property owners by forcing this material

into their docks, boathouses and water access areas. Then, ultimately TVA will have to deal with this excess debris at Wheeler Dam.

- endangerment by congestion to all life, overcrowded,
- The protrusion of the boat harbor in the Elk River will be very unsafe considering the increase in boat traffic exiting the marina. We have heard that the marina will extend 1,000 feet into the river. If this is true, there will surely be an increase in boating crashes and fatalities due to this obstruction, especially if barges are used as a wave brake. Although any wave brakes will obstruct the vision of boats exiting the marina and boats navigating the channel of the river. Also, please consider the extremely large number of logs and trees that float down the Elk River after heavy rains during the winter and spring. A marina extending 1,000 feet will cause a huge navigational mess as it collects logs and trees.
- This facility would expose the residence to increased river traffic resulting in safety problems, and a very high probability of drugs and alcohol.
- With the addition of the newly acquired subdivision at the mouth and the now proposed development of trailers camping, etc. at Barnett Landing, this will increase the traffic on ELK river to dangerous proportions.
- Not only will this marina create heavy traffic in a small area, the safety of boaters will be crippled greatly. Boaters who are not familiar with the Elk River waterways already have difficulty navigating the congested area - adding a marina will only make it worse.
- On weekends and holidays the increased boating/personal water craft traffic from this facility will multiply the already dangerous and over crowded conditions on the Elk.
- The addition of such a marina would overcrowd a narrow passage of the Elk River that is already fairly dangerous during the summer with vacationers. Unfortunately, not all boater are educated on or choose to pay attention to channels and boating rules and regulations.
- it would be safe to estimate at least 50 additional watercraft vehicles on the Elk River each day. I truly believe that no wider than the river is in certain areas this would be too much traffic on the water. and more accidents by inexperienced people driving watercraft on the river.
- Congestion: marinas are at Wheeler Lodge and Dam, the Point and Bay Hill, developed and/or being developed, Fishing tournaments, and Homeowners have relinquished the waterways to the many jet skis and boats already using the river.
- This area of the river is a path, somewhat narrow, to the Tennessee River and quite congested with the fishing tournaments, homeowners, other boats from above and below the Elk River Bridge and boat ramps already provided in the area.
- the additional traffic it will create on the river. We are covered up now with wave runners and power boats. There is a new sub division being built at the mouth on Limestone county side that will increase traffic on the river.
- In the past ten (10) years, boat and jet ski traffic on the Elk River has more than doubled, making it dangerous to be out on the water at peak vacation time. In my opinion, if this development is allowed to go forward, the additional traffic on the

water in this area will increase by 15 to 35% making it dangerous to engage in water sports in the area where Elk meets the Tennessee River and all in the area south and north east of the proposed development.

- we need to keep the waterway open for normal speed traffic
- The river is already crowded enough. On a normal summer day finding any smooth water for water sports is almost impossible. The marina would stick out into the river SO far, and this will crowd the waterway even more.
- It has been my experience that with the least bit of wind out on the Tennessee River/Wheeler Lake, everybody heads to Elk River or one of the other creeks such as First Creek to get out of the wind and rough water. Especially the skiers, fishermen, and jet boats. With Bay Hill marina and Lucy's Branch campsites out there, it's an overwhelming increase in traffic on Elk River already. Then TVA has let that Christopher start all those homes down there with his planned boat slips. He's already started ruining the River directly across from where Doss wants his Marina. Enough is enough! On the weekends, it's already overcrowded and too dangerous to be out. We rarely go out on the weekend anymore. The Elk River channel is just! too narrow to accommodate any more traffic. A new marina will just make matters worse and more dangerous.
- Increased boat traffic to a now calm narrow navigable area ("Exhibit B" indicates an 800' wave break perpindicular to the shoreline)on the Elk River in which shall become congested and creating more instances for accidents on the waterway and decreasing the safety of my family / kids and someday grand-kids.
- Effect of the proposed marina on the Elk River flow and the accumulation of debris (both natural and man-made). The proposed marina would appear to intrude into the Elk River at a point that would impede the natural ability of the river to carry debris around the left-turn bend and out into the Tennessee. The Elk River is well know for its debris and the associated water hazards. The concern over the proposed development should be its impact on the rivers ability to carry debris safely out into the Tennessee, and not allow it to accumulate upstream, creating more water hazards.

Water Quality

Septic and Sewage

- Increased development means increasing sewage disposal problems and the possibility of it leaching into the River. Will this be a private sewage plant? The water level of the ground can only accommodate so many field lines. Overspill flow into the river. Who will monitor the pollution?
- A new subdivision is currently being developed at the mouth of Elk River on the opposite shore from the proposed site. They've already got problems with sewage disposal because the land is too low. Just wait until the rest of those homes are completed.
- Another of our concerns is how will the sewerage problem be handled for this project? We are on a well and the last thing we need is to have a large septic system filtering into the surrounding ground water and polluting the wells in the area. Has a perc test even been performed?
- Increase in sewage potentially causing water pollution.

- Sewage Disposal - Marina, cabins, campsites. (Most of the 91 acres are in low, "wetland" type land - it will be impossible to keep all sewage out of the river). As I understand it, Mr. Doss plans to use septic tanks. This area is too low. It has too much runoff directly into the river. There is no way that septic tanks for a project this size will keep all the sewage out of the river. I recently had a septic system installed on my property for a family of only two people. The requirements from the Lauderdale County Health Department made it almost impossible to install the field lines. It wound up costing over $10,000.00. I wonder if Mr. Doss will be required to use the same precautions that I had to live by? Has he considered the extreme cost? And what assurances and checks does TVA have to make sure that this project would keep all sewage out of the river?
- Fuel leakage from boats and direct human waste. (urine, feces, trash into river at Marina)
- How does Mr. Doss plan to keep all the sewage from these boats out of the river? They can use a pumping system, but that won't stop it all. I've been to parties on boats in privately owned marinas. Once it gets dark and the drinking starts, people just use the river. It's as simple as that. I've lived on the Tennessee River all my life and there is no doubt about this. With all these homes, docks, boathouses, and piers already here, Elk River is almost a septic tank now.
- As the VP of Twin River Estates Water Company, I am requesting that you exercise caution before granting easement requested by Mr. Gilbert Doss. A project of the size suggested by Mr. Doss will necessarily require a large septic system. Any large septic system, in close proximity to a waterway, could potentially introduce serious contamination if the project is not preceded by a comprehensive study of the soil structure in the affected area.
- When the issue of the septic system was discussed at the informal meeting conducted on July 18, Mr. Doss indicated that "perk" tests had been performed on the proposed site. Since "perk" tests are used to measure the soils ability to absorb affluent at some minimum rate, these tests do not provide any insight to the rate at which the affluent will migrate laterally and potentially enter the river. The real concern, when planning a large septic system near a waterway, should be focused on preserving the water quality of the river.
- The soil in this area generally consists of limestone rock and clay. This type of soil is not well suited for holding an affluent. More Importantly, this soil will readily allow greater lateral movement of the affluent. there is some physical evidence, in the immediate areas of the proposed development that supports this concern. Multiple springs, flowing from the banks of the Elk River, have been observed on the property adjacent to the southern boundary of the proposed development site. this clearly indicated lateral movements of water within the soil structure. Should the planned septic system's drainage field contaminate any of these springs, then the Elk River could also be contaminated with raw sewage.
- I urge TVA and the developer to conduct comprehensive soil studies, employing a qualified geologist, to ensure that this project will not damage the water quality of the Elk River. Proper soil studies are the only tools available to reduce the liability exposure for both TVA and the developer.
- We are also concerned about the leakage of human waste from the holding tanks of boats in the marina and recreational vehicles in the campground. This especially

concerns us since we have a six month old daughter and we are worried that this leakage will spread disease causing bacteria that will cause her harm.

Fuels, Lubricants, Sewage From Boats at Marina

- The more boats and filling stations that exist on the river the more chance of an accidental spill and further destruction of the water life in the area.
- The increase in boating traffic would no doubt increase the potential for petroleum products to become introduced to the water.
- Fuel leakage from boats
- All you have to do is ride thru a marina and smell the gas.
- Boaters, mainly jet-skiers, speed-boat skiers, and bass fishermen, pollute the quiet environment of the embayment with their litter, their gasoline secretions
- Not only is it taking homes away from the wildlife, the excess gas and oil that will go into the river will ruin the fish population. The extra boating traffic will leave wakes that will wreak havoc with the docks, seawalls, and banks. The erosion will be much worse than it is now.

Other Water Quality Issues

- Runoff - Increased development by the loss of forest. Decreases water quality.
- Nor has it been disclosed how runoff from these paved areas would be treated.
- Dredging - This will affect the natural balance of the shoreline and flow of the river. Unintended results usually occur due to dredging and many times are negative.
- Specifically, the Elk River System already has pollution problems. I have spoken with ADEM and they have informed me that are not allowing point discharge into the river in this area because of the phosphorous values.
- Potential for erosion of the soil as trees are cut and sites developed. If rip rap had to be used to control erosion, it would be unsightly and not in keeping with the present shoreline.
- years ago one could see your feet while standing in the Elk. Development, farming and population has changed that forever.
- The extra boating traffic will leave wakes that will wreak havoc with the docks, seawalls, and banks. The erosion will be much worse than it is now.
- Remember, this river provides drinking water for many of us Tennessee River Valley residents.
- In a previous TVA report on this property found that “soil interpretation indicates that the soil has highly erodible soils….” How will this problem be addressed by these developers?
- How will the dredged spoils and the substantial amount of water used to pump it be handled? Surely not just poured out onto ground that slopes to the river. A settling pond will be required to hold the dredged slurry at least temporarily to prevent it from washing back into the river. Where would the pond be located? How big does it need to be? Where and how will the earth removed to dig the pond be stored to prevent it

from washing into the river? Has the dredging plan been reviewed by a qualified engineer? If so, what were the details and results of the review?

- Also, shoreline areas outside the proposed project area will be subject to increased wake effects from the increased boating activities in the immediate area of the project when it become commercial. These areas are likely suffer increased erosion and deterioration from those increased wake effects.
- the increased bank erosion will get into the river and take trees with it. and the entirety of the shoreline must be "rip-rapped".
- Also our community use water from a community well and I myself have a well on my property. these wells are from underground springs that are fed from underground springs from all over the area. IF such a facility were to locate in the area their septic system would contribute an excessive amount of waste (both human and synthetic) into the soils finding its way into these springs damaging our water supply.

Roads/Traffic

- Endangerment by congestion to all life
- The road is only one lane wide and the entire length of Lakeview Drive is comprised of steep hills and sharp curves that are not conducive to large campers or vehicles pulling boats. As people discover there is no ingress to TVA from this road guess where they will want to do their turnarounds. We already have enough people turning around in our driveway who evidently don't know what "Dead End" means.
- The proposed road for access to this facility is very narrow. If a large boat being towed met a large motor home or camper it would be almost impossible to pass safely
- Roads are not currently designed for this much traffic. Tax payer burdened by the cost of construction to upgrade roads.
- Increased traffic into the area. My husband left a buffer strip between the end of the road that he put into Hidden Valley Shores and TVA land, but there is already a problem with four-wheelers going across our private land into the proposed development area. Certainly this problem would be increased by those seeking an alternate route into the campground area.
- Mr. Doss said somebody at the Lauderdale Count Road Dept said that the two lane road in and out of the park would handle the traffic. They are mistaken. And how in the world can they say that anyway when he doesn't have any idea how many people are going in and out of there. Ya'll need to get actual projected numbers, and have the road dept consider it with accurate information and an impartial investigator. Make sure they take in consideration the residences on that road, along with the many children that use that road.
- There are children that play, Skateboard/basketball/pitch, on that road all the time.
- TVA should have enough consideration about those poor people that live on that road. They won't be able to get out of their house!
- Entrance road is a two lane-road through residential areas. Trash and abuse to the area between Hwy 72 and "marina" area will increase. South of the "industrial park" on the proposed route on Barnett landing road is a residential area. If you allow this project, an alternative route must be found. The current road has difficulty handling

current traffic. It would be a disservice to the residences to allow the road to connect to a park/camping area.

- Additional commercial development in the Elk River area will increase traffic on Highway 72. Until the proposed median is completed from Athens to the Lee-High bridge, we do not need additional traffic on Highway 72. A reduction in speed limit has helped, but additional traffic (especially traffic pulling boats and travel trailers) will only add to an already dangerous situation.
- Increased traffic on a sub-standard County road in which traffic projections have not been developed for to determine if the existing roadway structure (pavement design) can handle the increased average daily traffic (ADT).
- Furthermore the intersection of Barnett Road and County Road 70 is currently serviced by a recently added four way stop sign. The increased traffic flow will probably require a light rather than just signs. This is especially important since so many children play in these streets. This increased traffic flow would represent a significant risk to these children.
- There is a great concern with various safety issues regarding the direct route to access this proposed project. The only inlet/outlet for this project will be accessed down Barnett Road off Highway 72. Barnett Road is a narrow county roadway that has several peaks and valleys. Due to the narrowness of the road and no distinct white/yellow lines, many times you will meet oncoming traffic, in these peaks and valleys, traveling in the center of the road, creating near-miss accidents. All this additional projected traffic will create many more near-miss/fatal accidents because there in nowhere to go except head on.
- In addition the local residents, the road is already heavily traveled by vehicles/boats going to the end of Barnett Road to access the TVA boat launch. Even though it has been newly resurfaced, it doesn't have a grade "A" surfacing job. All this additional traffic brought on by this marina/campsite will heavily tax/deteriorate the existing road, creating a sub-standard road for residents whose livelihood makes it mandatory they travel the road daily regardless of the condition of the road.
- I do however object to a possibility that access to the marina be through the roads from York Drive to Poplar Springs Road to Sharon Drive to Jennifer Circle where my future home is under construction. This route would be convenient for patrons of the marina coming from the east on US route 72, create traffic and danger for walkers, joggers, children, and adults in an otherwise quiet developed community. In consideration of the above I oppose the marina or any other development of TVA's property that allowed it's eventual connection by road to the adjacent Jennifer Circle.
- Major county expense for roads and traffic
- These include the increase in traffic on roads and lanes that are not designed for this traffic load
- Safety of the county-maintained access roads (County Road 70 and Barnett Road) leading into the proposed development. Both Barnett Road and CR 70 are very narrow, with no shoulders, and several hills that degrade sight distance. These roads are not adequate to safely handle the increase in traffic of large boats/trailers and campers associated with the proposed development. Additionally, many of the homes along both roads are single family homes built very close to the roadway, so

much so that the road itself serves as play area for local children, who would be exposed to the traffic hazard.

- I live at the end of county road 77. I have 3 small kids and I do not want the additional traffic on that road.
- a road entrance that will get some people killed - Add to it that Doss's road is dangerous
- Increased traffic on a sub-standard County road in which traffic projections have not been developed for to determine if the existing roadway structure (pavement design) can handle the increased average daily traffic (ADT).
- County Road 77 will be the public road serving the entrance to the proposed project. This is a two-lane rural road. Exhibit-B if the JPN shows the county road but does not give sufficient detail to locate the proposed entrance to the project. Is the county road designed to accommodate the anticipated traffic volume expected during construction and operation of the project? Has this been studied by a qualified engineer? If so, what were the results of the study?

Terrestrial Ecology/Natural Resources

Animals: Birds, Turtles; Aquatic: Mussels, Fish, Terrestrial Mammals

- Loss of habitat for waterfowl, wildlife, and fish - is home to a variety of animal life, including opossums, raccoons, deer, coyotes, porcupines, **eagles, herons**, owls, and an incredible variety of birds. have observed box turtles living on the shoreline and a turtle crawl up from the river to lay its eggs in my front yard.
- This action is particularly important as it has been reported that **Eagles** have been seen roosting on Tract 21 which has about one mile of shoreline.
- Affect the return and nesting of the **bald eagle**.
- The Elk and Tennessee Rivers provide major flyways for all types of waterfowl and many fishing opportunities. Increased development of the shoreline reduces this habitat and adversely affects fishing.
- fowl, fish, plants, garbage, shallow water, shoreline destruction.
- This area is one of the few areas that are still wooded on that portion of the elk river and supports a verity of water fowl and other wildlife. This area could be more useful to the area if it is left as is.
- All the neighbors and river users ooh and aah over watching **eagles, osprey**, hawks, owls, **pileated woodpeckers**, wood ducks, ring neck ducks, geese, mallards, herons, hooded mergansers, horned grebe and all types of water fowl in addition to turtles, **mussels**, beavers, raccoons, deer etc. On and around this property. This is a very valuable wildlife habitat and is threatened by the possibility of this
- we have seen a dramatic increase in the variety of waterfowl that reside where the peaceful embayment empties into the elk--great blue herons, white egrets, kingfishers, wood ducks, and mallards.
- development, not to mention the erosion from wind, rain and wave action cutting of trees and vegetation, pollution, fuel leakage, runoff, sewage, increase of traffic on the water dredging of the cove and other environmental impacts

- An example of this would be the flock of about 20 wild turkeys that can be found on this land.
- We have the unique experience this very year of having a bird appear at our home that have never been formally identified before in this state. We took numerous photographs of this bird and even alerted the Alabama Ornithological Society. When their President came to our home to see and verify the existence of the bird he commented profusely on what a unique and pristine habitat the Elk River was. He was quite surprised that an area like this still existed. The find was considered quite significant as you can verify by visiting this url, several websites are listed that contain this information: http://www.google.com/search?hl=en&q=white-winged+crossbill+kelso+rogersville&btnG=Google+Search or http://www.tvas.org/RBA2005_04.htm
- It is also worth noting that this section of the Elk River also supports several types of herons, bald eagles, and even an osprey has been sighted. The mere presence of a marina and the associated activity will pose a severe threat to these species.
- We are concerned that any development of this property will have an adverse effect on the Elk River Population of bald eagles that nest in this area. Bald eagles have been observed using this property on numerous occasions. We hope that TVA will consider the negative impacts on this endangered species while conducting the environmental impact study.
- Fishing - The proposed easement is a march of destructive development for the area and a death toll for fishing, beautiful fowl life and recreational water activities.
- I cannot believe that dredging is not going to have a negative effect on the fish population in that area. That is currently one of the favorite fishing spots on the river.
- My children frog and gar gig, fish, hunt and walk in these areas. These types of activities are currently severally limited by the lack of undeveloped waterfront. We are just making these conditions worse.
- The Marina, if construction is allowed, will result in the elimination of a large area of irreplaceable fish and wildlife habitat.
- This is clearly a location where the natural process of spawning and feeding occur annually. As I have fished there, I have caught bream, shellcracker, bass, catfish, etc. because of the excellent natural habitat. I definitely believe developing a marina here will absolutely change the area permanently, and not in a positive direction for a fisherman.
- Mr. Doss will be selling gas at this marina and that he will also need to dredge the slew to accommodate his proposed dry storage. This will have a very negative effect on the mussel population in this area of Elk River.
- will ruin fish spawning areas
- Please leave the acres of land undisturbed. We have very few left. I expect TVA to protect natural habitats.
- Effect of the proposed development on the natural wetlands in the area.
- Also, it is now an important place for fish and wild life to live and propagate.

- The wildlife in the area that you intend to build on is simply amazing. Do you realize how much of that you will destroy?
- There are eagles nesting in and around that area. I thought that they were still considered endangered.
- The recreation, the natural habitat and the beauty is to be protected. The marina would add more distress to the land and the river. Please consider my concern to protect the wildlife and residents (who prefer quiet canoeing and observation of the beauty of nature) from more development with the proposed marina.
- For one, the wildlife it would run off of their own habitats.
- According to an E.P.A. data base, the lower Elk River "section is habitat for two federally listed fish species: the Snail Darter (Percina Tanasi) and the Boulder Darter (Etheostoma Wapiti). If there habitat is in the vicinity of the proposed project, it is likely to be harmed.
- The negative impact that this project will have on the fish population. (Elk River is already in danger from too much sediment runoff, too much pressure from fishermen, and general abuse by the public) There is a fishing tournament nearly every day out of one of the aforementioned boat ramps. There are few places left where the shoreline is not developed, where one can fish without being on top of someone's dock or pier. This is one of the few places left where Crappie, Bass, Shellcracker, and other fish can bed without being disturbed. Dredging that out will definitely ruin the spawning areas. The fish have few places left to go. It would be devastating to the fish population, which is already in dire condition.

Timber/Forest Habitat

- There will have to be a lot of old timber cut to put in a ramp, dry storage, marina, campsites and a big parking lot for all. This 91 acres is a natural forest, animal habitat and wetland (marshy area in back of cove with small creek) and this cove is an excellent spot for fishing of all kinds and bird watching.
- remove one mile of shoreline from being "wild" and scenic
- Loss of native trees and flora and fauna.
- I've watched residences build on the river while maintaining the required TVA tree line. If private residences have to maintain TVA requirements, why would you consider an easement for commercial industry who will destroy what private people and TVA work to maintain.
- the amount of forestland to be cleared and the amount of land to be paved over for storage, parking lots, campsites, etc. has not been disclosed.
- Wetlands
- A portion of the land requested in this proposal is wetlands with springs that flow into the river. If this land has been percolation tested, where can the percolation test results be obtained?

Cultural Resources

- Loss of valuable archaeological sites and artifacts.

- Negative historical and archaeological impact - (These grounds have history of Indian Villages and possibly their burial grounds) A TVA archaeologist recently told us at a Lake Watch meeting that it is a Federal Crime to dig for Indian relics, arrowheads, etc on Federal Lands. How could TVA allow Mr. Doss to dig in this area when they would charge an individual with a Federal Crime just for digging for arrowheads?
- There are historical sites in this area also.
- There were also Indian villages and camps on this side of the river (refer. Bureau of ethnology bulletin 122 pg 91 and 92) above and below the waterline.
- There are historical sites in this area also. There used to be Indian villages along the area and I'm sure they have burial grounds there.

Solid Waste Disposal

- What provision has the developer planned for garbage removal in the area, which will increase.
- Does the owner have to meet requirements in keeping the area clean
- The campsites will produce waste that has to be disposed of. The tremendous pressure from boaters, residents, and fishermen makes the shoreline unbearable now.
- Increase in garbage causing rates to increase, trash in the river, and trash on the roads leading to the site.

Visual Resources

- The proposed development at Barnett's Landing will be a disaster for the pristine area.
- The spot is one of the most beautiful on the lake
- It should be left with respect by man (and TVA) to the natural flora, fauna and water life for the enjoyment of nature without the addition of fences, asphalt, sewage, concrete, garbage and congestion.
- Fishing and boating on the Elk River- things I most enjoy are the tracts of beautiful trees owned by TVA and the serenity of the surroundings.
- River view & home ownership degradation
- Potential for destruction of natural lands that enhance the river view.
- Potential for poor upkeep of properties, especially in the winter when view people are using the river.
- Without exception they all are completely taken with the natural beauty of the hills and forest. They always comment about how undeveloped the shoreline is compared to the other rivers they are familiar with
- We've enjoyed the natural look of the river for many, many years and then to have the shoreline destroyed and aesthetically altered with construction and then to possibly be abandoned, we'll be stuck having to look at the eye sore.

- we need to keep the waterway beautiful - addition of commercial barge/type barriers and removal of trees and natural habitat would be inappropriate for esthetics
- Drawings presented do not present esthetic proposals and do not give architectural details - what control would there be over the development after lease was awarded?
- It would eliminate the only remaining quiet and undeveloped area on Elk River. Many people now enjoy visiting this lovely area, and would be hurt by its loss.
- If the proposed marina does not survive from a financial standpoint, we will be left with a desolate eyesore as compared to a now scenic recreational waterway.

Noise

- The restaurant and the camp sites would be built right next to our property. This would have an impact on the quality of the quiet and peaceful location our home currently offers.
- With the recent development of The Pointe, which is almost directly across the river from the proposed site, there is already a drastic environmental impact on this area with the increased river traffic and noise.
- This facility would expose the residence to unwanted and excessive noise.
- Increased noise and disturbance to the people who live in Hidden Valley Shores (developed by my husband), as well as to others who live on that part of the river.
- Boaters, mainly jet-skiers, speed-boat skiers, and bass fishermen, pollute the quiet environment of the embayment with their litter, their gasoline secretions, and their NOISE.
- The PRIMARY CONCERN is the noise (day and night) that will be caused by the constant traffic influx/outflux (since this will be the only inlet/outlet) in order to get to the marina. The noise/traffic from this projected access road will directly affects my property in many ways and will forever change the quiet, peaceful lifestyle as it exists.
- Many of these boats will be high-powered under-muffled "bass boats" that are likely to increase the ambient noise level significantly. Has the ambient noise impact on neighboring private property in the area of the proposed development been studied by a qualified engineer? If so, what were the results of the study?

Security Concerns

- The developer didn't have any method or offer any comments on the security of the proposed development.
- will allow virtually hundreds of strangers easy access to our backyards during evening hours. there are several summer camps which are uninhabited for much of the time. Our homes would become extremely vulnerable to break-ins and potential vandalism from the multiple campers.
- potential for forest fires caused by careless campers - people would be spending the evening hours around camp fires. This leaves us with an uneasy feeling as to the safety of our homes.

- I have raised four children and I know that when a group of teenagers are camping they do things that they would normally never do when they were alone. I am really concerned with this happening during the evening way out here in the boonies.
- Parks of this type, usually bring somewhat undesirable people, who have no respect for ownership and will most certainly increase the crime rate.
- Increased potential for illegal and criminal activities.
- The very real threat to the security and peace of mind of the hundreds of people who live on the Elk River. Those who will move away are people who now contribute to the economy of Rogersville and Lauderdale County.
- I found out tonight that the proposed area is within the Rogersville Police jurisdiction. The 1 Sheriff's Deputy for the 1/3rd Eastern part of Lauderdale County is correct.
- He will not have a controlled gate in and out of the park, He will not have any private security at all!
- You should also note that the "meth" labs I mentioned in my letter and at the meeting are verifiably true.
- Now how in the world could anyone at TVA allow someone build a "shanty town" campsite community with no security whatever in among all these 100's of residences?
- Even though it may be in the Rogersville Police jurisdiction, that does not mean they will patrol the area. In fact, they won't. I have lived in my community for almost 30 years and I have not seen them in here more than a couple of times. They spend all their time on Hwy 72 giving traffic tickets. Except for Killen, Rogersville has the reputation of the biggest speed trap in North Alabama. An example of the fact that Rogersville PD wont do anything: My neighbors home and my home were broken into by someone who broke windows to get in. Long story short, when I called to report it the Rogersville Police did not come out. It was the Sheriff's department and it was at least two hours when they finally came. And the deputy did nothing but a report so I'd have it for my insurance. Neither the Rogersville Police nor the Sheriff's office will patrol that isolate! d campground. IT WILL BECOME A HAVEN FOR DRUG DEALERS, DRUNKS, AND THIEVES. PLEASE DON'T TURN THEM LOOSE IN OUR NEIGHBORHOODS.
- Theft of property from local boathouses and homes will increase. We have two Neighborhood Watch Programs and a Lake Watch Program in this area. These programs can't protect us. We have been extremely fortunate that the crime rate here is fairly low. PLEASE DO NOT ALLOW THIS PROJECT; WE WILL HAVE THIEVERY HERE, NO DOUBT. DON'T TURN THESE PEOPLE LOSE IN OUR NEIGHBORHOODS.
- Lauderdale County is a "dry" county. This area, as a campsite, marina, and cabins, will certainly bring in alcohol and the related crimes. (DUI in both cars and boats, and all the related criminal activity that comes with alcohol) With private ownership, there will be no police protection. At least at the state parks, they have police and park rangers to make sure that the drunks don't get out of hand. There will be noone to stop the drunks from driving in and out of the campsite and no police to keep the drunks off the river. This will wind up killing some people. Most likely, it will be a kid in the neighborhood where they go to and from the camp.

- Drug activity - Cabins and campsites will turn into "meth" labs. (IE Cabin # 12 at Joe Wheeler Park at Wheeler Dam, Camper at Rockpile Campsite Area at Wilson Dam, Waterloo Campsites. In the recent past, "meth" makers and distributors have been caught in cabins and campers in parks that have police. At Joe Wheeler Park, # 12 cabin was used as a meth lab. They got caught only because they have park rangers and police. This park won't have any protection. Same thing happened in a camper in TVA Camping area at "Rockpile Fishing Area". AND THIS HAPPENED EVEN WITH TVA POLICE PATROLLING THE AREA ON A REGULAR BASIS.
- there is only one Alabama Marine Policeman for the whole area of Wilson and Wheeler Lakes.
- there have been several incidents of drug deals, alcohol use, sexual relations and littering at the boat ramp. TVA nor Rogersville have cut the grass or picked up the garbage this year. There is no lighting at this boat ramp, so it is easy for mischief to go on, especially at night.
- I was sad to hear that Doss turned down the $5K offer to withdraw his proposal. That tells you how much he cares about his neighbors and how much he'll care when he puts that eyesore of a campsite in. It'll be a rundown, camper/mobile home park such as the one on South Sauty over on Lake Guntersville. And believe me, it is a mess with a den of thieves. Some relatives over there say that almost every house and boathouse within 3 to 5 miles of that den of thieves has been broken into. And it is just like we are here. They are too far out to get any police to patrol or even show up when they have the thieves on the property. One home called 911 while the intruders were in the house, but the cops didn't show until the people had long gone. They never caught them. No one can prove where the thieves came from, but it's proof enough for me that crime is rampant over there within hear shot of the campsites.
- lack of adequate police presence to police this marina if approved,
- Increased traffic at Barnett Landing creating more instances of loitering. We just recently had our garage broken into and a 4-wheeler stolen as well as a theft attempt into the cabin.
- Anytime you have a recreational area like that it attracts not only positive but also negative attention such things as alcohol, drugs and the crimes that go with them. Is the Lauderdale County Law Enforcement willing to put on the extra help to take care of this problem?

Property Access/Property Values

- our home is one of the last ones located on Lakeview Drive which abuts the TVA land. There is a five foot strip of land owned by Bill Wright that blocks public access to the TVA land from Lakeview Drive.
- Potential reduction in land value to local residence.
- Lastly, brings the issue of property value. If this proposal were to come to fruition it would definitely have an impact on the value of property in this area. If this land were to be developed for the aforementioned purpose, we would be forced to look for other property for our retirement home. Having a restaurant and campsite in what would virtually be our side yard would have a definite impact on our ability to sell our property for a fair market price.

- The access road that will cut is off Barnett's Road. The access property is approximately 200 feet wide and 360 feet deep before it joins TVA property. My Property is the same width and length and directly joins this access property on the North side. The entire West side of my property (200 feed wide) directly joins the TVA property (the area that the access road will be continued on through until it reaches the projected marina/campground site)..the beginning of the access road will start off Barnett Road on the North side of the developer's 200 foot-wide property, leaving an approximate 140-foot land barrier between the entire length of this access road and my property. The developer's promise to plant additional trees as a barrier is a SECONDARY CONCERN.
- The inclusion of the RV Park has the potential to reduce our property values. Several residents recently visited privately operated RV parks located in the area and have discovered that they have evolved into permanent home sites for most of the occupants. The accumulation of personal property scattered within these parks presents a very unattractive setting for visitors and local residents.

Land Use

- I was also disturbed to learn that if the easement is granted one person would have total control over who gets to use the land. As it is, the public has a right to hike, hunt, fish, and even camp out on the property. If he is granted this easement, the number of people will be limited by Mr. Doss.
- With land across the river going for a record $1700 a foot on the water, why does this man get an easement for the use of this much property without having to purchase it as other developers have to do. He will profit from this land for at least forty years without having to lay out the initial cost for the purchase of the land. I don't understand how easements work. How can public land be taken and used for the enrichment of one person while denying free use of it to the public? I have seen many easements granted for environmental purposes, but there is no profit margin in those cases.
- By the way, if this is on TVA property, what is an individual doing getting access to same property? Does that mean each of us up and down the Elk can bid to run a business of any kind?
- Even though TVA has zoned this parcel of land for commercial recreation it is located in the middle of a residential area. There are permanent homes on each side.
- North Alabama faces intense development, and each year hundreds of acres of farmland and forests are lost. The result is a degradation of watersheds, allowing for increased pollution of ever important water supplies.
- The proposed development at Barnett's Landing will be a disaster for one of the last undeveloped areas on the Elk River. It will create extensive environmental damage and alteration resulting in a even more degraded watershed. This area should be left as one of the last vestiges of undeveloped land on the river.
- Potential for poor quality trailers, used as a permanent/long term residence.
- The TVA Management Plan is outdated and does not reflect the current need or desires of the local population. Since the plans "Study Phase" was begun, there has been a proliferation of facilities on the Elk River and Tennessee River.

- TVA should consider updating the plan to delete the classification "Commercial Recreation from Tract 21 and limit Tract 21 to visual management.
- If granted and it's for 30 years, what happens after the end of the 30 year period? Does it go abandoned, must it be torn down, can the easement be extended?
- My concern is if granted and five years from now it goes out of business, what happens? My apologies for ranting and thanks for your time.
- My husband, William P. Wright, bought land that adjoins the proposed development at a TVA auction over fifty years ago, with the promise and the expectation that the land retained by TVA would remain in its natural state
- That land is the only undeveloped land left between the Tennessee River and the Elk River Bridge on the Lauderdale County side, and is appreciated and enjoyed by a great many people who use the river.
- The taxpayers paid for the impoundment and any development should be carefully screened for environmental impact and overall health of the reservoir.
- I'm extremely concerned that there may be avenues where our natural resources can turn into Commercial development.
- In the past, it seems that when requests for this type operation is not policed and the next thing you know the area is in need of repair and the owner is not forced to make the necessary repairs. A good example of this is the old Lucy's Branch complex. The marina there is open at times and closed at other times and is definitely in need of repair.
- Since it appears that the tract is currently allocated for Commercial Recreation I see no reason why Mr. Doss's request should not be granted subject to the normal TVA restrictions.
- There are just TOO MANY PEOPLE. There are almost 50 homes just in my neighborhood and its all north of the proposed site. North of me, there is a home on every lot next to the river. Anderson Creek that runs into Elk River just north of the Hwy 72 Bridge has been developed just in the last few years. From here to Tennessee, Elk River is simply covered up. It has too much pressure already.
- This will be a privately owned business that will rent to anyone. Other private camping areas have developed into nothing more than "Shanty Towns". What happens is that the owner of the cabins and campsites get into financial trouble and in the so-called "off season" has to reduce prices and rent for longer periods of time. They wind up with migrant workers, vagrants, and generally undesirables. For instance, there is a private campsite and marina on South Sauty on Lake Guntersville. It turned into a low rent camper/mobile home park. They currently have homes being broken into all around it. The police are so far away, they are never around. It will be the same here. How can TVA be assured this won't happen here?
- This land should be left alone for all to enjoy and the wildlife to abound. This is the only expanse of land undeveloped on Elk River on the Lauderdale county side. This land is a natural refuge only accessible by boat or foot.
- How does this proposed development fit into TVA's master plan for river development?

- What are the provisions for restoration at the end of this lease?
- TVA has not shown how Mr. Doss' proposed development is integrated into a master plan for development while maintaining a healthy river. Does a river development plan exist? If a river development plan exist how can it be accessed?
- If the proposed marina does not survive from a financial standpoint, we will be left with a desolate eyesore as compared to a now scenic recreational waterway.
- When will TVA stop selling our natural environment to the highest bidder? Why do we need three marinas within such a short distance of each other?
- Further, it unfairly allocates public lands to support a private venture and should be rejected.
- No trade-off study shows that this facility (if a market for this service exists) in private hands meets a need of significant community benefit to deprive the public of the use of and access to recreational public lands.
- Will publicly owned TVA land be turned over for private use and abuse? Land adjoining Track #21 is currently for sale. Could the purchaser of this land obtain river access via this easement?
- This prime waterfront property is currently accessible to all citizens for recreational use free of charge. The private development of this property for profit will restrict access to the land and the large waterway engulfed by the marina to only those people that choose to pay for boat storage or camping. This does not seem very equitable to the general tax paying public who's tax dollars paid for this land and waterway. Restricting public property for private profits does not serve the interests of the tax paying citizens. We believe that private developers should pay for land used in the developments and should not be subsidized with public land that was purchased with Federal tax dollars.
- Furthermore, the sale or lease of land by TVA to any private company or individual should not be possible or allowed. (Comment by: Bob Blanks)
- This project should never be allowed to be placed in the middle of these residential neighborhoods.
- A safety concern exists due to people coming into the marina/campground being able to stop/walk along the inlet road wandering off the road, into the natural habitat, allowing them to wander onto my property.
- TVA has long been viewed as stewards of our shorelines by the people in our area, I built my home here because of its proximity to the TVA land, thinking that I would not have to worry about any development in that area. Now I feel betrayed that TVA is considering leasing this land to someone for development.
- I understand that the TVA Board of Directors consists only of 2 members at this time instead of the normal 9 members. I would that an issue of this importance would not be decided by only 2 board members.
- The property in question is the last parcel of undeveloped shoreline on the west bank of the lower Elk River. When I purchased my property, our sales agent contacted TVA and confirmed that the parcel in question was classified as recreational only.

- TVA arbitrarily reclassified the property as recreation/commercial. I feel reclassification and the approval of this easement represents a violation of the trust between TVA and the public.
- If TVA wished to dispose of this property, I would suggest that you exercise your power and reclassify the property to residential then using a public auction. TVA could generate a significant income. Developed shoreline, immediately across the river is currently selling for 1,700 per foot. Also, extending residential development along the Elk river would be more acceptable to local residents.
- What I have observed from other type facilities like this in the area is that they eventually become permanent residence for mostly low-income/transient families. We need to preserve the areas for non-development on the Elk River
- we need to promote development and use of existing developed areas before allowing new areas to be opened (bridge at Elk River - State-owned property, etc.)
- what benefit does TVA receive for lease of the property versus allowing it remain as it is?
- so-called marina you are planning to let Gilbert Doss have to ruin 92 acres of public land on Elk River,
- There are 100's of homes around it that don't want that marina. We own it too, you know. I don't care what your reports and studies say.
- Some moron at TVA changed the classification of that land and therefore lied to the many people they had told that the 92 acres would not be developed and remain a pristine wetland.
- What will it cost TVA to put the property back like it was? I believe the future problems for TVA and cost of cleaning up his mess will be much more than TVA will ever get in revenue. He won't have any profits, that is unless he rents those campsites by the week or month in the off season to Meth dealers and thieves. There is a proven history of private campsites doing this to stay afloat. Even the State does it, but they have their own cops to patrol the area. No matter, there are two cases that I know of in the recent past where meth dealers have been caught on government controlled recreational property. There won't be anybody to catch them on Doss's 91 acres.....
- If I understand correctly, the basic duties of TVA are to provide citizens inexpensive power, access to public lands for recreation, and to conserve our wonderful natural resources. I know its duties entail much more than the aforementioned; however, the basic tenets of responsibility are covered in these three areas. We currently have three private developments along the Elk River system. This will surely impact wildlife diversity, water and soil quality, and general river traffic. With the value of riverfront property increasing day by day there will surely be more private endeavors in the future. TVA may be the last stronghold for undisturbed and unaltered river landscape left. These areas scattered throughout our river system provide invaluable buffer zones between private developments. If these few remaining areas are given up for lease and development, the plant and animal diversity will surely suffer. Please give strong consideration to vetoing this project. I know money is an important issue; however, preserving as much of the remaining habitat that is directly under your control is essential to the survival of our ecosystem.

Other

- First impressions are important and the first impression that this has created both in my mind and in the minds of my neighbors is that TVA is trying to by pass the citizens and railroad this shaky proposal through to completion. So automatically by default you have raised the suspicions of the people most affected by the marina project.
- TVA could do better by the residents by clearing up the debris in the river.
- I was not convinced with his denial about docking his barge at the site. Even though he has nothing about that in his existing plans, it's a definite possibility in the future once he has control of the land.
- I have watched with increasing sorrow as this beautiful river fills up with silt and trash and while such blights as the granary (now defunct) are given permission to further maim the river.
- That guy that tried to make a point about the employment of a whole 12 people is a tax accountant in Rogersville with other business interest. He does not live on the water and he, mistakenly, would trade the security for all of my neighbors for a few part time jobs.
- The one other guy that was for it. The man that asked where there was a marina. and lied about how long it takes to get to 1st Creek has a personal interest too. I wouldn't be at all surprised, I don't have proof, but I'll bet you that he is behind Doss on this deal so he can use that marina for the people he is selling houses to on the other side of the river. That's got to be his interest in this deal. He wants another way to line his pockets.
- After hearing what Mr. Doss had to say (and the only two people for it being those two as described above), it is obvious that they are not doing this for anybody but themselves. Is TVA going to allow a monstrosity like this deal to go thru when the vast, vast majority of people are against it and the only thing Doss, Christopher, and the accountant see are $ signs. They are not interested in our community. This is certainly not in the Elk River community's interest.
- I hope this project is not one of those that is already going to happen no matter what the public wants.
- This business will struggle to make money and will not have any money for private security. (For example, the restaurant/Marina in McFarland Park has struggled from the beginning. The Harbor has changed hands; the Restaurant has failed under different owners/renters. There will be no money for private security.
- I would like to quote form the TVA Act of date, it says in part:

  To improve the navigability and to provide for the flood control of the Tennessee River, to provide for "reforestation: and the "proper" use of marginal lands in the Tennessee Valley, to provide for the agricultural and industrial development of said valley.
- I find no correlation from the TVA document as to where adding this marina is of any Benefit to anyone with the possible exception of the marina proprietor and perhaps a small influx of revenue to the township of Rogersville. It bears to ask the question of

- What price has to be paid environmental and ecologically? Reforestation, I beg to differ, old growth timberland will be removed putting additional pressure on wildlife in the area. Proper use of marginal lands, Hardly, Marinas, it is know however will policed to produce discarded trash from irresponsible boat operators and users of recreational vehicles and well as fuel spillages. To provide for the agricultural and industrial development of said valley.. Please explain to me how this marina is to benefit the agricultural community. Human waste generated from the marina, campsites, cabins' leeching into a low lying water shed is not what I consider agricultural development, I think not, this proposed marina is a pure commercial venture with the design of generating financial capitol for the proprietor, leaving community to bear the burden of The degradation of its land and waterways.
- Quality - There is real concern for the quality of what will come if the lease is approved. Obviously nice families with a decent desire to enjoy the wonderful natural atmosphere of the river with TVA has provided will not trundle down the poor country roads to "Bubba' Meth-lab Acres". but will continue on a few minutes to the clean facilities at the State Park. Anyone who has lived in the rural South knows exactly what private RV parks become. If your board approves this lease, it will be providing a very convenient venue for very unruly elements. The trash in the river will greatly increase, not mention the litter and noise on the roads. We will see the drug busts on the evening news. I hope that the community of Rogersville is willing to take on the extra policing responsibilities which will certainly come. Rogersville will also certainly suffer economically as this element, now largely absent from the community, makes the area repugnant to tax-paying citizens.
- Public Responsibility of TVA - The fishermen at the meeting attested to the fact that this shoreline and the slough it contains provide some of the best sport fishing on the River. The proposed marina, dredging, and development would, or course, ruin the natural beauty for the fishermen and may change the habitat of the fish. The land itself has an old logging trail on it an is often used by the public for delightful nature walks. Facilitation healthy outdoor activities is exactly what TVA should do in its role as a public trustee of valuable natural land. Approving this lease will do just the opposite. now, Especially with the Pointe across the river, this land comprises one of the largest and prettiest pieces of natural shoreline left on the lower Elk. TVA has a public responsibility to be very careful about what it does with it. Approving a plan for a RV park from an applicant who publicly calls himself "Bubba" should certainly raise suspicions.
- Finances - If land on the west shore of the Elk now sells fro between $600 and $1000 a running foot (The Pointe asks about double that), the property in question is conservatively worth between three and five million dollars. At five percent, the annual mortgage interest on such a sum would fall between $150,000 and $250,000. Since rents are higher than mortgage interest, we assume TVA is entitled to a lease payment well in excess of these figures for the 91 acres. Again, suspicions are raised. A microware restaurant, unneeded marina, and RV park will find it difficult to be financially profitable on such expensive land. Either MR. Doss has something else up his sleeve or TVA will provide him the land at a low lease payment and thereby violate its responsibility to the public trust.
- Elevated bodily injury and property damage an EDO and environmental systems
- The number of proposed cabins and campsites to be constructed in this development has not been specified. The question then arose are these recreational

campsites or extended habitation (residential) sites. It was noted that the TVA land was classified recreational commercial (not residential); although some of the sites would be for monthly occupancy. Note: Government operated campgrounds restrict occupancy to two weeks and prohibit campsite structures to preserve the recreational nature of the campground and its appearance; a restriction that will not necessarily be placed on these campsites.

- so-called marina you are planning to let Gilbert Doss have to ruin 92 acres of public land on Elk River,
- There are 100's of homes around it that don't want that marina. We own it too, you know. I don't care what your reports and studies say.
- Some moron at TVA changed the classification of that land and therefore lied to the many people they had told that the 92 acres would not be developed and remain a pristine wetland.
- What will it cost TVA to put the property back like it was? I believe the future problems for TVA and cost of cleaning up his mess will be much more than TVA will ever get in revenue. He won't have any profits, that is unless he rents those campsites by the week or month in the off season to Meth dealers and thieves. There is a proven history of private campsites doing this to stay afloat. Even the State does it, but they have their own cops to patrol the area. No matter, there are two cases that I know of in the recent past where meth dealers have been caught on government controlled recreational property. There won't be anybody to catch them on Doss's 91 acres.
- If I understand correctly, the basic duties of TVA are to provide citizens inexpensive power, access to public lands for recreation, and to conserve our wonderful natural resources. I know its duties entail much more than the aforementioned; however, the basic tenets of responsibility are covered in these three areas. We currently have three private developments along the Elk River system. This will surely impact wildlife diversity, water and soil quality, and general river traffic. With the value of riverfront property increasing day by day there will surely be more private endeavors in the future. TVA may be the last stronghold for undisturbed and unaltered river landscape left. These areas scattered throughout our river system provide invaluable buffer zones between private developments. If these few remaining areas are given up for lease and development, the plant and animal diversity will surely suffer. Please give strong consideration to vetoing this project. I know money is an important issue; however, preserving as much of the remaining habitat that is directly under your control is essential to the survival of our ecosystem.
- In Exhibit-D the applicant provides a cross-section of a proposed 48" diameter drainage culvert for the proposed access road. If this diagram is accurate and to scale, then it appears that the hydraulic drainage cross sectional area is being reduced from approximately 32 square feet to approximately 12.5 square feet. That is a very substantial reduction. Will this reduced cross-section be capable of accommodating expected maximum drainage volume over the next thirty years? Were any calculations by a qualified engineer made to support the selection of a 48" culvert? If so, what are the details. What is the design basis for the selection of a 48" diameter culvert?
- Also, in the provided documentation it suggests that a 48" culvert will convey the water from an un-named tributary underneath the proposed road. I find it hard to

believe, based on the quad maps that this pipe has been adequately sized and would like to be better informed of who is the controlling/governing agency for the road once it leaves CR-77.

- the culverts are two small to hold back flooded streams,
- In view of the possible adverse impacts on adjacent property and residences due to noise and wake effects, the scope of analysis for this project should include near shoreline areas and uplands within at least several hundred to one thousand yards of the proposed project.
- On the TVA website TVA recommends ways to care for the environment on and around the river. I do not understand how you can be so contradictive of yourselves. In my opinion, this marina project goes against what TVA is putting on their website in trying to preserve the environment. According to your website, “TVA is committed to protecting the environmental resources of the valley.” This one statement speaks volumes. The approval that TVA has given for this marina project is exactly the opposite of what TVA is saying in that statement.
- An additional issue: It is my understanding that TVA will now have to spend a considerable sum to remove the failed granary. As I recall, the people on Elk River begged TVA to not allow that project, but they did anyway. Thank the good Lord that it will take only money to remove that eyesore. BUT, bringing this to it's logical conclusion: If TVA allows Doss to ruin that 91 acres, and cut down the numerous trees that it will take to make room for cabins, septic tanks, field lines, roads, etc., then how will TVA replace those trees when he fails? The people on Elk River are upset enough about this that they will never use his marina. Unless there is another hidden agenda on his part to make money, he will eventually fail too because most of the local people won't support it.

Previous TVA Report

- The findings from a previous TVA report on this tract of land have not been addressed.
- A previous TVA report on this property found “Soil interpretation indicates that the site has highly erodible soils…”and “Removal of understory vegetation or tree canopy could have an impact on the erodible soils. Approved methods of checking soil erosion must be implemented if major development is considered on the tract.” To my knowledge this activity has not been accomplished; although, trees and vegetation would have to be removed for this development. Also, the TVA report found that “Floating debris, carried by the Elk River, have been deposited at the back of the embayment. Because of the cover provided by sporadic colonization of submersed aquatic plants and debris, the cove offers good sport fishery habitat for crappie and largemouth bass.” Again, to my knowledge the impact of dredging on aquatic and marine life due to riverbed modification and debris removal has not been evaluated. Further, the TVA report found “The area now receives moderate levels of informal recreational use, i.e., primitive camping, bank fishing, and some hunting.” Also, to my knowledge no assessment has been made of current informal recreational activities in the proposal area.
- I would also like to request a thorough review be conducted on the previous environmental document that was prepared to make sure all previous commitments within the document are being upheld.

Granary

- When TVA requested input from concerned citizens about the granary that was eventually constructed with TVA's permission, we protested to no avail. Afterward, we endured a huge explosion and so much air pollution that river residents who had never experienced asthma or allergies developed them. Parts of the granary that burned have never been cleaned up. We who have homes on the river live with the ugly results, both to our health and to the esthetics of the river, of that clearly wrong TVA decision. The pollution and overcrowding of boats on the Elk River from an additional marina will be another lasting negative effect on this river. When the granary was being considered, TVA advised that the east side of the river up to the bridge was zoned as commercial. Since the granary was going to be built on the up-river side of the bridge, special permission had to be granted. Thus, input from the public was requested. At that time TVA stated that the west side of the river was for residential use only. Has that changed? Or is this another special permission grant that is being considered by TVA? With our residence in the Sugar Creek Embayment being about twelve miles up river from the proposed site, you might think that we would not have concerns about this marina.
- We lost our fight against the granary proposal, and we're left with its ugly, nonproductive reminder.
- A project gone bad (granary) at Anderson Creek and Elk River continues to be a navigational hazard and eyesore. The community never favored this project, and it failed as evidence today shows.

Alternatives

- Have alternatives been explored?
- What about turning this into a park or hiking trials for all Alabamians to use, not just a privileged few? The benefit of some forward thinking would outlast any short term gain.
- Maybe TVA could give the land to the state? There is a severe lack of public land in Alabama, this could provide more river access for more citizens while at the same time preserving and enhancing the watershed.
- This project will not have a positive impact on the Elk River Community.
- Additionally, I suggest that if there is truly an interest in what I or other have to say about the environment, I suggest that you take a boat ride up the Elk river towards Elkmont Alabama. Look at the difference between what has happened and is about to happen to the area nearest hwy 72 and the Tenn. River. Look at the environment. Look, hear and experience what is still alive as an example as to what will continue to die due to consideration of such requests from the Commercial easements that the Bubba's request.
- The proposal is at best sketchy, lacking virtually all of the details that would identify the true impact on the community, environment and Elk River. ·
- A market survey is not available to determine a need for this type facility in the community.

- No trade-off study shows that this facility (if a market for this service exists) in private hands meets a need of significant community benefit to deprive the public of the use of and access to recreational public lands.
- Absence of definition about the number of boats that this proposed development would bring to the Elk River inhibits full assessment of increased river traffic; however, these boats must be added to the boats berthed at the one hundred plus slip marina being constructed across the Elk River at The Pointe. If the combined marinas only add two hundred additional vessels in the mouth of the Elk River, safety, environmental and water quality impact will be horrendous!
- Why dredge for a new facility when there is an existing slough on the limestone county side of the Elk River? This facility already exists and has immediate access to highway 72? Why hasn't Mr. Doss explored an easement or lease with the state of Alabama to develop this property? It would be far less expensive and far less damaging to the environment to revamp and develop an existing marina/port than to create a new and unnecessary one. It is also worth noting that this state property is literally on the same side of the river at the navigation channel and there far less likely to experience low water problems in the winter and spring than the proposed Barnett road site.
- The development is completely unnecessary as there are far better alternatives that should be considered first that will be far more affordable and far less negative impacts. The argument that there is no public access to the Elk River is absolutely absurd. There are two properties on the Elk River at the Highway 72 bridge that ARE public access. And with far better road access to boot. If TVA and the State feel that public access should be improved on the Elk River, the state property on the Limestone County side of the river is the most logical choice.
- If Mr. Doss's project was limited to a marina/restaurant operation, and did not include the proposed RV park, many local residents would not find this proposal so objectionable.

In Support of Proposal

- We live on the Tennessee River and certainly have no opposition to Mr. Doss preceding with his plans. We feel that this would be an asset to Rogersville and the surrounding area.
- I think it would be a good thing . I'm from Rogersville we have Joe -Wheeler State Park but some people don't know about it. Elk River is (dead) on that side of Rogersville and think of the jobs it would bring.
- I would like to add my support for the proposed marina and RV park in the Rogersville/Elk River area. I am a boater with a cruiser, a runabout, two jet skis plus a motor home. Those proposed facilities would provide many more opportunities for me and my family in both the RV and boating areas.
- The facilities would be a great asset to the area by bringing in much needed revenue. I am aware of five marinas on Pickwick Lake with another one planned to be built in the near future. All of those are probably within a 10 mile radius of each other.
- I am a member of four RV organizations all of which hold rallies all over the country. These rallies normally consist of 20 to 6,000 RVs. This translates into a lot of

revenue and such could be true with the facilities planned for Elk River. I would love to host a rally in this area but there are no adequate facilities available.

- I saw nothing in the negative comments made in the Times Daily on 25 July 05 that should even be considered in the decision process. We should not personal opinions stand in the way of progress for this area.
- I applaud the efforts of Mr. Doss by wanting to build a first class facility on Elk River which will provide enormous benefits to the whole North Alabama Area.
- Please help move this project forward quickly. Let me know if there is anything I can do to assist in providing Mr. Doss a 40 year easement on the property.
- this email is to submit my opinion in favor of the proposed marina on Elk River. I read the negative comments and didn't find any basis to most of them. I've known Bubba Doss for a long time and have full confidence he would not go forward with anything that would have a negative impact on the river. Getting fuel has become a real problem in this area with the lack of attendants at the only 2 facilities Bay Hill and Joe Wheeler. I personally waited around 2 hours the last time I filled my house boat and I spoke with an individual this weekend that just waited 2 hours. They only have help during peak times and use a radio to call someone down.
- With the new development going in across the river from this proposed site there will be a real increased need for this marina. Thanks for allowing the public's input in this matter and good luck with the project.
- Just to let you know I support the Marina project at Rogersville.
- I am writing in regards to the request for a 40 year easement for the development of a commercial marina on the Elk River in Lauderdale County. My family owns a small business in Rogersville (Emma's Gifts) and we live within 1 mile of the proposed marina. We are excited about the prospect of a new marina, restaurant, and campground. Rogersville needs more jobs, more tourism, and a better economy. As business owners and residents of Rogersville, we want to see growth and a stimulated economy in our hometown. Many of the negative comments made about the proposal are from residents who already enjoy the recreational benefits of the river and don't want others to benefit. Please consider the generous request of Mr. Doss and listen to the residents of Rogersville who are progressive and open-minded about Rogersville growth.
- I have heard of the marina project in Rogersville. I feel very positive about this project. As a council member of the town, I feel this would be a great boost to the development of the town. As a business owner, I feel this will draw more people to our community. And as a resident, I feel this will create jobs for the people of Rogersville.
- Is the application for this marina on the TVA web site anywhere? I would be very interested in seeing this go ahead as slip space is limited on the west end of Wheeler Lake.
- I would like to take this opportunity to tell you that I am very much in favor of the proposed development.
- My husband and I live on Co Rd 605 (aka Lambs Ferry Rd). The back of our property lies adjacent to the above referenced TVA property near the South end of this property. I feel that this project would increase our property values as well as

giving us access to the river. I feel that this property should be utilized and many people would benefit by having access to the water.

- I have been employed in Rogersville for the past 35 years and my husband was in the retail grocery business for a number of years. So we know how the businesses in this town could benefit from a development such as this. We have a large number of people who have moved here from other areas and I believe this development would bring even more people to this area.
- Please consider approving this for the benefit of the people of our area.
- I have lived on the Tennessee River for seventeen years and have enjoyed it tremendously. However, only a very few have the opportunity to enjoy such an experience. Yes, I was at the meeting at the fire department. The only comments I'm hearing since then, were negative regarding the opposition to the project. More than one person has told me they were disgusted with the opposition to the project. Some in attendance were so vocal you can why those for the project did not speak up (considering they were our neighbors).
- I am for the project. I think it will be of great benefit to the general public. It will provide a much needed recreation outlet for persons in the TVA region, after all, the river is not for just a few land owners.
- I am confident in the ability of the proprietor that is requesting the easement. I had never met him prior to the meeting. He has an excellent reputation in the community and considerable expertise in the area that will be required to develop the project. I was in the banking profession for thirty seven years and familiar with marina projects and Mr. Doss as a proprietor would rate higher than most commercial projects in the ability to develop and operate the facility.
- I encourage you to approve this project. The area is ideal for this type development and this area will benefit tremendously in areas of recreation and a desirable place to visit and live.
- I am a council member in Rogersville, Alabama. I am writing you concerning the development of the marina and campground on Elk River. This is a project that is really needed in our area. All of the marina's in our area are filled to capacity, with long waiting lists. I understand that there is some who oppose this project. Most of this opposition is for selfish reasons from people who are not looking out for the good of the entire area. I urge you to please do what is best for this area and follow through with this project. I support Bubba Doss one hundred percent.
- As the commercial banker here in Rogersville, I am very familiar with Mr. Doss and several projects he has been involved with. Mr. Doss is very well respected in our community as a local entrepreneur and neighbor. I have had the pleasure of handling several projects for Mr. Doss and find his ability, follow through and promptness in these projects without question.
- I am also the Fire Chief for the Town of Rogersville and the Rogersville Volunteer Fire Department. Our fire department recently constructed a new fire station very close to this proposed project. One of the reasons for building this new station was for future growth such as the development Mr. Doss is proposing to build. This project will now be adequately covered for fire protection by our new #2 fire station.

- Also, Mr. Doss has served his community as a volunteer firefighter with our neighboring department in the past. His community involvement and spirit is without question.
- In closing, I am very much in favor of the development as proposed by Mr. Doss. I believe the Tennessee Valley Authority and Mr. Doss as a partnership will be a win - win for our community.
- Please approve this development for Mr. Doss and the Rogersville Community.
- Consider my comments a YES vote for the proposed project.
- I feel that the project would be a very sound use of the land, in the fact that is has virtually no access now and with the development of the land in the manner described, it would lend it to be accessible by the general public thru the use of the nature trails to be developed and the availability of both camping use and day use by the local residents.
- I feel that the economic impact to the Rogersville area would not only benefit Mr. Doss, but bring in both much needed revenue and tax dollars to the local area. Revenue will be generated both by visitors to our community spending their dollars to camp etc., as well as shop with our local merchants, dine in our local restaurants and purchase fuel at our filling stations.
- I feel that the new opportunities for employment in the Rogersville area will greatly enhance the growth to both the local job base and the economy. More jobs are desperately needed in the area. Lot's work together to keep our families together in the area and not force our young adults to leave Rogersville in search of employment.
- I see much of the opposition, not considering the benefits, but looking at only the personal benefit they might have of themselves by having more traffic in the area or opening up a dead end street.
- Many of those same people suggest that the marina project would cause more boats on the river. They must not have a clue! The same number of boats would still be on the river, they might just possible be repositioned. How anyone could possible believe that this type facility would cause more boats on the river is beyond my compression.
- I am very supportive of the proposed Marina and RV park project on Elk River.
- There is a tremendous need for marina slips in the area. I checked with Joe Wheeler Marina this morning. There are 86 on the waiting list. Most of these people wil never be able to rent a slip unless additional ones are built.
- I am a boater on the Wheeler lake area and I am excited to here that someone is interested in developing a marina in a protected harbor. I am also interested in finding a slip in this area for my boat. Hopefully Mr. Doss's plans would include slip for the larger boats 40' – 80'.

- I would like again to offer my support for this project as proposed by Mr. Gilbert Bubba Doss. The facilities that Mr. Doss is proposing are really needed on Elk River to accommodate the ever increasing boat and recreational vehicle traffic. I have known Mr. Doss for 18 years and he has a reputation for building first class facilities that would be a tremendous asset to Alabama. I am both a boat owner (99-36 ft Aft Cabin Carver and a 2004 Airstream Motorhome) and I would like to utilize facilities that he is proposing to build. Please approve his request as it is in the best interests of the travelers throughout the US.

APPENDIX C – TECHNICAL DATA

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Table C-1 Plant List of Species Observed on August 3, 2005

Common Name	Scientific Name
American ginseng*	*Panax quiquifolius*
America hog peanut	*Amphicarpaea bracteata*
American beautyberry	*Callicarpa americana*
American beech	*Fagus grandifolia*
American lopseed	*Phyrma leptostachya*
Beaked panic grass	*Panicum anceps*
Black gum	*Nyssa sylvatica*
Black walnut	*Juglans nigra*
Black oak	*Quercus veluntina*
Bog hemp	*Bohmeria cylindrica*
Box elder	*Acer negundo*
Broad beech fern	*Thelypteris hexagonoptera*
Canada black snakeroot	*Sanicula canadensis*
Canada wild lettuce	*Lactuca canadensis*
Carolina buckthorn	*Rhamnus carolinanus*
Cherrybark oak	*Quercus pagoda*
Chestnut Oak	*Quercus montana*
Chinese Privet*	*Ligustrum sinense*
Christmas fern	*Polystichum acrostichoides*
Crane's fly orchid	*Tipularia discolor*
Deciduous holly	*Ilex decidua*
Devil's walking stick	*Aralia spinosa*
Ebony spleenwort	*Asplenium platyneuron*
Elephants foot	*Elephantopus carolinianus*
Flowering dogwood	*Cornus florida*
Green ash	*Fraxinus pennsylvanica*
Hackberry	*Celtis laevigata*
Hairy bedstraw	*Galium pilosum*
Hairy skullcap	*Scuttelaria elliptica*
Harvest lice	*Agrimonia parviflora*
Heal-all	*Prunella vulgaris*
Heart-leaf skullcap	*Scuttelaria ovata*
Hound's tongue	*Cynoglossum virginicum*
Indian tobacco	*Lobelia inflata*
Japanese honeysuckle**	*Lonicera japonica*
Japanese Stilt grass**	*Microstegium venimum*
Jewel weed	*Impatiens capensis*
Jumpseed	*Polygonum virginicum*

Common Name	Scientific Name
Lizard's tail	*Saururus cernuus*
Loblolly pine	*Pinus taeda*
Mayapple	*Podophyllum peltatum*
Mockernut hickory	*Carya tomentosa*
Muscadine grape	*Vitis rotundifolia*
Naked tick treefoil	*Desmodium nudiflorum*
Northern red oak	*Quercus rubra*
Pawpaw	*Asimina triloba*
Persimmon	*Diospyros virginiana*
Poison ivy	*Toxicodendron radicans*
Rattan vine	*Berchemia scandens*
Rattlesnake fern	*Botrychium virginianum*
Red bud	*Cercis canadensis*
Red maple	*Acer rubrum*
Red mulberry	*Morus rubrus*
Resurrection fern	*Pleopeltis polypodioides var michauxii*
Roundleaf greenbrier	*Smilax rotundifolium*
Sassafras	*Sassafras albidum*
Shagbark hickory	*Carya ovata*
Silky dogwood	*Cornus amoemum*
Silver maple	*Acer saccharinum*
Slender lespedeza	*Lespedeza virginica*
Slender woodoats	*Chasmanthium laxum*
Slippery elm	*Ulmus rubra*
Smart weed	*Persicaria pennsylvannica*
Smooth sumac	*Rhus glabra*
Snowberry	*Symphoricarpos orbiculatus*
Solomon's plume	*Smilicina racemosa*
Southern lady fern	*Athyrium filix-femina var asplenoides*
Southern red oak	*Quercus falcata*
Spotted wintergreen	*Chimaphila maculata*
Strawberry bush	*Euonymus americanus*
Summer grape	*Vitis aestivalis*
Sweetgum	*Liquidambar styriciflua*
Tall goldenrod	*Solidago altissima*
Tulip poplar	*Lireodendron tulipifera*
Velvetleaf tick tree foil	*Desmodium viridiflorum*
Virginia pine	*Pinus virginiana*
Virginia creeper	*Parthenocissus quiquefolius*

Common Name	Scientific Name
White ash	*Fraxinus americana*
White oak	*Quercus alba*
White vervain	*Verbena urticifolia*
Wild black cherry	*Prunus serotina*
Wild hydrangea	*Hydrangea arborescens*
Wild yam	*Dioscorea villosa*
Willow oak	*Quercus phellos*
Winged elm	*Ulmus alata*
Winged sumac	*Rhus copalina*

* Species not observed by TVA botanist, but reported from the site
** Denotes nonnative exotic species

TVA Natural Heritage Project Routine Wetland Determination Form

Project: Elk River Resort (Doss)	Investigator: P.C. Durr	Normal Circumstances:	x	Sample ID:	Wetland A: Plot 1 (A-1)
County: Lauderdale		Atypical Situation:		Station/Structure #(s):	
State: Alabama	Date: 8/25/05	Problem Area:		Cowardin Code:	PEM/PSS/PFO1Ch

Vegetation

	Plant Species	Stratum	Indicator		Plant Species	Stratum	Indicator
1.	*Salix nigra*	Tree	Obl	9.	*Ludwigia leptocarpa*	Herb	Obl
2.	*Acer saccharinum*	Tree	Facw	10.	*Ludwigia uruguayensis*	Herb	Obl
3.	*Acer rubrum*	Tree	Fac	11.	*Triadenum walteri*	Herb	Obl
4.	*Cephalanthus occidentalis*	Shrub	Obl	12.	*Boehmeria cylindrica*	Herb	Facw+
5.	*Cornus amomum*	Shrub	Facw+	13.	*Alternanthera philoxeroides*	Herb	Obl
6.	*Alnus serrulata*	Shrub	Facw+	14.	*Saururus cernuus*	Herb	Obl
7.	*Brunnichia cirrhosa*	Vine	Facw	15.	*Polygonum punctatum*	Herb	Facw+
8.	*Murdannia keisak*	Herb	Obl	16.	*Carex lupulina*	Herb	Obl

Percent of Dominant Species That are OBL, FACW, or FAC: 16/16 = 100%

Hydrology

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators				Secondary Indicators	
	Inundated	x	Drift Lines		Oxidized Root Channels
x	Saturated in Upper 12 in.		Water Marks	x	Water Stained Leaves
x	Sediment Deposits		Drainage Patterns		

Remarks: Hydrology is controlled principally by reservoir level.

Soils

Soil Unit:		Drainage class:		Listed hydric soil?	Yes		No	

Profile Description:

Depth (Inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance (%)	Texture
0-5	10YR 5/2	10YR 4/2	<10	silt loam
5-10+	10YR 5/3	10YR 5/4	<10	silty clay loam

Hydric Soil Indicators:

x	Gleyed or Low Chroma Colors		Histic Epipedon		Aquic Moisture Regime
x	Sulfidic Odor		High Organic Cont. Surf. Layer Sandy Soils		Reducing Conditions
	Concretions		Organic Streaking in Sandy Soils		Other (Explain in Remarks)

Remarks: Despite other strong wetland indicators, soils appear weakly converted.

Wetland Determination

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a USACE Wetland?	Yes	x	No	
Wetland Hydrology Present?	Yes	x	No		Does area only meet USFWS wetland definition?	Yes		No	x
Hydric Soils Present?	Yes	x	No		Is wetland mapped on NWI?	Yes		No	x

Estimated size: ± 4 acres.

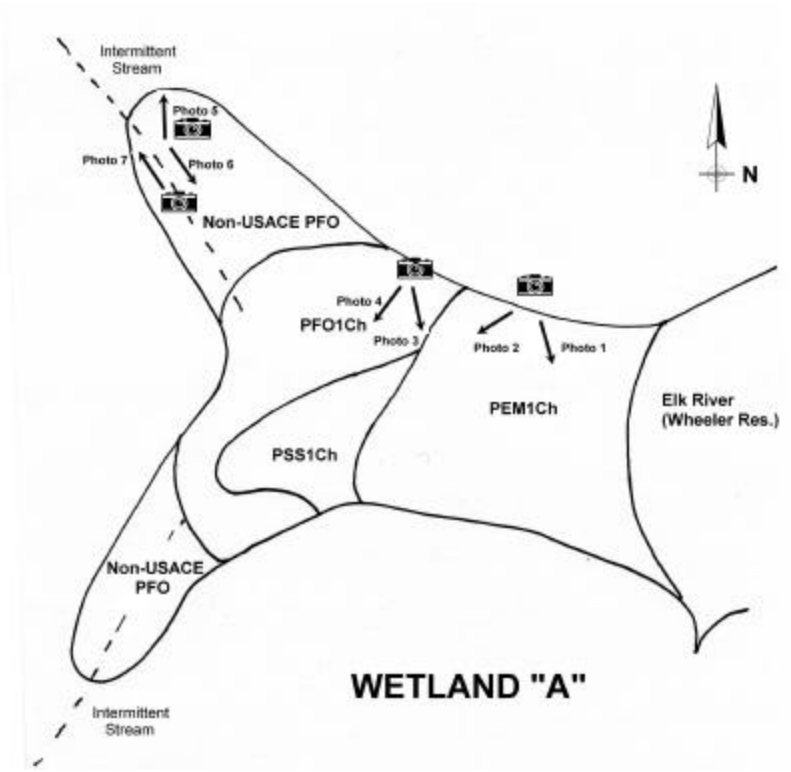
Wetland Descriptors

Sample ID: A-1	**Photo ID(s):** Photos 1-4.

Flagging Description: Outside perimeter of wetland has been flagged. These are to be located by a licensed surveyor.

5.3. Drawing:

Please Include : North Arrow, Project Centerline, Survey Corridor Boundaries, Length of Wetland Feature, Distances from Centerline, Photo Locations



Obvious Connections to Waters of the US/State?	x	Yes		No	Waterbody/Watershed: Elk River/Wheeler Reservoir															
Primary Water Source (If other, note in comments)	x	Cap. Fringe		Overbanking		Sheet Flow		Groundwater		Precipitation		Other								
TVARAM SCORE:	**60**	**TVARAM CATEGORY:**																		

Description of Wetland and Other Comments: (i.e. forest age class; habitat features; hydrologic regime; description of the wetland outside of or adjacent to ROW; erosion potential, existing disturbances, adjacent land use, wildlife observations, station numbers, lat-long, etc)

This wetland is driven primarily from periodic flooding of the area by the adjoining reservoir. Wetlands associated with intermittent drainages generally lack hydric soils and are weakly delimited by "Facultative" vegetation (See Plot A-3). The wetland complex is estimated at ca. 4+ acres. This includes 35% PEM, 25% PFO, 10% PSS, and 30% non-USACE (lacks hydric soils)

TVA Natural Heritage Project Routine Wetland Determination Form

Project: Elk River Resort (Doss)	Investigator: P.C. Durr	Normal Circumstances:	x	Sample ID:	Wetland A, Plot 2 (A-2)
County: Lauderdale		Atypical Situation:		Station/Structure #(s):	
State: Alabama	Date: 8/25/05	Problem Area:		Cowardin Code:	non-USACE PFO

Vegetation

	Plant Species	Stratum	Indicator		Plant Species	Stratum	Indicator
1.	*Pinus taeda*	Tree	Fac	9.	*Sambucus canadensis*	Shrub	Facw-
2.	*Celtis laevigata*	Tree	Facw	10.	*Parthenocissus quinquefolia*	Vine	Fac
3.	*Liriodendron tulipifera*	Tree	Fac	11.	*Toxicodendron radicans*	Vine	Fac
4.	*Acer negundo*	Tree	Facw	12.	*Microstegium vimineum*	Herb	Fac+
5.	*Morus rubra*	Tree	Fac	13.	*Impatiens capensis*	Herb	Facw
6.	*Ulmus americana*	Sapling	Facw	14.	*Polygonum cespitosum*	Herb	Facw-
7.	*Celtis laevigata*	Sapling	Facw	15.			
8.	*Ligustrum sinense*	Shrub	Fac	16.			

Percent of Dominant Species That are OBL, FACW, or FAC: 14/14 = 100%

Hydrology

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators				Secondary Indicators	
	Inundated		Drift Lines		Oxidized Root Channels
	Saturated in Upper 12 in.		Water Marks		Water Stained Leaves
	Sediment Deposits	x	Drainage Patterns		

Remarks: Hydrology is provided by occasional overbanking of a nearby intermittent creek and drainage from adjoining side slopes.

Soils

Soil Unit:		Drainage class:		Listed hydric soil?	Yes		No	

Profile Description:

Depth (Inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance (%)	Texture
0-3	10YR 3/3			silt loam
3-10+	7.5YR 4/6	10YR 3/3	<5	sandy loam

Hydric Soil Indicators:

	Gleyed or Low Chroma Colors		Histic Epipedon		Aquic Moisture Regime
	Sulfidic Odor		High Organic Cont. Surf. Layer Sandy Soils		Reducing Conditions
	Concretions		Organic Streaking in Sandy Soils		Other (Explain in Remarks)

Remarks: Soils do not meet USACE hydric soil parameters. Some ATV impacts were noted near photo points 5 and 6.

Wetland Determination

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a USACE Wetland?	Yes		No	x
Wetland Hydrology Present?	Yes	x	No		Does area only meet USFWS wetland definition?	Yes	x	No	
Hydric Soils Present?	Yes		No	x	Is wetland mapped on NWI?	Yes		No	x

Estimated size: ± 1.25 acres.

Wetland Descriptors

Sample ID: A-2	**Photo ID(s):** Photos 5-7.
Flagging Description: Outside perimeter of wetland has been flagged. These are to be located by a licensed surveyor.	
5.4. Drawing:	
Please Include : North Arrow, Project Centerline, Survey Corridor Boundaries, Length of Wetland Feature, Distances from Centerline, Photo Locations	

SEE DRAWING FOR WETLAND A-1.

Obvious Connections to Waters of the US/State?	x	Yes		No	Waterbody/Watershed: Elk River (Wheeler Reservoir)												
Primary Water Source (If other, note in comments)	X	Cap. Fringe		Overbanking		Sheet Flow		Groundwater		Precipitation		Other					
TVARAM SCORE:		**TVARAM CATEGORY:**															

Description of Wetland and Other Comments: (i.e. forest age class; habitat features; hydrologic regime; description of the wetland outside of or adjacent to ROW; erosion potential, existing disturbances, adjacent land use, wildlife observations, station numbers, lat-long, etc)

This level area near the embayment with the Elk River meets the USFWS wetland definition only. Soils are generally too sandy and porous to support hydric soil formation. The area contains some braided channels which support intermittent or ephemeral flow. ATV damage to these channels is moderate. The overstory is strongly dominated, in some areas, by large loblolly pines which exceed 2.5 ft in diameter. Most trees also appear to be > 100 ft tall.

TVA Natural Heritage Project Routine Wetland Determination Form

Project: Elk River Resort (Doss)	Investigator: P.C. Durr	Normal Circumstances:	x	Sample ID:	Wetland A, Plot 3 (A-3)
County: Lauderdale		Atypical Situation:		Station/Structure #(s):	
State: Alabama	Date: 8/25/05	Problem Area:		Cowardin Code:	Upland Test

Vegetation

	Plant Species	Stratum	Indicator		Plant Species	Stratum	Indicator
1.	*Pinus taeda*	Tree	Fac	9.	*Cornus florida*	Shrub	Facu
2.	*Quercus stellata*	Tree	Facu	10.	*Fagus grandifolia*	Shrub	Facu
3.	*Liriodendron tulipifera*	Tree	Fac	11.	*Lonicera japonica*	Vine	Fac-
4.	*Prunus serotina*	Sapling	Facu	12.	*Berchemia scandens*	Vine	Facw
5.	*Carya ovalis*	Sapling	Facu	13.	*Toxicodendron radicans*	Vine	Fac
6.	*Liriodendron tulipifera*	Sapling	Fac	14.	*Parthenocissus quinquefolia*	Herb	Fac
7.	*Carya tomentosa*	Sapling	Upl	15.	*Vitis rotundifolia*	H erb	Fac
8.	*Carya ovalis*	Shrub	Facu	16.	*Sanicula canadensis*	Herb	Facu

Percent of Dominant Species That are OBL, FACW, or FAC: 7/16 = 43.8%

Hydrology

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators

_____ Inundated

_____ Saturated in Upper 12 in.

_____ Sediment Deposits

_____ Drift Lines

_____ Water Marks

_____ Drainage Patterns

Secondary Indicators

_____ Oxidized Root Channels

_____ Water Stained Leaves

Remarks: No hydrology indicators present.

Soils

Soil Unit:		Drainage class:		Listed hydric soil?	Yes		No	

Profile Description:

Depth (Inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance (%)	Texture
0-3	10YR 3/3			loam
3-10+	7.5YR 4/3	10YR 3/3	<5	silt loam

Hydric Soil Indicators:

_____ Gleyed or Low Chroma Colors

_____ Sulfidic Odor

_____ Concretions

_____ Histic Epipedon

_____ High Organic Cont. Surf. Layer Sandy Soils

_____ Organic Streaking in Sandy Soils

_____ Aquic Moisture Regime

_____ Reducing Conditions

_____ Other (Explain in Remarks)

Remarks: No hydric soil indicators present.

Wetland Determination

Hydrophytic Vegetation Present?	Yes		No	x	Is this Sampling Point Within a USACE Wetland?	Yes		No	x
Wetland Hydrology Present?	Yes		No	x	Does area only meet USFWS wetland definition?	Yes		No	x
Hydric Soils Present?	Yes		No	x	Is wetland mapped on NWI?	Yes		No	x

Estimated si ze: Upland test plot.

Wetland Descriptors

Sample ID: A-3	**Photo ID(s):**
Flagging Description:	
Drawing:	
Please Include : North Arrow, Project Centerline, Survey Corridor Boundaries, Length of Wetland Feature, Distances from Centerline, Photo Locations	

Obvious Connections to Waters of the US/State?		Yes	x	No	Waterbody/Watershed:									
Primary Water Source (If other, note in comments)		Cap. Fringe		Overbanking		Sheet Flow		Groundwater		Precipitation		Other		
TVARAM SCORE:		**TVARAM CATEGORY:**												

Description of Wetland and Other Comments: (i.e. forest age class; habitat features; hydrologic regime; description of the wetland outside of or adjacent to ROW; erosion potential, existing disturbances, adjacent land use, wildlife observations, station numbers, lat-long, etc)

UPLAND TEST PLOT.

TVA Natural Heritage Project Routine Wetland Determination Form

Project: Elk River Resort (Doss)	Investigator: P.C. Durr	Normal Circumstances:	x	Sample ID:	Wetland B, Plot 1 (B-1)
County: Lauderdale		Atypical Situation:		Station/Structure #(s):	
State: Alabama	Date: 8/25/05	Problem Area:		Cowardin Code:	PEM/PSS/PFO1Ch

Vegetation

	Plant Species	Stratum	Indicator		Plant Species	Stratum	Indicator
1.	*Liquidambar styraciflua*	Tree	Fac+	9.	*Berchemia scandens*	Vine	Facw
2.	*Liriodendron tulipifera*	Tree	Fac	10.	*Ludwigia leptocarpa*	Herb	Obl
3.	*Liriodendron tulipifera*	Sapling	Fac	11.	*Triadenum walteri*	Herb	Obl
4.	*Acer rubrum*	Sapling	Fac	12.	*Alternanthera philoxeroides*	Herb	Obl
5.	*Liquidambar styraciflua*	Sapling	Fac+	13.	*Eclipta alba*	Herb	Facw-
6.	*Cephalanthus occidentalis*	Shrub	Obl	14.	*Boehmeria cylindrica*	Herb	Facw+
7.	*Cornus amomum*	Shrub	Facw+	15.	*Hydrocotyle sp.*	Herb	---
8.	*Smilax rotundifolia*	Vine	Fac	16.	*Bidens sp.*	Herb	---

Percent of Dominant Species That are OBL, FACW, or FAC: 14/14 = 100%

Hydrology

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators				Secondary Indicators	
	Inundated	x	Drift Lines		Oxidized Root Channels
x	Saturated in Upper 12 in.		Water Marks	x	Water Stained Leaves
x	Sediment Deposits		Drainage Patterns		

Remarks: Hydrology is controlled princi pally by reservoir level.

Soils

Soil Unit:		Drainage class:		Listed hydric soil?	Yes		No	

Profile Description:

Depth (Inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance (%)	Texture
0-7	10YR 3/2			silt
7-10+	10YR 5/2	10YR 3/2	5	silty clay

Hydric Soil Indicators:

x	Gleyed or Low Chroma Colors		Histic Epipedon		Aquic Moisture Regime
x	Sulfidic Odor		High Organic Cont. Surf. Layer Sandy Soils		Reducing Conditions
	Concretions		Organic Streaking in Sandy Soils		Other (Explain in Remarks)

Remarks:

Wetland Determination

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a USACE Wetland?	Yes	x	No	
Wetland Hydrology Present?	Yes	x	No		Does area only meet USFWS wetland definitio n?	Yes		No	x
Hydric Soils Present?	Yes	x	No		Is wetland mapped on NWI?	Yes		No	x

Estimated size: ±1.25 acres.

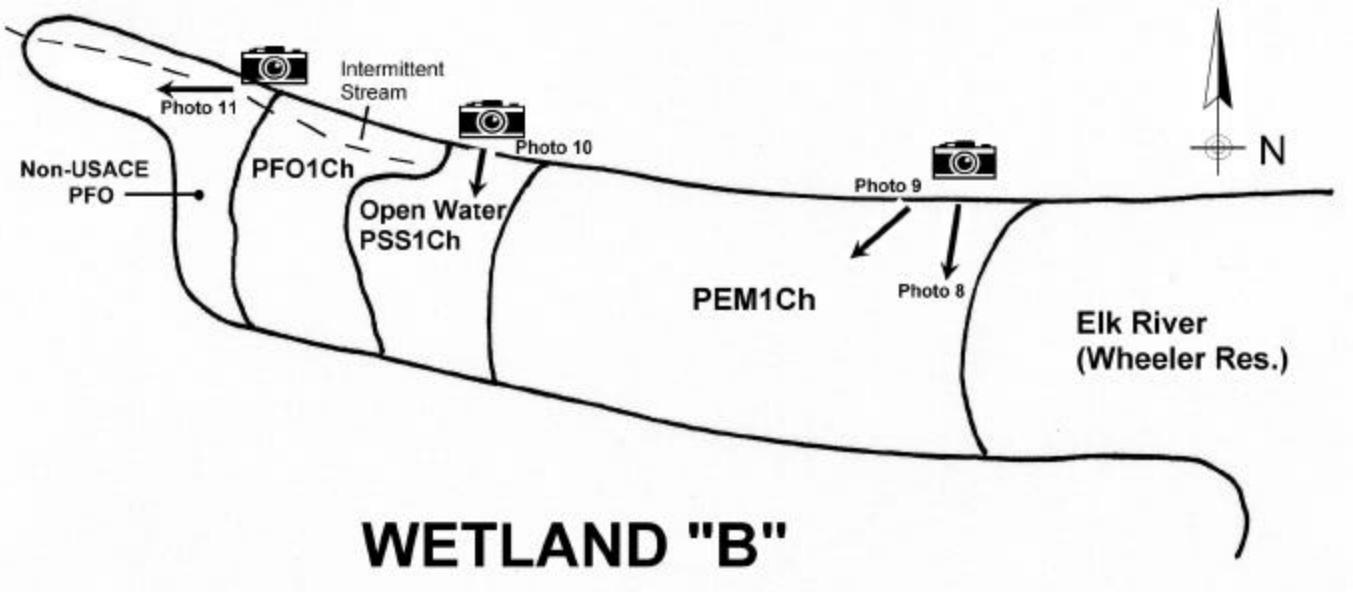
Wetland Descriptors

Sample ID: B-1	**Photo ID(s):** 8- 10.

Flagging Description: Outside perimeter of wetland has been flagged. These are to be located by a licensed surveyor.

Drawing:

Please Include : North Arrow, Project Centerline, Survey Corridor Boundaries, Length of Wetland Feature, Distances from Centerline, Photo Locations



Obvious Connections to Waters of the US/State?	x	Yes		No	Waterbody/Watershed: Elk River (Wheeler Reservoir)															
Primary Water Source (If other, note in comments)	x	Cap. Fringe			Overbanking		Sheet Flow		Groundwater		Precipitation		Other							
TVARAM SCORE:	**61**	**TVARAM CATEGORY:**																		

Description of Wetland and Other Comments: (i.e. forest age class; habitat features; hydrologic regime; description of the wetland outside of or adjacent to ROW; erosion potential, existing disturbances, adjacent land use, wildlife observations, station numbers, lat-long, etc)

Similar in most respects to Wetland "A", but only about 1/3 the size. *Ludwigia leptocarpa* is a very strong dominant in the emergent zone. Numerous turtles, green frogs, and green herons were observed. A dirt access road at the top of the wetland drainage is a moderate source of siltation.

TVA Natural Heritage Project Routine Wetland Determination Form

Project: Elk River Resort (Doss)	Investigator: P.C. Durr	Normal Circumstances:	x	Sample ID:	Wetland B, Plot 2 (B-2)
County: Lauderdale		Atypical Situation:		Station/Structure #(s):	
State: Alabama	Date: 8/25/05	Problem Area:		Cowardin Code:	non-USACE PFO

Vegetation

	Plant Species	Stratum	Indicator		Plant Species	Stratum	Indicator
1.	*Liquidambar styraciflua*	Tree	Fac+	9.	*Berchemia scandens*	Vine	Facw
2.	*Liriodendron tulipifera*	Tree	Fac	10.	*Impatiens capensis*	Herb	Facw
3.	*Acer saccharinum*	Tree	Facw	11.	*Microstegium vimineum*	Herb	Fac+
4.	*Liriodendron tulipifera*	Sapling	Fac	12.	*Boehmeria cylindrica*	Herb	Facw+
5.	*Acer negundo*	Shrub	Facw	13.	*Polygonum cespitosum*	Herb	Facw
6.	*Ligustrum sinense*	Shrub	Fac	14.			
7.	*Lonicera japonica*	Vine	Fac-	15.			
8.	*Parthenocissus quinquefolia*	Vine	Fac	16.			

Percent of Dominant Species That are OBL, FACW, or FAC: 12/13 = 92.3%

Hydrology

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: ____ (in.)

Depth to Saturated Soil: ____ (in.)

Wetland Hydrology Indicators:

Primary Indicators				Secondary Indicators	
	Inundated		Drift Lines		Oxidized Root Channels
	Saturated in Upper 12 in.		Water Marks	x	Water Stained Leaves
	Sediment Deposits	x	Drainage Patterns		

Remarks: This area receives periodic overbank flow from a nearby intermittent creek.

Soils

Soil Unit:		Drainage class:		Listed hydric soil?	Yes		No	

Profile Description:

Depth (Inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance (%)	Texture
0-4	10YR 4/2			silt loam
4-7	10YR 3/3	7.5YR 4/4	25	silt loam
7-10+	7.5YR 5/4	7.5YR 4/3	25	silty clay loam

Hydric Soil Indicators:

	Gleyed or Low Chroma Colors		Histic Epipedon		Aquic Moisture Regime
	Sulfidic Odor		High Organic Cont. Surf. Layer Sandy Soils		Reducing Conditions
	Concretions		Organic Streaking in Sandy Soils		Other (Explain in Remarks)

Remarks: No hydric soil indicators present.

Wetland Determination

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a USACE Wetland?	Yes		No	x
Wetland Hydrology Present?	Yes	x	No		Does area only meet USFWS wetland definition?	Yes	x	No	
Hydric Soils Present?	Yes		No	x	Is wetland mapped on NWI?	Yes		No	x

Estimated size:

Wetland Descriptors

Sample ID:	**Photo ID(s):** Photo 11.
Flagging Description:	
Drawing:	
Please Include : North Arrow, Project Centerline, Survey Corridor Boundaries, Length of Wetland Feature, Distances from Centerline, Photo Locations	

SEE DRAWING FOR WETLAND B-1.

Obvious Connections to Waters of the US/State?	x	Yes		No	Waterbody/Watershed: Elk River (Wheeler Reservoir)											
Primary Water Source (If other, note in comments)	x	Cap. Fringe		Overbanking		Sheet Flow		Groundwater		Precipitation		Other				
TVARAM SCORE:		**TVARAM CATEGORY:**														

Description of Wetland and Other Comments: (i.e. forest age class; habitat features; hydrologic regime; description of the wetland outside of or adjacent to ROW; erosion potential, existing disturbances, adjacent land use, wildlife observations, station numbers, lat-long, etc)

This area meets the USFWS wetland definition only since it lacks hydric soils. The area contains some braided channels which support intermittent or ephemeral flow. ATV damage to these channels is moderate and has resulted in some siltation into down-gradient portions of the wetland.

TVA Natural Heritage Project Routine Wetland Determination Form

Project: Elk River Resort (Doss)	Investigator: P.C. Durr	Normal Circumstances:	x	Sample ID:	Wetland B, Plot 3 (B-3)
County: Lauderdale		Atypical Situation:		Station/Structure #(s):	
State: Alabama	Date: 8/25/05	Problem Area:		Cowardin Code:	Upland Test

Vegetation

	Plant Species	Stratum	Indicator		Plant Species	Stratum	Indicator
1.	*Carya ovata*	Tree	Facu	9.	*Aralia spinosa*	Shrub	Fac
2.	*Prunus serotina*	Tree	Facu	10.	*Ulmus americana*	Shrub	Facw
3.	*Quercus alba*	Tree	Facu	11.	*Ligustrum sinense*	Shrub	Fac
4.	*Ulmus alata*	Sapling	Facu+	12.	*Berchemia scandens*	Vine	Facw
5.	*Carya ovata*	Sapling	Facu	13.	*Rubus argutus*	Herb	Facu+
6.	*Cercis canadensis*	Sapling	Facu	14.	*Asplenium platyneuron*	Herb	Facu
7.	*Cercis canadensis*	Shrub	Facu	15.	*Polygonum virginianum*	Herb	Fac
8.	*Quercus alba*	Shrub	Facu	16.	*Geum sp.*	Herb	---

Percent of Dominant Species That are OBL, FACW, or FAC: 5/15 = 33.3%

Hydrology

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators

_____ Inundated

_____ Saturated in Upper 12 in.

_____ Sediment Deposits

_____ Drift Lines

_____ Water Marks

_____ Drainage Patterns

Secondary Indicators

_____ Oxidized Root Channels

_____ Water Stained Leaves

Remarks: No hydrology indicators present.

Soils

Soil Unit:		**Drainage class:**		**Listed hydric soil?**	**Yes**		**No**	

Profile Description:

Depth (Inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance (%)	Texture
0-7	10YR 4/3			silt loam, rock fragments
stopper @ 7				rock

Hydric Soil Indicators:

_____ Gleyed or Low Chroma Colors

_____ Sulfidic Odor

_____ Concretions

_____ Histic Epipedon

_____ High Organic Cont. Surf. Layer Sandy Soils

_____ Organic Streaking in Sandy Soils

_____ Aquic Moisture Regime

_____ Reducing Conditions

_____ Other (Explain in Remarks)

Remarks: No hydric soil indicators present.

Wetland Determination

Hydrophytic Vegetation Present?	Yes		No	x	Is this Sampling Point Within a USACE Wetland?	Yes		No	x
Wetland Hydrology Present?	Yes		No	x	Does area only meet USFWS wetland definition?	Yes		No	x
Hydric Soils Present?	Yes		No	x	Is wetland mapped on NWI?	Yes		No	x

Estimated size:

Wetland Descriptors

Sample ID: B-3	**Photo ID(s):**
Flagging Description:	
Drawing:	
Please Include : North Arrow, Project Centerline, Survey Corridor Boundaries, Length of Wetland Feature, Distances from Centerline, Photo Locations	

UPLAND TEST PLOT.

Obvious Connections to Waters of the US/State?		Yes	x	No	Waterbody/Watershed:									
Primary Water Source (If other, note in comments)		Cap. Fringe		Overbanking		Sheet Flow		Groundwater		Precipitation		Other		
TVARAM SCORE:		**TVARAM CATEGORY:**												

Description of Wetland and Other Comments: (i.e. forest age class; habitat features; hydrologic regime; description of the wetland outside of or adjacent to ROW; erosion potential, existing disturbances, adjacent land use, wildlife observations, station numbers, lat-long, etc)

Site: Elk River Resort (Doss), Wetland "A"	Rater(s): Paul Durr/PTRL	Date: 8/25/05

3 | 3 Metric 1. Wetland Area (size)

max 6 pts. subtotal

Notes: BR/CM = adjusted points for Blue Ridge and Cumberland Mountains. If an open water body (excluding aquatic beds and seasonal mudflats) is >20 acres (8 ha), then add only 0.5 acre (0.2 ha) of it to the wetland size for Metric 1.

Select one size class and assign score.

- ☐ >50 acres (>20.2 ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2 ha) (5) [BR/CM (6)]
- ☐ 10 to <25 acres (4 to <10.1 ha) (4) [BR/CM (6)]
- ☒ 3 to <10 acres (1.2 to <4 ha) (3) [BR/CM (5)]
- ☐ 0.3 to <3 acres (0.1 to <1.2 ha) (2) [BR/CM (3)]
- ☐ 0.1 to <0.3 acre (0.04 to <0.1 ha) (1) [BR/CM (2)]
- ☐ <0.1 acre (0.04 ha) (0)

Sources/assumptions for size estimate (list):

14 | 17 Metric 2. Upland Buffers and Surrounding Land Use

max 14 pts. subtotal

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☒ WIDE. Buffers average 50 m (164 ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25 m to <50 m (82 to <164 ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10 m to <25 m (32 ft to <82 ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10 m (<32 ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☒ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young 2nd growth forest (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field (3)
- ☐ High. Urban, industrial, open pasture, row cropping, mining, construction (1)

25 | 42 Metric 3. Hydrology

max 30 pts. subtotal

3a. Sources of water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3) [BR/CM (5)]
- ☒ Precipitation (1) [unless BR/CM primary source (5)]
- ☒ Seasonal/intermittent surface water (3)
- ☒ Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- ☒ 100-year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g., forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- ☒ >0.7 m (27.6 in.) (3)
- ☐ 0.4 to 0.7 m (16 to 27.6 in.) (2) [BR/CM (3)]
- ☐ <0.4 m (<16 in.) (1) [BR/CM 0.15 to 0.4 m (6 to <16 in.) (2)]

3d. Duration inundation/saturation. Score one or dbl. check & avg.

- ☐ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3) [BR/CM (4)]
- ☐ Seasonally inundated (2) [BR/CM (4)]
- ☐ Seasonally saturated in upper 30 cm (12 in.) (1) [BR/CM (2)]

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

☐ ditch	☐ point source (nonstormwater)
☐ tile (including culvert)	☐ filling/grading
☐ dike	☐ road bed/RR track
☐ weir	☐ dredging
☐ stormwater input	☒ other: **ATV Road**

13 | 55 Metric 4. Habitat Alteration and Development

max 20 pts. subtotal

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☒ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

☐ mowing	☐ shrub/sapling removal
☐ grazing	☐ herbaceous/aquatic bed removal
☐ clearcutting	☐ woody debris removal
☐ selective cutting	☐ sedimentation
☐ farming	☐ dredging
☐ toxic pollutants	☐ nutrient enrichment

55

subtotal this page

Site: Elk River Resort (Doss), Wetland "A"	Rater(s): Paul Durr/PTRL	Date: 8/25/05

55
subtotal previous page

0 max 10 pts. | **55** subtotal

raw score*

Metric 5. Special Wetlands

*If the documented raw score for Metric 5 is 30 points or higher, the site is automatically considered a Category 3 wetland.

Select all that apply. Where multiple values apply in row, score row as single feature with highest point value. Provide documentation for each selection (photos, checklists, maps, resource specialist concurrence, data sources, references, etc).

- ☐ Bog, fen, wet prairie (10); acidophilic veg., mossy substrate >10 sq.m, sphagnum or other moss (5); muck, organic soil layer (3)
- ☐ Assoc. forest (wetl. &/or adj. upland) incl. >0.25 acre (0.1 ha); old growth (10); mature >18 in. (45 cm) dbh (5) [exclude pine plantation]
- ☐ Sensitive geologic feature such as spring/seep, sink, losing/underground stream, cave, waterfall, rock outcrop/cliff (5)
- ☐ Vernal pool (5); isolated, perched, or slope wetland (4); headwater wetland [1st order perennial or above] (3)
- ☐ Island wetland >0.1 acre (0.04 ha) in reservoir, river, or perennial water >6 ft (2 m) deep (5)
- ☐ Braided channel or floodplain/terrace depressions (floodplain pool, slough, oxbow, meander scar, etc.) (3)
- ☐ Gross morph. adapt. in >5 trees >10 in. (25 cm) dbh: buttress, multitrunk/stool, stilted, shallow roots/tip-up, or pneumatophores (3)
- ☐ Ecological community with global rank (NatureServe): G1*(10), G2*(5), G3*(3) [*use higher rank where mixed rank or qualifier]
- ☐ Known occurrence state/federal threatened/endangered species (10); other rare species with global rank G1*(10), G2*(5), G3*(3) [*use higher rank where mixed rank or qualifier] [exclude records which are only "historic"]
- ☐ Superior/enhanced habitat/use: migratory songbird/waterfowl (5); in-reservoir buttonbush (4); other fish/wildlife management/designation (3)
- ☐ Cat. 1 (very low quality) : <1 acre (0.4 ha) AND EITHER >80% cover of invasives OR nonvegetated on mined/excavated land (-10)

Metric 6. Plant Communities, Interspersion, Microtopography

5 max 20 pts. | **60** subtotal

6a. Wetland vegetation communities.
Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- [2] Emergent
- [1] Shrub
- [2] Forest
- ☐ Mudflats
- ☐ Open water <20 acres (8 ha)
- ☐ Moss/lichen. Other _____

Vegetation Community Cover Scale

0 = Absent or <0.1 ha (0.25 acre) contiguous acre [For BR/CM <0.04 ha (0.1 acre)]
1 = Present and either comprises a small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2 = Present and either comprises a significant part of wetland's vegetation and is of moderate quality, or comprises a small part and is of high quality
3 = Present and comprises a significant part or more of wetland's vegetation and is of high quality

6b. Horizontal (plan view) interspersion.
Select only one.

- ☐ High (5)
- ☐ Moderately high (4) [BR/CM (5)]
- ☐ Moderate (3)[BR/CM (5)]
- [2] Moderately low (2) [BR/CM (3)]
- ☐ Low (1) [BR/CM (2)]
- ☐ None (0)

Narrative Description of Vegetation Quality

low = Low species diversity &/or dominance of nonnative or disturbance tolerant native species
mod = Native species are dominant component of the vegetation, although nonnative &/or disturbance tolerant native species can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare, threatened or endangered species
high = A predominance of native species with nonnative sp &/or disturbance tolerant native sp absent or virtually absent, and high sp diversity and often but not always, the presence of rate, threatened, or endangered species

6c. Coverage of invasive plants.
Add or deduct points for coverage.

- ☐ Extensive >75% cover (-5)
- [-3] Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

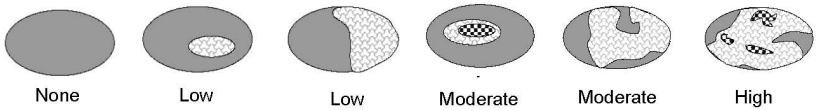
Mudflat and Open Water Class Quality

0 = Absent <0.1 ha (0.25 acres) [For BR/CM <0.04 ha (0.1 acre)]
1 = Low 0.1 to <1 ha (0.25 to 2.5 acres) [BR/CM 0.04 to <0.2 ha (0.1 to 0.5 acre)]
2 = Moderate 1 to <4 ha (2.5 to 9.9 acres) [BR/CM 0.2 to <02 ha (0.5 to 5 acre)]
3 = High 4 ha (9.9 acres) or more [BR/CM 2 ha (5 acres) or more]

6d. Microtopography.
Score all present using 0 to 3 scale.

- [1] Vegetated hummocks/tussocks
- ☐ Coarse woody debris >15 cm (6 in.)
- ☐ Standing dead >25 cm (10 in.) dbh
- ☐ Amphibian breeding pools

Hypothetical Wetland for Estimating Degree of Interspersion



Microtopography Cover Scale

0 = Absent
1 = Present in very small amounts or if more common of marginal quality
2 = Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3 = Present in moderate or greater amounts and of highest quality

60 **GRAND TOTAL (max 100 pts)**

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html

Site: Elk River Resort (Doss), Wetland "B"	Rater(s): Paul Durr/PTRL	Date: 8/25/05

Metric 1. Wetland Area (size)

2 (max 6 pts.) | 2 (subtotal)

Notes: BR/CM = adjusted points for Blue Ridge and Cumberland Mountains. If an open water body (excluding aquatic beds and seasonal mudflats) is >20 acres (8 ha), then add only 0.5 acre (0.2 ha) of it to the wetland size for Metric 1.

Select one size class and assign score.

- [ ] >50 acres (>20.2 ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2 ha) (5) [BR/CM (6)]
- [ ] 10 to <25 acres (4 to <10.1 ha) (4) [BR/CM (6)]
- [ ] 3 to <10 acres (1.2 to <4 ha) (3) [BR/CM (5)]
- [2] 0.3 to <3 acres (0.1 to <1.2 ha) (2) [BR/CM (3)]
- [ ] 0.1 to <0.3 acre (0.04 to <0.1 ha) (1) [BR/CM (2)]
- [ ] <0.1 acre (0.04 ha) (0)

Sources/assumptions for size estimate (list):

Metric 2. Upland Buffers and Surrounding Land Use

14 (max 14 pts.) | 16 (subtotal)

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [7] WIDE. Buffers average 50 m (164 ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25 m to <50 m (82 to <164 ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10 m to <25 m (32 ft to <82 ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10 m (<32 ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [7] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrubland, young 2nd growth forest (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field (3)
- [ ] High. Urban, industrial, open pasture, row cropping, mining, construction (1)

Metric 3. Hydrology

25 (max 30 pts.) | 41 (subtotal)

3a. Sources of water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3) [BR/CM (5)]
- [1] Precipitation (1) [unless BR/CM primary source (5)]
- [3] Seasonal/intermittent surface water (3)
- [5] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [1] 100-year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [1] Part of wetland/upland (e.g., forest), complex (1)
- [1] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [3] >0.7 m (27.6 in.) (3)
- [ ] 0.4 to 0.7 m (16 to 27.6 in.) (2) [BR/CM (3)]
- [ ] <0.4 m (<16 in.) (1) [BR/CM 0.15 to 0.4 m (6 to <16 in.) (2)]

3d. Duration inundation/saturation. Score one or dbl. check & avg.

- [ ] Semi- to permanently inundated/saturated (4)
- [3] Regularly inundated/saturated (3) [BR/CM (4)]
- [ ] Seasonally inundated (2) [BR/CM (4)]
- [ ] Seasonally saturated in upper 30 cm (12 in.) (1) [BR/CM (2)]

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [7] Recovered (7)
- [ ] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- ☐ ditch
- ☐ tile (including culvert)
- ☐ dike
- ☐ weir
- ☐ stormwater input
- ☐ point source (nonstormwater)
- ☐ filling/grading
- ☐ road bed/RR track
- ☐ dredging
- ☐ other: **ATV Road**

Metric 4. Habitat Alteration and Development

12 (max 20 pts.) | 53 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [2] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [4] Moderately good (4)
- [ ] Fair (3)
- [ ] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [6] Recovered (6)
- [ ] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- ☐ mowing
- ☐ grazing
- ☐ clearcutting
- ☐ selective cutting
- ☐ farming
- ☐ toxic pollutants
- ☐ shrub/sapling removal
- ☐ herbaceous/aquatic bed removal
- ☐ woody debris removal
- ☐ sedimentation
- ☐ dredging
- ☐ nutrient enrichment

53

subtotal this page

Site: Elk River Resort (Doss), Wetland "B"	Rater(s): Paul Durr/PTRL	Date: 8/25/05

53
subtotal previous page

0 (max 10 pts.) **53** (subtotal)

Metric 5. Special Wetlands

raw score*

*If the documented raw score for Metric 5 is 30 points or higher, the site is automatically considered a Category 3 wetland.

Select all that apply. Where multiple values apply in row, score row as single feature with highest point value. Provide documentation for each selection (photos, checklists, maps, resource specialist concurrence, data sources, references, etc).

- ☐ Bog, fen, wet prairie (10); acidophilic veg., mossy substrate >10 sq.m, sphagnum or other moss (5); muck, organic soil layer (3)
- ☐ Assoc. forest (wetl. &/or adj. upland) incl. >0.25 acre (0.1 ha); old growth (10); mature >18 in. (45 cm) dbh (5) [exclude pine plantation]
- ☐ Sensitive geologic feature such as spring/seep, sink, losing/underground stream, cave, waterfall, rock outcrop/cliff (5)
- ☐ Vernal pool (5); isolated, perched, or slope wetland (4); headwater wetland [1st order perennial or above] (3)
- ☐ Island wetland >0.1 acre (0.04 ha) in reservoir, river, or perennial water >6 ft (2 m) deep (5)
- ☐ Braided channel or floodplain/terrace depressions (floodplain pool, slough, oxbow, meander scar, etc.) (3)
- ☐ Gross morph. adapt. in >5 trees >10 in. (25 cm) dbh: buttress, multitrunk/stool, stilted, shallow roots/tip-up, or pneumatophores (3)
- ☐ Ecological community with global rank (NatureServe): G1*(10), G2*(5), G3*(3) [*use higher rank where mixed rank or qualifier]
- ☐ Known occurrence state/federal threatened/endangered species (10); other rare species with global rank G1*(10), G2*(5), G3*(3) [*use higher rank where mixed rank or qualifier] [exclude records which are only "historic"]
- ☐ Superior/enhanced habitat/use: migratory songbird/waterfowl (5); in-reservoir buttonbush (4); other fish/wildlife management/designation (3)
- ☐ Cat. 1 (very low quality) : <1 acre (0.4 ha) AND EITHER >80% cover of invasives OR nonvegetated on mined/excavated land (-10)

6 (max 20 pts.) **61** (subtotal)

Metric 6. Plant Communities, Interspersion, Microtopography

6a. Wetland vegetation communities.
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6b. Horizontal (plan view) interspersion.
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- ☐ Moderately high (4) [BR/CM (5)]
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- ☐ Low (1) [BR/CM (2)]
- ☐ None (0)

Narrative Description of Vegetation Quality

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Mudflat and Open Water Class Quality

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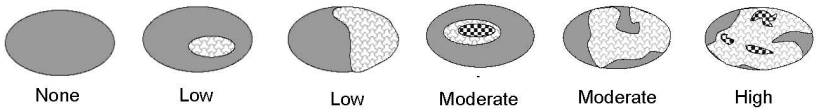

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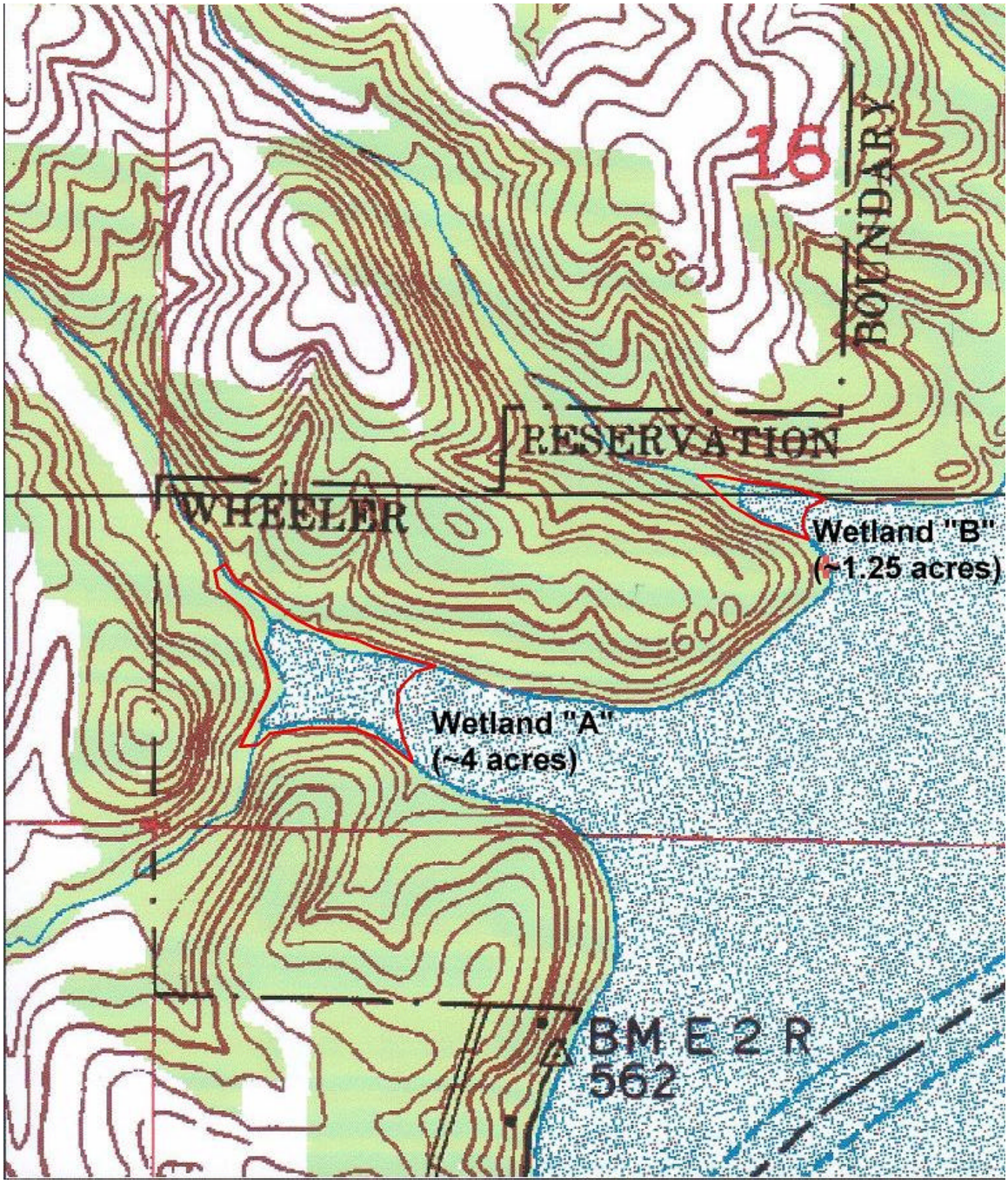


Figure C-1 Wetland Areas

TVA Letter to Alabama Historical Commission

September 19, 2005

Ms. Stacye Hathorn
Alabama Historical Commission
468 S. Perry Street
Montgomery, Alabama 36130-0900

Dear Ms. Hathorn:

TVA, PROPOSED COMMERCIAL RECREATION EASEMENT, WHEELER RESERVOIR, LAUDERDALE COUNTY, ALABAMA

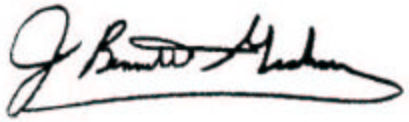
The Tennessee Valley Authority (TVA) proposes to approve a recreation easement and grant a 26a permit for recreational facilities on TVA Tract XWR-21PT (approximately 91 acres) on the Elk River (RM 2) on the Wheeler Reservoir in Lauderdale County, Alabama. The applicant proposes to construct a recreation and resort area to be under a long term easement agreement with TVA. The marina would include parking areas, boat slips, fishing piers; dry boat storage facilities, RV park, nature trails, camping areas, cabins, a store, and a restaurant (see enclosed Figures).

TVA has determined the Area of Potential Effects (APE) for this project to be the 91 acres proposed for the easement. All proposed facilities will be located within this APE.

TVA conducted a Phase I Archaeological survey of the 91 acre tract. Please find enclosed a copy of the report titled *Archaeological Survey of a 91-Acre Tract Proposed as a Commercial Recreation Easement in Lauderdale County, Alabama.* TVA has reviewed the report and agrees with the author's findings and recommendations regarding sites 1LU681 and 1LU682. TVA has determined that these sites fail to meet the criteria of eligibility for listing in the National Register of Historic Places (NRHP). TVA finds that the proposed easement and permit will have no effect on historic properties.

Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR § 800, we are seeking your concurrence with our definition of the APE and that no historic properties will be affected by the proposed undertaking. Should you have any questions or comments, please contact Erin Pritchard at 865/632-2463 or ecpritchard@tva.gov.

Sincerely,



J. Bennett Graham, Manager
Cultural Resources