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TWIN CREEKS RESORT AND MARINA ON TIMS FORD RESERVOIR SECTION 26A APPROVAL

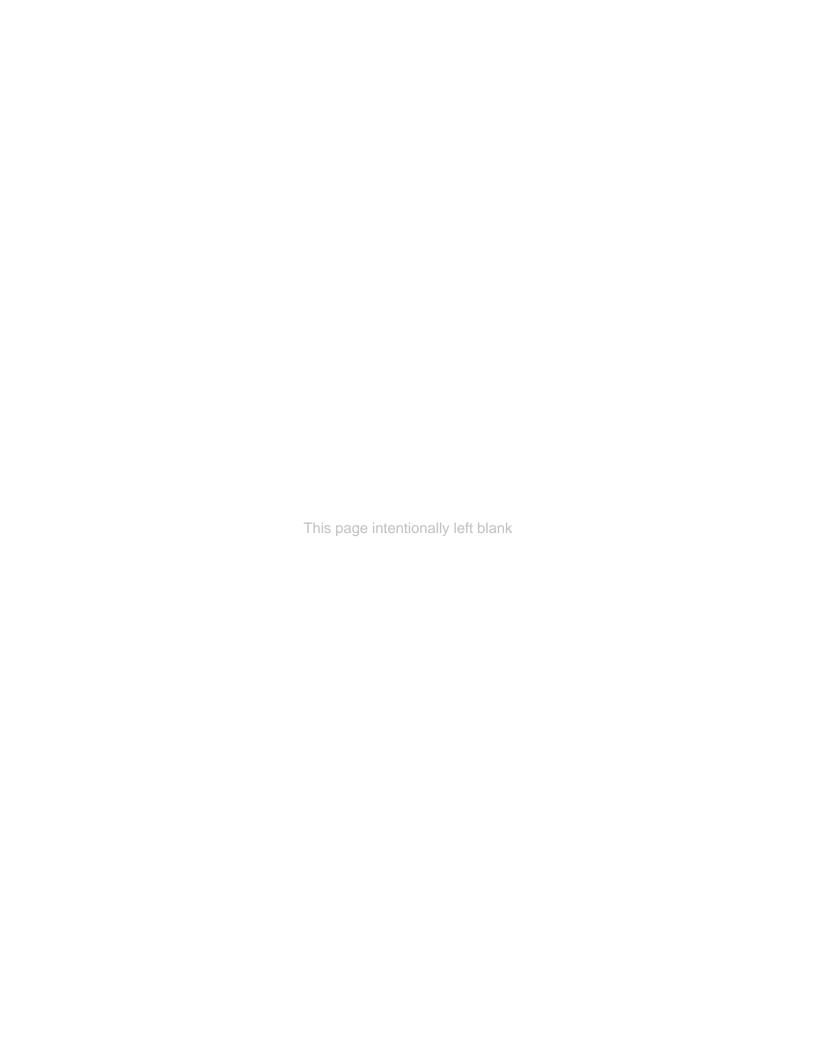
FINAL ENVIRONMENTAL ASSESSMENT

Franklin County, Tennessee

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The Proposed Action and Need

In 1985, the Tennessee Valley Authority (TVA) granted a permanent easement for commercial recreation purposes to the state of Tennessee, designated XTTMFR-8RE, on Tims Ford Reservoir in Franklin County, Tennessee (Figure 1). The easement was subsequently assigned to the City of Winchester, who in turn is in final lease negotiations with Twin Creeks Resort and Marina, LLC (the applicant). The applicant is proposing to develop a marina and resort complex that spans the 55 acres of TVA fee property under easement and approximately 20 acres of Tennessee Department of Environment and Conservation (TDEC) property. The applicant's proposed commercial marina and resort would provide camping and boating recreational opportunities for the general public on Tims Ford Reservoir.

The proposed development would consist of a 76-site campground with laundromat, bathhouse, playground, camp store/office, and water/electric/sewer service; 25 rental cabins, pavilion with associated lawn, picnic pavilion with attached restroom and parking; restaurant facility; retail space; boat/recreational vehicle (RV) dealership; dry boat storage building and marine repair/service facility; two motel units, each with maximum of 27 rooms; a parking lot associated with the existing boat ramp would be expanded and renovated/repaved, an added concession space and pavilion, a proposed courtesy dock and public fishing pier with associated harbor limits (Attachment A). A picnic pavilion and parking area are associated with the marina facility. Cart paths and roads are proposed throughout the development (Attachment A). The marina facility would be constructed in two phases with new boat slips, a floating ship store, fuel dock and newly established harbor limits within the Boiling Fork Creek embayment (Attachment A). The proposed development would require TVA to issue a permit pursuant to Section 26a of the TVA Act to the applicant, and the U.S. Army Corps of Engineers (USACE) to issue a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899.

The proposed project location is included in the 2000 Tims Ford Reservoir Land Management Plan (RLMP). However, the existing 1985 permanent easement to the state of Tennessee for commercial recreation was overlooked during development of the 2000 RLMP. As a result, the land associated with the easement location (approximately 55 acres) was designated as a Zone 4/5, "Natural Resource Conservation/Industrial" rather than being properly designated Zone 6, "Recreation" (Figure 2). Although the applicant already has the necessary land rights to receive the permit under the existing easement, TVA is proposing to correct the Tims Ford RLMP in order to ensure the 1985 permanent easement is accurately reflected both in land records and in TVA's RLMP.

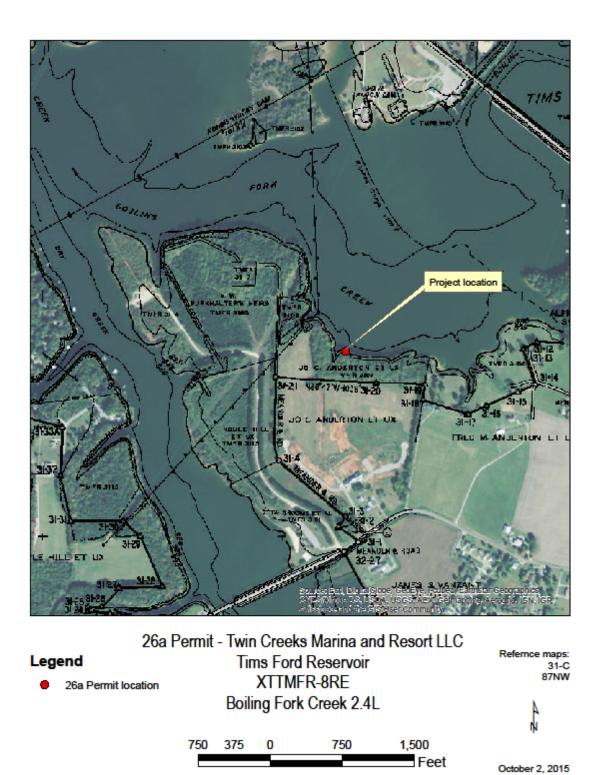


Figure 1 - Project Location Map

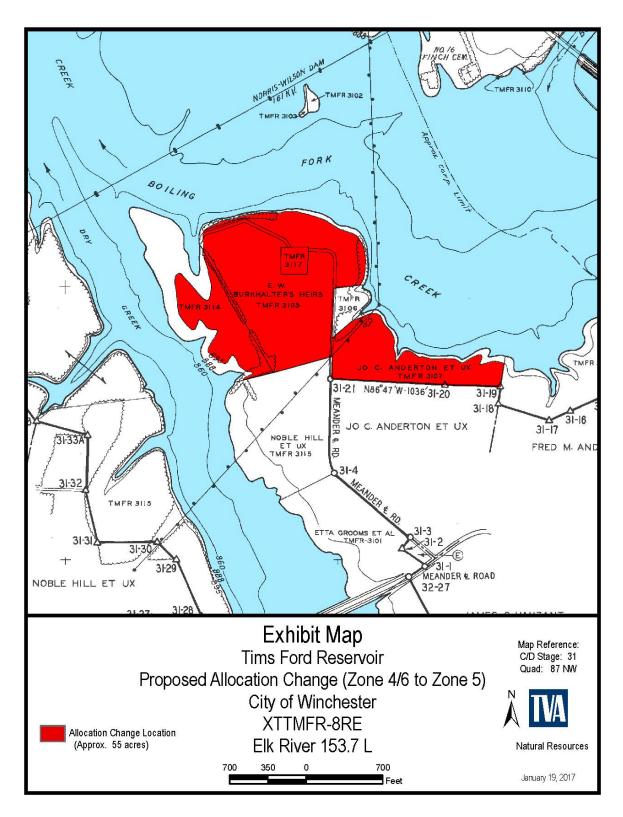


Figure 2 - Proposed Land Allocation Correction Map

Public Involvement

The applicant submitted a joint application to TVA and the USACE in October 2015. The USACE issued Joint Public Notice 16-27 on July 27, 2016 (Attachment B). The USACE received a comment letter from the U.S. Fish and Wildlife Service (USFWS) that stated that the project area likely contains suitable habitat for the Indiana bat and northern long-eared bat. The USFWS recommended that any disturbance of these areas be avoided and minimized and requested that coordination with the USFWS prior to issuance of a permit. The USACE also received a comment letter from the Dripping Springs Property Owners Association Board and Tims Ford Bass Club. These groups expressed their concerns about the proposed marina harbor limits and Dry Creek harbor limits, no wake zones, and also requested a public hearing to address their concerns. The group later sent an email request to cancel the public hearing request after they spoke with the USACE and had a better understanding of the project.

TVA posted the draft EA on its website for a 30-day public comment period and requested the public to submit comments via mail, email or online comment form. TVA also published a notice requesting comments in The Herald Chronicle newspaper on December 9, 2016. TVA did not receive any comments during the comment period. However, TVA received two comments from members of the public after the comment period ended. Both commenters inquired when TVA would make its final decision on this project.

Alternatives

Preliminary internal scoping by TVA has determined that from the standpoint of the National Environmental Policy Act (NEPA), there are two alternatives available to TVA. These are the No Action Alternative and the Proposed Action Alternative, which are described below.

The No Action Alternative

Implementation of the No Action Alternative would result in the denial or withdrawal of the applicant's request for Section 26a approval for the proposed marina and resort development. This alternative would not meet the needs of the applicant.

The Proposed Action Alternative

Under the Proposed Action Alternative, TVA would issue 26a approval to the applicant for the proposed marina and resort development. Below is a list of the facilities and land-based activities that would be subject to Section 26a approval.

List of facilities (new or existing) subject to Section 26a (below the 895-foot contour):

- Marina
 - Floating covered slips 566' x 90' 20 slips each 80' long x 22' wide 6'x40' long access walkway with 10' wide x 16' concrete landing
 - Floating covered slips 566' x 86' 56 slips, each 40' long x 16' wide 6'x40' long access walkway with 10' wide x 16' concrete landing
 - Floating covered slips 566' x 70' 40 slips, each 32' long x 25' wide- 6'x40' long access walkway with 10' wide x 16' concrete landing
 - o Floating covered slips − 556' x 58' − 44 slips, each 26' long x 22' wide − 6' x 40' long access walkway with 10' wide x 16' concrete landing
 - Ship store, floating 80' wide x 140' long

- Courtesy slips 450' long x 54' wide 32 slips, each 24' long x 24' wide
- Fuel dock 10' wide x 521' long
- Electric and water service to marina/docks
- Riprap bank stabilization (vicinity of marina) 1500' long $x \sim 10$ ' high
- Existing Dry Creek boat ramp 30' wide x 50' long
- Parking area for 74 spaces at Dry Creek boat ramp
- Fishing pier (floating) 10' wide x 100' long with 6' wide by 60' long access walkway
- Cart path (gravel)

Land based activities requiring prior TVA approval (above the 895-foot contour):

- Campground
 - o (14) 20' x 20' walkup sites
 - o (76) 40' x 60' Camper/RV sites
 - Playground
 - o 30' x 65' Laundromat/restroom/bathhouse building
 - o 40' x 80' Campground office
- Boat/RV dealership (pre-engineered metal building)
- Boat maintenance facility (could include painting and removal of paint from boat hulls) – 85' x 120'
- Dry boat storage 140' x 200'
- Facility maintenance building
- Concession building 20' x 20'; construction to comply with TVA guidance
- Pavilion 30' x 50' open sides
- Fencing around boat storage and maintenance area, approx. 3.75 acres, above the 895' contour.
- 25 rental cabins (mix of 2 and 3 bedroom cabins with kitchen and multiple baths)
- Picnic pavilion with lawn (for rental use or cabin guest use, weddings, etc.)
- Parking adjacent to cabin pavilion
- Two motel units with 27 rooms each
- Restaurant 10,400 square feet
- Retail space 21,500 square feet, limited to water-based recreation retail only
- Above ground fuel storage tank (6,000 gallon gasoline)
- Roads throughout
- Cart path/pedestrian path throughout
- Transformer pads for marina power supply
- Underground water, sewer, electric

- Steps/concrete ramps to access marina walkways from parking area
- Marina parking area
- Marina picnic pavilion

Construction of the floating boat slips would be built in 2 separate construction phases. During Phase 1, a total of 94 slips would be constructed. After Phase 1 has reached 70 percent occupancy, the development would move to Phase 2 where the remaining 98 slips would be constructed. The remainder of the project would not be phased and the developer may construct the remaining proposed structures and facilities as they deem appropriate.

TVA would also correct its 2000 Tims Ford RLMP to reflect the existing 1985 permanent easement to the State of Tennessee for commercial recreation of the subject property. The existing easement was overlooked during development of the Plan and this oversight resulted in the property being allocated as Zone 4/5, "Natural Resources/Industrial", rather than Zone 6, "Recreation", an allocation that reflects the permanent easement. This proposed change in allocation would result in minor changes of approximately 0.57 percent of overall planned TVA land on Tims Ford Reservoir. With these changes, the percentage of lands allocated to Zone 4 and Zone 7 across the Tennessee River Valley would continue to be within the ranges for those zones in TVA's Comprehensive Valleywide Land Plan (CVLP). The CVLP was established in TVA's 2011 Natural Resource Plan and is intended to aid TVA's decision-making across the entire TVA reservoir system. Therefore, the proposed allocation correction would be in compliance with the CVLP.

Alternative Considered but Not Evaluated

No additional alternatives were considered or evaluated for this project.

Affected Environment and Anticipated Impacts

<u>No Action Alternative</u>. Under the No Action Alternative, TVA would not issue a Section 26a permit for the proposed marina and resort development. No work would occur within the project area; therefore, no resources would be impacted by the proposed action.

<u>Proposed Action Alternative</u>. TVA has reviewed the proposed project and documented potential environmental impacts related to the project in the attached categorical exclusion checklist (Checklist) (Attachment C). The Checklist identifies the resources present in the project area and documents TVA's determination that the proposal would not significantly affect these resources. As documented in the Checklist, the proposed action would have no effect on endangered, threatened, or special status plant or aquatic species; aquatic ecology; natural areas; scenic rivers; prime farmland; or groundwater. Potential impacts to other environmental resources are evaluated in this Environmental Assessment.

Wetlands and Water Quality

A review of National Wetland Inventory data, aerial photography, and a field survey indicated that there are no wetlands within the project area. Therefore, there would be no direct, indirect, or cumulative impacts to wetlands with the Proposed Action Alternative.

The proposed development could potentially impact Tims Ford Reservoir. The proposed bank stabilization activities and other proposed actions would require a permit from TDEC pursuant to Section 401 of the Clean Water Act and from the USACE pursuant to Section

404 of the Clean Water Act. To avoid or minimize impacts to water resources, the applicant reduced the proposed length of riprap bank stabilization from 2000 to 1500 linear feet and eliminated the proposed dredge from the project.

Implementation of construction best management practices (silt fences, establishment of buffers, etc.) and TVA's general and standard permit conditions would minimize the potential impacts to water quality. Therefore, the proposed action would have minor, temporary surface water impacts during construction activities. The potential surface water impacts during operation of the proposed facilities would be minor. Proper steps outlined below in the solid and hazardous waste section would minimize potential contamination of surface water from oil, gas, and other lubricants.

Visual Effects

The proposed new facilities are located within a cove on Tims Ford Reservoir. Multiple residences in direct line of sight of the proposed facilities were identified, and new homes are under construction on the adjacent property. The visual character of the proposed project area and the surrounding area is a mixture of wooded areas and Commercial/Recreation facilities. Onsite clearing and construction would create visual discord for the duration of this work. Once complete, however, the proposed resort and marina would be consistent with the current visual character of the area. Thus, there would be minor, temporary visual impacts during construction of the proposed facilities and minor visual impacts during operation.

Recreation

The Tims Ford Reservoir is 34 miles long at Normal Summer Pool (NSP) and 888 feet elevation above mean sea level (msl) with average water depths of 50 feet and water depth at the dam of 143 feet. The Reservoir is designed for a 30-foot drawdown with possible range from 895 to 865 feet at msl for flood management; however, actual annual operational drawdowns average around 18 feet. Normal winter pool elevations range from 865-873 feet at msl with normal summer pools around 888 to 883 feet depending on seasonal rain fall and runoff.

In 2016, TVA performed a water-related recreation analysis on Tims Ford Reservoir. The study area extends upstream from the Tims Ford Dam at Elk River mile 133.3 approximately 34 miles up the main arm of Tims Ford Reservoir in Franklin and Moore Counties, Tennessee. For purposes of the boating density assessment, total surface acres were identified during summer pool elevations to be approximately 10,560 surface acres (120 acres were removed because they were occupied by islands).

There are several existing public, private and commercial recreation facilities that provide recreational boating access to Tims Ford Reservoir, including two commercial marinas, eleven public recreation areas, 253 private community docks and forty-four private ramps serving private residential developments. These facilities are considered as the "base case" for the recreation analysis. Commercial and public boating-related facilities available include thirteen boat-launching ramps with a combined parking capacity of 662 trailers and wet and dry slip accommodations for 655 vessels.

The proposed marina property above elevation 895 feet msl is publicly owned and currently has limited infrastructure with an existing access road and developed boat ramp, parking and courtesy dock. With the increased lake access and moorage, water-related recreation

opportunities such as boating, fishing, and leisure-time activities would most likely increase. The proposed marina would provide a benefit and attraction for local residents, tourists, and potential homeowners.

The proposed marina with items as listed above could also lead to increased boating traffic in an area that currently receives moderate to heavy boating use.

Boating Density

Development of the proposed marina facility would provide additional boating services in this area of Tims Ford Reservoir. To gauge the impact this proposed marina would potentially have on recreational boating traffic and boating safety, the boating activity patterns in the vicinity of the proposed marina have been assessed in the context of general boating activity patterns on TVA reservoirs.

In order to determine boating usage on TVA reservoirs, TVA completed a study in 2009 *Boating Density Analysis* (TVA 2009, Appendix I) to estimate recreational boating densities based on observations of boating use patterns across the Tennessee River reservoir system. The *Boating Density Analysis* included a review of boating density standards and guidelines used by other federal agencies. The capacity thresholds used by TVA were derived from a compilation of these assessments and guidelines. In the 2009 study, TVA estimates the percentage of vessels that are likely in use that are stored at commercial marinas and permitted private access facilities (such as permitted private docks, community docks, and private marinas) across the Tennessee River reservoir system. Similarly, public boat-launching ramps are in use on any given day but generally are not used at full vehicle/trailer parking capacity.

In order to determine the boating density for Tims Ford Reservoir, water-related recreation facilities as shown below in Table 1 and existing private boat docks, piers and boathouses in the recreation study area have been considered at 100 percent occupancy. TVA estimated the private access boating units for Tims Ford Reservoir using the 26a permit data base. The estimated private access boating units included in TVA's total permits from 26a records reflect 697 permits for private docks, piers and boathouses; TVA estimates 1.78 recreational boats per permit for an estimate of around 1,240 stored recreational boats and 253 community slips. The estimate for "boats stored" is approximately 1,493 and is used as the "base" throughout the remaining calculations in the boating density worksheet.

For purposes of this evaluation, current boating use on TVA reservoirs was estimated for three different points in the peak summer boating season (May through September): (a) non-holiday week days, (b) non-holiday weekend days, and (c) peak use holiday weekend days (Memorial Day, July 4th, and Labor Day).

- a) Non-holiday weekdays. This case estimates 15 percent of vessels stored at commercial marinas and private access facilities are likely to be in use, and 20 percent of estimated parking spaces for boat-launching ramps are likely in use each non-holiday weekday (Monday through Thursday) from May to September.
- b) Non-holiday weekend days. This case estimates 25 percent of vessels stored at commercial marinas and private access facilities are likely to be in use, and 60 percent of estimated parking spaces for boat-launching ramps are likely in use during non-holiday weekend days (Friday, Saturday, and Sunday) from May to September.

c) Peak use holiday weekend days. This case estimates 35 percent of vessels stored at commercial marinas and private access facilities are likely to be in use, and 75 percent of estimated parking spaces for boat-launching ramps are likely in use during holiday weekend days (Friday, Saturday, Sunday, and Monday) from May to September.

Table 1 shows the current and 2016 estimates of watercraft currently using Tims Ford Reservoir and the surface acres per boat on an average daily basis on a weekday, non-holiday weekend, and peak use holiday weekends. Optimum recreational boating density thresholds should allow at least 6.0 to 7.6 surface acres per boating unit. The proposed facilities would increase boating traffic; however, as noted in Table 1, the boating density thresholds in all cases but one exceed the optimum recreational boating density thresholds for all three periods estimated for the peak summer boating season. The one exception is peak use holiday weekends for the 2016 estimates where the mid point for the surface acres per boating unit optimum threshold may be exceeded. With the addition of the proposed 192-slip marina, dry storage and added ramp parking based on projections of the resulting recreation development and boating use estimates, it appears Tims Ford Reservoir could accommodate non-holiday weekday, non-holiday weekend and holiday boating activity without going below generally accepted recreational boat thresholds of 6.0 to 7.6 surface acres per boat (TVA 2009).

Table 1. Current and Estimated Boating Density Thresholds

	Non-holiday weekdays (surface acres per boating unit)	Non-holiday weekend days (surface acres per boating unit)	Peak Use holiday weekend days (surface acres per boating unit)
Current Boating Density Thresholds	475 (22 surface acres per boating unit)	1,002 (11 surface acres per boating unit)	1,331 (8 surface acres per boating unit)
Estimated Boating Density Thresholds ¹	551 (19.18 surface acres per boating unit)	1,139 (9.27 surface acres per boating unit)	1,520 (6.95 surface acres per boating unit)

¹ The 2016 estimate of recreational boating density factoring in the proposed 192-slip marina, additional dry storage (225) and additional ramp parking (40)

Phasing

The applicant has indicated that the marina would be constructed in two phases. Phase 1 involves providing slips for 94 vessels, and slips for 98 additional vessels would be added in Phase 2. Phase 2 would be constructed once occupancy reached 70 percent for the 94 slips in Phase 1. Because the proposed project would not be constructed all at once, the actual increase in the number of watercraft on the reservoir would be spread over a number of years to include recreational watercraft stored in slips under Phase 1 and Phase 2 completion. (Table 2).

Table 2. Applicant's Planned Phases and Boating Density Estimates

Planned Phases and Occupancy Estimates	Increase in Watercraft/ Density Thresholds
Phase 1 = 94 boat slips 70% occupancy = 66 slips plus 40 ramp parking and 225 dry storage	52, 97, 131 boats added ¹ 19.86, 9.54, 7.16 surface acres per boating unit ²
Phase 2 adds 98 boat slips for total 192 slips 70% occupancy at 134 slips	56, 104, 141 boats added ¹ 19.71, 9.48, 7.11 surface acres per boating unit ²
Phase 1 & 2 = 192 boat slips 100% occupancy at 192 slips, 225 dry storage plus up to 75% of 40 additional ramp parking spaces	71, 129, 176 boats added ¹ 19.18, 9.27, 6.95 surface acres per boating unit ²

¹ The three numbers coincide with estimates derived for non-holiday week days, non-holiday weekend days, and peak use holiday weekends, as described above.

As watercraft use increases, the number of visitors, both on and off the reservoir, experiencing a feeling of overcrowding may increase, especially among historic users of Tims Ford Reservoir. Visitors seeking an experience of solitude and quiet out on a water body may be impacted as visitation increases over time. These users may eventually seek other areas of the reservoir that offer a more rural undeveloped or semi-primitive experience. It is anticipated that the experience on Tims Ford Reservoir would be less crowded during the shoulder season for weekends in the months just before and after the peak boating season (May through September).

Under the proposed action, the total anticipated increase in watercraft on Tims Ford Reservoir would be 71, 129 and 176 boating units during non-holiday weekday, non-holiday weekend, and peak use holiday weekends, respectively. This is based upon the assumption of 100 percent occupancy for all slips, dry storage, ramp parking and private docks, piers and boathouses on Tims Ford Reservoir. A total increase of about 13 percent over the current non-holiday weekend daily watercraft estimate and the current peak use holiday weekend daily watercraft estimate could result from the proposed Action Alternative.

Boating Safety

TWRA is responsible for preparing Tennessee's annual boating safety reports. The data in these boating safety reports are derived from efforts that document "reportable boating accident" incidents completed by TWRA officers investigating boating accidents. To be considered a reportable boating accident, an accident involves death, a missing person, an injury requiring medical treatment beyond first aid, or property damage of \$2000.00 or more. The annual boating safety reports are analyzed in an effort to create proactive plans to reduce the number of boating accidents and their related fatalities, injuries, and property damage.

On Tims Ford Reservoir, there were 10 boating accidents and no fatalities reported in 2015; seven were accidents involving personal injury and three were property damage accidents.

² Optimum boating capacity thresholds are 6.0–7.6 surface acres per boat.

When compared to other reservoirs in Tennessee, Tims Ford has a relatively low occurrence of boating and personal watercraft (PWC) accidents (TWRA 2015). For complete 2015 and 2014 boating safety data, see the Tennessee Wildlife Resource Agency's 2015 Tennessee Boating Incident Statistical Report (TWRA 2015).

Impacts Analysis

Under the proposed action, there would be an increase in recreational boating traffic. Because the increases in boating density could exceed maximum recommended density in the study area during summer peak use holiday weekends, and weekend boating density would be at or near threshold levels, TVA has developed a phased 26a permit approach. The following permit condition would be implemented to reduce potential impacts to water-related recreation. In order to reduce potential water-related recreation impacts, the Section 26a permit approval would initially allow for construction and operation of 94 boat slips. Approval of 98 additional slips will be subject to further boating density assessments by TVA and boating safety consultation with the Tennessee Boating Law Administrator, Chief of Enforcement for TWRA.

Under the phased permit approach, the applicant is to notify TVA in writing to request approval for the remaining 98 slips, as shown in the approved marina design drawings, when occupancy levels of the 94 permitted slips are at or near 70 percent. At that time, TVA and TWRA will reassess boating safety data. TVA would use same or similar methodology (if current methodology has been updated) as used for this environmental review, including completion of a boating density analysis and consideration of TWRA's annual boating safety data. Once the data is analyzed, if TVA determines approval for 98 additional slips would not adversely impact boating safety, TVA would issue approval for 98 slips as shown on the approved marina design drawings. If TVA determines approval could potentially adversely impact boating safety, the approval would not be issued until a Recreational Boating Capacity Study is completed. If necessary, further minimization efforts would be developed to allow for an appropriate amount of slips to be permitted under additional permit conditions, as appropriate.

The recreation analysis shows that when the proposed marina is fully built and its boat slips, dry storage, and ramp parking spaces are at 100 percent occupancy, the project will increase the number of users to 6.95 acres per boating unit on a peak holiday weekend. The optimum boating threshold range determined for Tims Ford Reservoir is between 6.0 and 7.6 surface acres per boating unit. Thus, the proposed project is not anticipated to cause the reservoir to exceed its optimal recreational user capacity.

In conclusion, the implementation of the phased permit condition would reduce potential water-related recreation impacts to insignificant levels. The recreation analysis also indicated that the addition of the 192 slips, 225 dry storage and 40 additional ramp parking spaces with other marina facilities would not adversely impact water-related recreation.

Air Quality

Under the Clean Air Act, the U.S. Environmental Protection Agency (USEPA) established National Ambient Air Quality Standards (NAAQS; USEPA 2015) to protect and enhance the nation's air quality resources. The primary NAAQS were promulgated to protect the public health, including the health of "sensitive populations, such as people with asthma, children, and older adults." Secondary NAAQS protect public welfare by promoting ecosystems health, preventing decreased visibility, and damage to crops and buildings.

The USEPA has set NAAQS for the below criteria pollutants. A listing of the NAAQS is presented in Table 3.

- sulfur dioxide (SO₂),
- ozone (O₃),
- nitrogen dioxide (NO₂),
- particulate matter whose particles are ≤ 10 micrometers (PM₁₀),
- particulate matter whose particles are ≤ 2.5 micrometers (PM_{2.5}),
- carbon monoxide (CO), and
- lead (Pb).

 Table 3.
 National Ambient Air Quality Standards

	Table 3. National Ambient All Quality Standards				
Pollutant	Primary / Secondary	Averaging Time	Level	Form	
Carbon Monoxide (CO)	primary	8 hours	9 ppm	Not to be exceeded more	
		1 hour	35 ppm	than once per year	
Lead (Pb)	primary and secondary	Rolling 3 month average	0.15 μg/m ^{3 [1]}	Not to be exceeded	
Nitrogen Dioxide (NO ₂)	primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
	primary and secondary	Annual	53 ppb ^[2]	Annual Mean	
Ozone (O ₃)	primary and secondary	8 hours	0.070 ppm ^[3]	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years	
Particulate Matter (PM _{2.5})	primary	Annual	12.0 μg/m ³	annual mean, averaged over 3 years	
	secondary	Annual	15.0 μg/m³	annual mean, averaged over 3 years	
	primary and secondary	24-hours	35 μg/m³	98th percentile, averaged over 3 years	
Particulate Matter (PM ₁₀)	primary and secondary	24-hours	150 μg/m ³	Not to be exceeded more than once per year on average over 3 years	
Sulfur Dioxide (SO ₂)	primary	1-hour	75 ppb ^[4]	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
	secondary	3-hours	0.5 ppm	Not to be exceeded more than once per year	

Source: USEPA 2015.

Notes:

- In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 μg/m³ as a calendar quarter average) also remain in effect.
- 2 The level of the annual NO₂ standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.
- 3 Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O₃ standards additionally remain in effect in some areas. Revocation of the previous (2008) O₃ standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.
- The previous SO₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which implementation plans providing for attainment of the current (2010) standard have not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)), A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the require NAAQS.

Ambient air monitors measure concentrations of criteria pollutants to determine attainment with these standards. The USEPA classifies geographic areas as being "attainment" areas, or "nonattainment" areas. A geographic area with air concentrations at or below the NAAQS is referred to as an "attainment" area. An area with air concentrations that exceed these standards is referred to as a "nonattainment" area. New sources of air pollution in or near these areas may be subject to more stringent air permitting requirements.

There are no ambient air quality monitors in Franklin County, Tennessee. The closest monitors, which are located in Chattanooga, Tennessee and Huntsville, Alabama, measured concentrations below the level of the NAAQS from 2013 to 2015 (Table 4). This indicates that air quality in the general vicinity of Franklin County is good.

Table 4 2013-2015 Ambient Concentrations of Criteria Air Pollutants¹

Monitor Location	O ₃ 8-hr 4 th Max (ppm)	PM _{2.5} 24-hr 98 th Percentile (µg/m³)	PM _{2.5} Annual Mean (µg/m³)	PM₁₀ 24-hr 2 nd Max (µg/m³)
NAAQS	3-Year Average			
MAAGO	0.070	35	12	150
Chattanooga, Tennessee	0.066	21	10	22
Huntsville, Alabama	0.064	19	9	50

Source: USEPA 2016a.

¹No air quality data is available at the listed monitors for CO, lead, NO₂, and SO₂.

Air quality impacts from construction activities would be temporary in nature and dependent on both manmade factors (e.g. intensity of activity, control measures, etc.) and natural factors (e.g. wind speed, wind direction, soil moisture, etc.).

Air quality impacts from the operation of the marina would primarily be related to emissions from increased boat traffic. Data from USEPA's 2014 National Emissions Inventory (USEPA 2016b) were used to estimate total emissions and emissions from pleasure watercraft in Franklin County, Tennessee (Table 5). Tims Ford Reservoir accounts for approximately 73 percent of the surface water area in Franklin County, so 73 percent of the

county's watercraft emissions were assumed to occur on this reservoir. According to the recreation analysis, a total increase of about 13 percent over the current non-holiday weekend daily watercraft estimate and the current peak use holiday weekend daily watercraft estimate could result from the proposed action. Therefore, increased watercraft emissions due to the proposed action were calculated as a 13 percent increase over watercraft emissions allocated to Tims Ford Reservoir. When compared to total emissions in Franklin County, the increase in watercraft emissions are small (less than 0.7 percent). Emission increases of this magnitude would not have an adverse impact on air quality nor lead to an exceedance or violation of any applicable ambient air quality standard. Therefore, there would be no direct, indirect, or cumulative impacts to air quality under the Proposed Action Alternative.

Table 5 Estimated Air Emissions in Franklin County, TN in 2014

Pollutant	Total Emissions (tons/year)	Pleasure Watercraft Emissions (tons/year)	Increased Emissions from Proposed Alternative ¹ (tons/year)	Increased Emissions from Proposed Alternative ¹ (percent)
СО	12,801	826	78.34	0.61
Lead	0.04	0.00	0.00	0.00
NO _x	1,707	75	7.11	0.42
VOC	14,260	238	22.58	0.16
PM _{2.5}	1,351	3.5	0.33	0.02
PM ₁₀	5,873	3.8	0.36	0.01
SO ₂	67	0.20	0.02	0.03

Source: USEPA 2016b.

Floodplains

A floodplain is the relatively level land area along a stream or river that is subject to periodic flooding. The area subject to a one-percent chance of flooding in any given year is normally called the 100-year floodplain. It is necessary to evaluate development in the 100-year floodplain to ensure that the project is consistent with the requirements of Executive Order (EO) 11988. The proposed project would be located at Boiling Fork Creek Mile 2.4. Boiling Fork Creek empties into the Elk River at Elk River Mile 135.5 on Tims Ford Reservoir. The 100- and 500-year flood elevations at this location on Boiling Fork Creek are 893.6 and 894.7 feet, respectively.

As a federal agency, TVA is subject to the requirements of EO 11988, Floodplain Management. The objective of EO 11988 is "...to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative" (United States Water Resources Council 1978). The EO is not intended to prohibit floodplain development in all cases, but rather to create a consistent government policy against such development under most circumstances. The EO requires that agencies avoid the 100-year floodplain unless there is no practicable alternative.

¹ Increased emissions from the Proposed Alternative assumes 73 percent of the watercraft emissions in Franklin County occur on Tims Ford Reservoir and assumes there will be a 13 percent increase in the number of watercraft on Tims Ford Reservoir.

Facilities proposed for construction and use above the 500-year floodplain, and some proposed for construction below the 500-year floodplain would not affect floodplain resources. TVA has no objection to those proposed facilities, as listed below. Some facilities proposed for construction and use below the 500-year flood elevation could affect floodplains unless conditions are applied. Those conditions are listed with each proposed facility below. Actions within the floodplain on TVA reservoirs are reviewed to determine if the proposed activity qualifies as a repetitive action. Under TVA's implementation of EO 11988, Floodplain Management, repetitive actions are projects within a class of actions TVA has determined to be approvable without further review and documentation related to flood control storage, provided the loss of flood control storage caused by the project does not exceed one acre-foot. See 46 Federal Register 22845 (Apr. 21, 1981). TVA has noted in the list below whether an activity or facility below the 500-year flood elevation is a repetitive action.

Existing and proposed facilities below the 500-year flood elevation

- floating covered boat slips repetitive action, conditional approval Condition 1 below
- floating ship store and fuel dock considered to be water-dependent uses of floodplain because they are supporting the marina and therefore would not affect floodplain resources, no objection
- electric and water service to marina/docks repetitive action, conditional approval -Condition 2 below
- bank stabilization (vicinity of marina) 1,500 feet long by 10 feet high repetitive action, conditional approval - Condition 3 below. The project would result in the loss of about 0.1 acre-foot of flood control and power storage, which would be consistent with the TVA Flood Control Storage Loss Guideline.
- minor grading and fill for existing boat ramp 30 feet wide by 50 feet long repetitive action - no objection
- minor grading and fill for parking area for 74 vehicles repetitive action no objection
- floating fishing pier 10 feet wide by 100 feet long repetitive action, conditional approval - Condition 4 below
- concession building 20 feet by 20 feet construction to comply with TVA guidance
 outside 100-year floodplain and above 500-year flood elevation no objection
- pavilion 30 feet by 50 feet, open sides outside 100-year floodplain and within the 500-year flood elevation - below 895 - Conditions 5 and 6 below
- minor grading and fill for gravel cart path and walkways and roads repetitive actions - no objection
- minor dredging repetitive action no objection

Proposed facilities above the 500-year flood elevation

The following facilities would be located outside the 100-year floodplain and above the 500-year flood elevation, which would be consistent with EO 11988. Therefore, TVA has no objection to these facilities.

- Campground
- Playground
- Laundromat/restroom/bathhouse building
- Campground office
- Boat/RV dealership (pre-engineered metal building)

- Boat maintenance facility
- 140' x 200' Dry boat storage
- Facility Maintenance Building
- 20' by 20' concession building
- Fencing around boat storage and maintenance area
- 30' x 50' open Picnic pavilion
- Parking adjacent to cabin pavilion
- 2, 27-unit motel buildings
- Restaurant 10,400 square feet
- Retail space 21,500 square feet
- Above ground fuel storage tank
- Roads
- Cart path/pedestrian path
- Transformer pads for marina power supply
- Underground water, sewer, electric
- Steps to access marina walkways from parking area
- Marina parking area
- Marina picnic pavilion

Provided the following conditions are included in the final 26a permit, approval of the proposed 26a permit for existing and proposed facilities at Twin Creeks Marina would have no significant impact on floodplains and floodplain resources:

- Condition 1: All floating facilities shall be securely anchored to prevent them from floating free during major floods.
- Condition 2: For all electrical services permitted, a disconnect must be located at or above the 894.7-foot contour that is accessible during flooding.
- Condition 3: For purposes of shoreline bank stabilization, all portions of floating facilities will be constructed or placed, on average, no more than two feet from the existing shoreline at normal summer pool elevation.
- Condition 4: The floor elevation of the fixed dock will be a minimum of 2.0 feet above the full summer pool elevation 888.0.
- Condition 5: The pavilion will be built as an open space and will never be enclosed in the future.
- Condition 6: Any flood-damageable equipment stored in the pavilion will be located above the 500-year flood elevation 894.7 feet.

Navigation

The proposed harbor limits on Boiling Fork Creek would cross the mapped navigation channel and could possibly impede boats from transiting the area on Boiling Fork Creek if the proposed limits are fully developed in the future. Therefore, TVA would require a smaller harbor limit dimension from the south bank of Boiling Fork Creek. The proposed harbor limits on Dry Creek do not exceed the 1/3 the distance across the channel threshold and would not pose a threat to navigation. The below conditions and notification will be included in the 26a Permit. With implementation of these conditions, the proposed project would have no impacts on navigation.

- Harbor limits on Boiling Fork Creek shall not exceed more than 765' x 1300'.
- Harbor limits on Dry Creek shall not exceed 200' x 400'.

 The applicant will be advised in writing that the facility will front directly on a recreational navigation channel at a location which makes the facility and any moored boats vulnerable to wave wash and possible collision damage from passing vessels.

Archaeological and Historical Resources

Historic and cultural resources, including archaeological resources, are protected under various federal laws, including the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, and the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires federal agencies to consult with the respective State Historic Preservation Officer when proposed federal actions could affect these resources.

The area of potential effects (APE) for cultural resources is defined at 36 CFR §800.16(d) (a section of the federal regulations implementing Section 106 of the National Historic Preservation Act) as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." TVA determined the APE for this action to be the TVA fee-owned land subject to 26a approval and the visual/architectural APE to be the 0.5 mile radius within the direct line of sight from the project area.

TVA conducted a Phase I archaeological survey, which identified one archaeological site (40FR623) and revisited four previously recorded sites (40FR190, 40FR191, 40FR494, and 40FR495). TVA determined that sites 40FR494, 40FR495 and 40FR623 are ineligible for the National Register of Historic Places (NRHP). However, sites 40FR190 and 40FR191 may have the potential to address research questions regarding the prehistory and history of the area and therefore should be considered undetermined. The proposed marina plans depict a proposed walking trail at the location of 40FR190 and a portion of a parking area at 40FR191. The walking trail would be located on an existing ATV trail, and no additional grading would occur. Gravel would be placed along the path to protect the soil from additional erosion. The proposed parking lot would be shifted to avoid site 40FR191, and the area would be left as a green space. The applicant proposes the removal of invasive vegetation in these locations. All work would be done by hand and with the use of herbicide selectively applied from the ground with backpack sprayers. No mechanical equipment would be allowed within a 20-foot buffer of 40FR191. Therefore, there would be no impact to sites 40FR190 and 40FR191. The Tennessee State Historic Preservation Officer concurred with TVA's determinations in an August 24, 2016 letter (Attachment D).

The survey also documented and assessed 12 architectural resources located within the APE, consisting of two previously documented (FR-4 and FR-882) architectural resources and 10 (IS-1 through IS-10) newly recorded properties. TVA found that FR-4, FR-882 and 1S-1 through IS-10 are ineligible for the NRHP based on their lack of architectural distinction and loss of integrity caused by modern alterations. Furthermore, for both sites FR-4 and FR-882, visual line of site to the project is partially obstructed by vegetation, and the historic setting has already been compromised by modern residential development. Therefore, the proposed undertaking would not have an adverse visual effect on FR-4 and FR-882. The Tennessee State Historic Preservation Officer concurred with TVA's determinations in an August 24, 2016 letter (Attachment D).

Threatened and Endangered Aquatic Species

The Endangered Species Act (ESA) provides broad protection for species of fish, wildlife, and plants that are listed as threatened or endangered in the United States or elsewhere. ESA outlines procedures for federal agencies to follow when taking actions that may jeopardize federally listed species or their designated critical habitat. The policy of Congress is that federal agencies must seek to conserve endangered and threatened species and use their authorities in furtherance of ESA's purposes. The State of Tennessee provides protection for species considered endangered or of special concern within the state other than those federally listed under the ESA. The listing is handled by TDEC; however, the TDEC Natural Heritage Inventory Program and TVA Regional Natural Heritage Program both maintain databases of aquatic animal species that are considered endangered or of special concern in Tennessee.

As documented in the Checklist (Attachment C), there are no listed plant or aquatic species habitat within the project area. However, a review of the TVA Regional Natural Heritage database identified one state-listed species (southeastern shrew) and one federally listed species (gray bat) within three miles of the project area. Three federally listed species (painted snake coiled forest snail, Indiana bat, and northern long-eared bat) have been documented in Franklin County, Tennessee.

Suitable habitat for southeastern shrew was observed within the project footprint during a January 27, 2016 field review. Direct effects to individuals may occur if ground disturbing activities occur at active nesting borrows while juveniles are immobile; however, because additional suitable habitat of similar quality exists in the surrounding area, the Proposed Action Alternative would not impact populations of southeastern shrew. No suitable habitat for the painted snake coiled forest snail species was observed in the project footprint during the January 2016 field review; therefore, the proposed actions would not impact painted snake coiled forest snail.

The nearest gray bat record is from a mist net capture in 2012 approximately 1.6 miles away from the project footprint. One cave has been reported within 3 miles of the project footprint (approximately 2.7 miles) but it would not be impacted by the proposed actions. No caves were observed within the project footprint during field review on January 27, 2016. Therefore, the proposed actions would not impact any known cave habitat. A partially flooded, old basement/storm cellar was observed on the property. Because the cellar could provide suitable bat habitat, a survey of this structure was performed on February 24, 2016. No signs of bats (e.g., staining, guano) were observed. Suitable foraging habitat does exist over Tims Ford Reservoir and two streams which are in the project footprint. Best Management Practices (BMPs) and erosion control measures would be used in and around these bodies of water to ensure there are no impacts to hydrology and water quality and that these foraging habitats are still available to gray bat. With the implementation of BMPs during proposed project activities gray bats would not be impacted by the proposed actions.

TVA field surveys identified twenty individual suitable habitat trees for the Indiana bat and northern long-eared bat on the TVA fee owned land and an approximately 0.84 acres of suitable habitat on the TDEC easement. TVA will place a condition in its Section 26a Permit that the flagged trees and trees within the parcel owned by TDEC mentioned above will not be removed. With the avoidance of these trees and use of BMPs around waterbodies, Indiana and northern long-eared bat would not be impacted by the proposed actions. TVA coordinated its findings with the USFWS. In an October 14, 2016 email, the USFWS

concurred with TVA's no effect determination, which fulfilled TVA's Section 7 requirements (Attachment E).

Solid and Hazardous Waste

The applicant proposes the removal of invasive vegetation, which would be done by hand and with the use of herbicide selectively applied from the ground with backpack sprayers. Only herbicides registered with the U.S. Environmental Protection Agency would be used and would be applied in accordance with applicable state and federal laws and regulations. Therefore, the herbicides would have negligible effects on surface water.

The proposed marina, repair/service or Boat/RV dealership facility may generate used oil, which would be required to be placed in containers of 55 gallons or greater capacity and must be in sized secondary containment. Smaller containers would also be placed in secondary containment. This containment requirement applies to new lube oil as well as used oil. If the volume of oil on site (in containers 55 gallons and up) exceeds 1,320 gallons, the Marina would be required to have a spill prevention control, and a countermeasure plan in accordance with 40 CFR 112. This total volume limit includes fuels, lubricating oil, transformer insulating oil, used oil, vegetable oil, animal fats and greases, fish and marine mammal oils, including oils from seeds, nuts, fruits, and kernels. Any above ground fuel storage tanks (55 gallons or greater) must have sized secondary containment.

Activities at the proposed maintenance facility could include painting and the removal of paint from boat hulls. The facility would follow applicable state and federal laws to ensure that the paint is handled and disposed properly. The piping out to the proposed Fuel Dock, which is located 510 feet from shore, must be in double walled piping. Piping must be installed in such a way that the interstitial space can be inspected for the presence of liquid (water or fuel). With the above BMPs, the construction and operation of the proposed facilities would not produce solid and hazardous waste impacts.

Land Planning

The correction of the 2000 Tims Ford RMLP would have no impacts on the resources discussed in this EA as the actual land use would not change and the existing commercial recreation operations would continue at the proposed project area. The impacts of the proposed modification of land use allocation would not substantially differ from those described in the Tims Ford RLMP EIS and the Natural Resources Plan Environmental Impact Statement (EIS). The reallocation would also be consistent with the objectives and goals of the RLMP and the Comprehensive Valley Land Plan. Therefore, TVA has determined that it is not necessary to supplement the Tims Ford RLMP EIS to address this reallocation.

Mitigation Measures

TVA will implement the routine environmental protection measures listed in this EA. In addition to those routine measures, the following non-routine measures, would be implemented to reduce the potential for adverse environmental effects.

- To ensure that the proposed development would not impact cultural sites 40FR190 and 40FR191, the following measures shall be taken:
 - The walking trail would be located on an existing ATV trail, and no additional grading would occur.

- Gravel would be placed along the path to protect the soil from additional erosion. The proposed parking lot would be relocated to avoid site 40FR191, and the area would be left as a green space.
- All work to remove invasive species shall be done by hand and with the use of herbicide selectively applied from the ground with backpack sprayers. No mechanical equipment would be allowed within a 20-foot buffer of 40FR191.
- TVA will place a condition in its Section 26a Permit that the applicant will not remove
 the twenty potentially suitable bat habitat trees that occur on the TVA fee property
 and on the approximately 0.84 acre within the TDEC easement.
- The below Navigation conditions and notification will be included in TVA's Section 26a Permit:
 - o Harbor limits on Boiling Fork Creek shall not exceed more than 765' x 1300'.
 - o Harbor limits on Dry Creek shall not exceed 200' x 400'.
 - The applicant will be advised in writing that the facility will front directly on a recreational navigation channel at a location which makes the facility and any moored boats vulnerable to wave wash and possible collision damage from passing vessels.
- In order to reduce potential water-related recreation impacts, Section 26a permit
 approval will be in two phases and will initially allow for construction and operation
 of only 94 boat slips. Approval of 98 additional slips will be subject to further boating
 density assessments by TVA and boating safety consultation with the Tennessee
 Boating Law Administrator.
- To ensure that the proposed and future development would be consistent with EO 11988 and prevent unwise development in the 100-year floodplain, the following conditions would be included in the final TVA 26a permit and any transfer documents:
 - 1. All floating facilities shall be securely anchored to prevent them from floating free during major floods.
 - 2. For all electrical services permitted, a disconnect must be located at or above the 894.7-foot contour that is accessible during flooding.
 - 3. For purposes of shoreline bank stabilization, all portions of floating facilities will be constructed or placed, on average, no more than two feet from the existing shoreline at normal summer pool elevation.
 - 4. The floor elevation of the fixed dock will be a minimum of 2.0 feet above the full summer pool elevation 888.0.
 - 5. The pavilion will be built as an open space and will never be enclosed in the future.
 - 6. Any flood-damageable equipment stored in the pavilion will be located above the 500-year flood elevation 894.7 feet.

Preferred Alternative

TVA's preferred alternative is the Proposed Action Alternative. Under this alternative, TVA would issue 26a approval for the proposed marina and resort development to the applicant and correct the 2000 Tims Ford RLMP at the proposed project location.

TVA Preparers

Nicole C. Berger, Navigation Program Supervisor – Navigation

Toree M. Cook, Atmospheric Analyst - Air Quality

Patricia B. Ezzell, Program Manager - Tribal Relations

Jerry Fouse, Recreation Specialist – Recreation

Elizabeth Hamrick, Terrestrial Zoologist, Threatened and Endangered Species

Michaelyn Harle, PhD; Archaeologist - Cultural Resources, National Historic Preservation Act Compliance

Loretta A. McNamee, Contract NEPA Specialist - NEPA Compliance and Document Preparation

Samantha Strickland, Recreation Specialist – Project Lead

Doug White, Program Manager Environmental Support – NEPA Compliance

Carrie Williamson, PE, CFM, Program Manager – Floodplain and Floodrisk

Agencies and Others Consulted

The following federal and state agencies and federally recognized Indian Tribes were consulted.

U.S. Army Corps of Engineers

U.S. Fish and Wildlife Services

Tennessee Historical Commission

Absentee Shawnee Tribe of Oklahoma

Alabama-Coushatta Tribe of Texas

Cherokee Nation

Eastern Band of Cherokee Indians

Eastern Shawnee Tribe of Oklahoma

Kialegee Tribal town

Muscogee (Creek) Nation

Shawnee Tribe

Thlopthlocco Tribal Town

United Keetoowah Band of Cherokee Indians in Oklahoma

References

- Tennessee Wildlife Resource Agency (TWRA). 2015. 2015 Tennessee Boating Incident Statistical Report. Boating & Law Enforcement Division. Available online at https://www.tn.gov/assets/entities/twra/attachments/2015 Annual Report Draft 1.pdf. Accessed January 24, 2017.
- United States Environmental Protection Agency (USEPA). 2015. National Ambient Air Quality Standards. Available at https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed November 29, 2016.
- USEPA. 201ab. Air Quality Statistics Report. Available online at https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report. Accessed November 29, 2016.
- USEPA. 2016b. 2014 National Emissions Inventory. Available online at https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data. Accessed January 12, 2017.
- United States Water Resources Council. 1978. "Floodplain Management Guidelines for Implementing E.O. 11988." *Federal Register* 43:6030, February 10, 1978.

Attachments

Attachment A – Conceptual Plans and Maps

Attachment B – U.S. Army Corps of Engineers Joint Public Notice

Attachment C – Categorical Exclusion Checklist

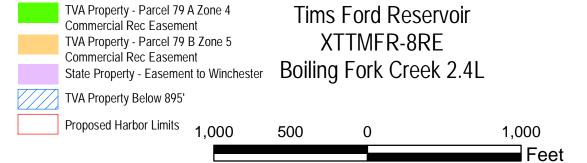
Attachment D - Tennessee State Historic Preservation Officer Correspondence

Attachment E – U.S. Fish and Wildlife Service Correspondence

ATTACHMENT A



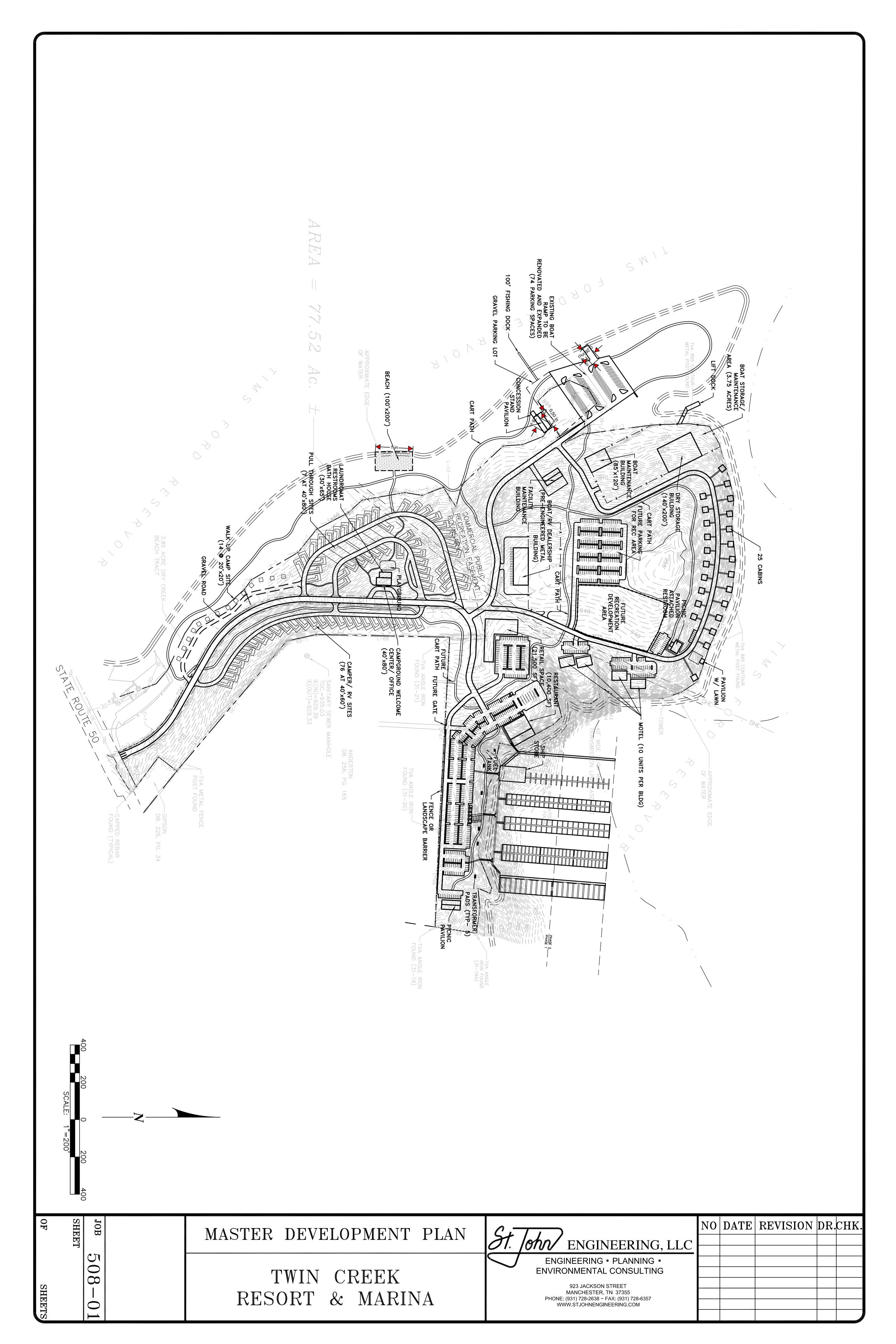


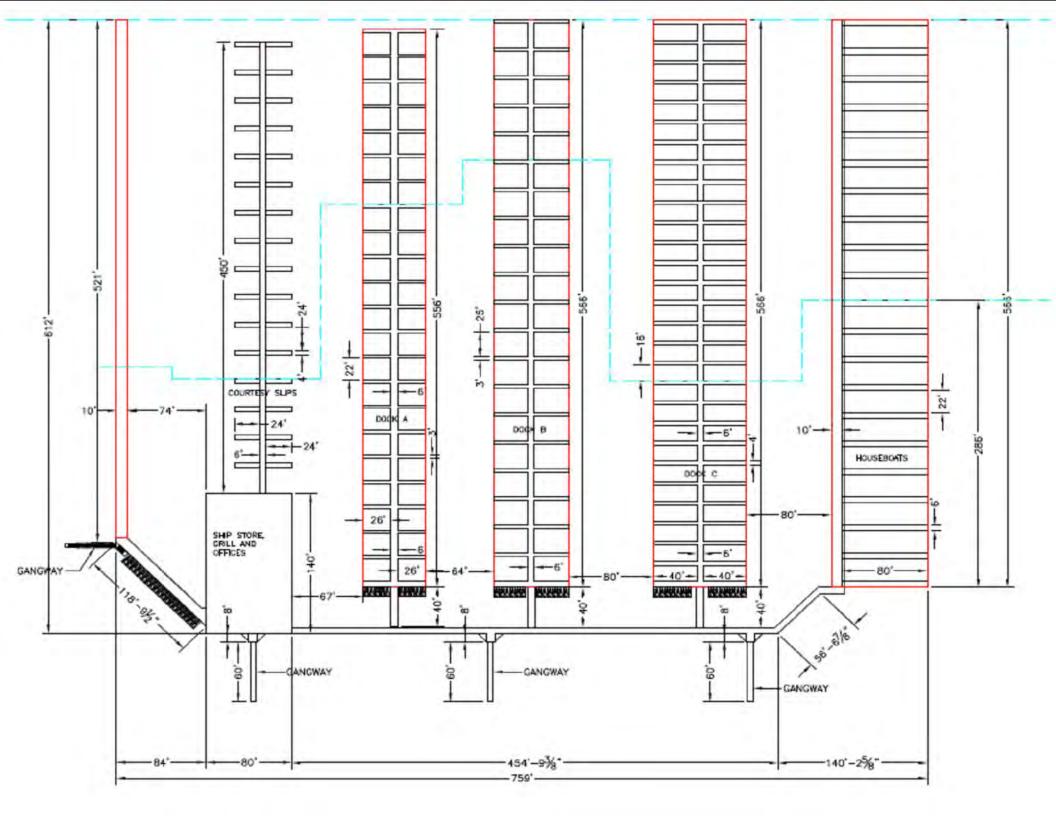


Refernce maps: 31-C 87NW

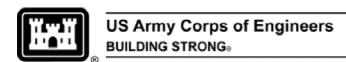
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September 30, 2016





ATTACHMENT B



Public Notice No. 16-27; File No. LRN-0-4678800

Posted 7/26/2016

Public Notice No. **16-27** Nashville District Application No. **0-4678800**

Date: July 27, 2016; Expires: August 27, 2016

Please address all comments to: Nashville District Corps of Engineers, West Regulatory Field Office

2424 Danville Road SW, Suite N, Decatur, AL 35603

Attn: Gary L. Davis

JOINT PUBLIC NOTICE
US ARMY CORPS OF ENGINEERS
AND
TENNESSEE VALLEY AUTHORITY

SUBJECT: Proposed Commercial Marina, Ship Store, Gas Dock, Harbor Limits, Riprap, Fishing Dock, Marine Travel Lift with Seawall, and Dredge at Boiling Fork Creek Mile 2.4, Left Bank, a Tributary of Elk River Mile 153.5, Left Bank, Tims Ford Lake, Franklin County, Tennessee

TO ALL CONCERNED: The application described below has been submitted for a Department of the Army Permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (CWA) for the discharge of fill material into waters of the United States. Before a permit can be issued, certification must be provided by the State of Tennessee, pursuant to Section 401 (a)(1) of the CWA, that applicable water quality standards will not be violated.

APPLICANT: Twin Creeks Marina and Resort 5385 Lynchburg Road Winchester, Tennessee 37398

LEAD FEDERAL AGENCY: The USACE and Tennessee Valley Authority (TVA) have a Memorandum of Understanding that designates TVA as the lead Federal Agency for conducting environmental reviews under the National Environmental Policy Act (NEPA) and other applicable federal laws and regulations (e.g., the National Historic Preservation Act (NHPA) and the Endangered Species Act (ESA)) for proposed work that may occur on property which is under TVA custody or control.

LOCATION: The proposed project is located north of County Road 50 (aka Lynchburg Road) on Dry Creek Ramp Road in Winchester, Franklin County, Tennessee. The proposed project is located on Tims Ford Lake at Boiling Fork Creek Mile 2.4, Left Bank, a tributary of Elk River Mile 153.5, Left Bank, within the Boiling Fork Creek watershed (HUC 060300030303). The project site may be found on the Belvidere, TN 7.5 Minute USGS Quadrangle Map (Latitude 35.19319°; Longitude -86.13449°).

ATTACHMENTS

<u>Plans for PN 16-27</u>

DESCRIPTION: The applicant proposes to discharge fill for construction of a 70-foot sea wall and marine travel lift, and discharge of fill for erosion protection along 1,500 feet of shoreline. The fill is associated with the construction of a floating commercial marina with ship store, gas dock, fishing dock, marine travel lift, and dredge on Tims Ford Lake. The purpose of the project would be to provide camping and boating recreational opportunities for the general public on Tims Ford Lake centered around a proposed commercial marina. Tims Ford Lake's normal summer pool (NSP) elevation is 888 feet above mean sea level (MSL) and normal winter pool (NWP) elevation is 873' MSL. The marina would consist of five floating dock facilities with water and electric service, floating ship store (140' x 80'), and fuel dock with 3 gas pumps (521' x 10'). The dock facilities would include: a) 450' x 54' courtesy dock consisting of 32 slips (24' x 24') with a 6' wide walkway and 4' wide fingers; b) Dock A (556' x 58') consisting of 44 double slips (24' x 22') with a 6' wide center walkway and 3' wide fingers; c) Dock B (556' x 70') consisting of 56 slips (40' x 16') with a 6' wide center walkway and 3' wide fingers; d)Dock C (566' x 86') consisting of 56 slips (40' x 16') with a 6' wide center walkway and 4'

wide fingers; and e) Houseboat slips (566' x 90') consisting of 20 slips (80' x 22') with a 10' wide walkway and 6' wide fingers. There would be a central walkway (455' x 8') that would run parallel to the shoreline which would be accessed by 3 access gangways (60' x 8') attached to 3 landing pads which would accommodate elevation changes during NSP and NWP. The Harbor Limit is proposed to extend 925 feet north from the shoreline and turn west for 1300 feet as shown on the attached drawing. The Harbor Limits would be subject to TVA review and approval. Approximately 480 cubic yards of riprap would be placed along 1500 linear feet of shoreline for erosion prevention at the proposed marina site. The proposed fishing dock (100' x 10') would be constructed parallel to the shoreline adjacent to the existing Dry Creek Boat Ramp with a 60' x 10' access walkway. A marine travel lift (75' x 31') would be constructed on concrete piers and steel rails (6 inches high and 4 inches wide) with a clear inside width of 20 feet. There would be ten 24 inch round

concrete piers each on a 4' x 4' x 16" concrete footer. A 70 linear foot concrete seawall would be constructed in association with the lift to protect the shoreline while in operation. The proposed dredge (50' x 31') would be performed with a hydraulic excavator approximately 20 linear feet lakeward from NSP beginning at 885' MSL and extending to 877' MSL. The proposed dredge would be conducted during NWP elevation to minimize impacts which would facilitate the operation of the marine travel lift. Upland activities would include the construction of a campground with bathhouse and restrooms, RV park, gravel roadways, retail center with parking, marina parking lot, restaurant, facility maintenance building, boat and RV dealership with parking, expansion of the existing boat ramp

parking with concession stand and pavilion, boat maintenance building, dry boat storage, 25 lakeside cabins, a lakeside wedding chapel, picnic pavilion with restrooms, and two small motel units with parking.

Plans of the proposed work are attached to this notice.

AVOIDANCE AND MINIMIZATION OF IMPACTS TO WATERS OF THE U.S.: The applicant stated because of the type of project impacts to waters of the U.S. could not be avoided. To minimize impacts to waters of the U.S., the applicant reduced the proposed riprap bank stabilization from 2000 to 1500 linear feet and proposes to conduct the dredge during Tims Ford winter drawdown period.

COMPENSATORY MITIGATION: The applicant is not proposing any compensatory mitigation.

PUBLIC INTEREST REVIEW/CUMULATIVE EFFECTS: The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the work must be

balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

SOLICITATION OF COMMENTS: The Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. An EA will be prepared by this office prior to a final decision concerning issuance or denial of the requested DA Permit.

HISTORIC AND CULTURAL RESOURCES: USACE conducted a review of National Register of Historic Places

(http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome) identified 18 historic resources in Franklin County, TN. Six of the resources (Bank of Winchester Building, Estill-Fite House, Franklin County Courthouse, Franklin County Jail, Trinity Episcopal Church, and Valentine Square) are located between 1.5 – 2 miles from the project site in Winchester, TN. The other 12 resources are located greater than 2 miles from the project site. A copy of this notice is being sent to the office of the State Historic Preservation Officer (SHPO) and other consulting parties for preliminary comments. After receipt of comments the Corps will evaluate consulting party concerns related to the proposed action on cultural resources, make an effects determination, and consult with SHPO as required.

ENDANGERED AND THREATENED SPECIES REVIEW (Per Section 7 of the Endangered Species Act): USACE conducted a review of U.S. Fish and Wildlife's Information for Planning and Conservation (IPaC) website (http://ecos.fws.gov/ipac/) indicated the following Threatened (T) and Endangered (E) species that may occur or could potentially be affected by the activities in this location:

- CLAMS: Fluted Kidneyshell (Ptychobranchus subtentum) (E)
- FISHES: Boulder Darter (Etheostoma wapiti) (Experimental Population, Non-essential) FLOWERING

PLANTS: Morefield's Leather Flower (Clematis morefieldii) (E); Price's Potato-bean (Apios priceana) (T); White Fringless Orchid (Platanthera integrilabia) (Proposed Threatened)

• MAMMALS: Gray bat (Myotis grisescens) (E); Indiana bat (Myotis sodalis) (E); Northern Long-Eared Bat (Myotis septentrionalis) (T)

Designated critical habitat for the Fluted Kidneyshell is located on Elk River extending from its embayed mouth at Wheeler Lake (34.89788; -87.06503) in Limestone County, AL upstream to its confluence with Farris Creek (35.16288; -86.31996) at the county line shared by Franklin and Moore Counties, Tennessee. [Federal Register (9/23/2013), vol. 78, No. 187, pages 59556 – 59620]. No designated critical habitat for the Fluted Kidneyshell occurs within Tims Ford Lake. No critical habitats have been established for the remainder of the above listed species. USACE conducted a site visit of the project area with TVA on May 17, 2016. The project area may contain suitable spring/summer habitat for the Indiana and Northern Long-Eared Bats. In order to reduce potential effects to these species, USACE proposes to prohibit tree removal associated with the project between the dates of April 1 to October 14 in any year the permit is valid.

A copy of the notice is being furnished to the United States Fish and Wildlife Service (USFWS) for their review. This public notice serves as coordination with the USFWS pursuant to Section 7(c) of the Endangered Species Act of 1972 (as amended). Per this notification, we request comments from the USFWS concerning potential impacts to threatened and/or endangered species. After receipt of comments, the USACE will evaluate the potential effects on proposed and/or listed species and their designated critical habitat and initiate consultation with USFWS, if required.

OTHER APPROVALS: Water Quality Certification from Tennessee Department of Environmental Conservation (TDEC) pursuant to Section 401 (a)(1) of the CWA are required for the proposed bank stabilization projects.

TVA approval is required under Section 26a of the TVA Act for all work that may occur on property that is under TVA control or custody and would be processed separately. In addition to the DA, TVA, and TDEC permits, other federal, state, and/or local approvals may be required for the proposed work.

PUBLIC HEARING REQUESTS: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

COMMENT PERIOD: Written statements received in this office on or before August 27, 2016, will become a part of the record and will be considered in the determination. Any response to this notice should be directed to the West Regulatory Field Office, Attention: Gary L. Davis at the above address, telephone (256) 350-5620, or email at gary.l.davis@usace.army.mil. It is not necessary to comment separately to TVA since copies of all comments will be sent to them and become part of their records on the proposal. Point of contact with TVA is Samantha Strickland, P.O. Box 1010, Muscle Shoals, AL 35662, telephone 256-386-2643, or via e-mail sjstrickland@tva.gov.

If you received this notice by mail and wish to view all of the diagrams, visit our web site at: http://www.lrn.usace.army.mil/Media/PublicNotices.aspx, or contact Mr. Gary L. Davis at the above address or telephone number, or email.

Timothy C. Wilder Chief, West Branch

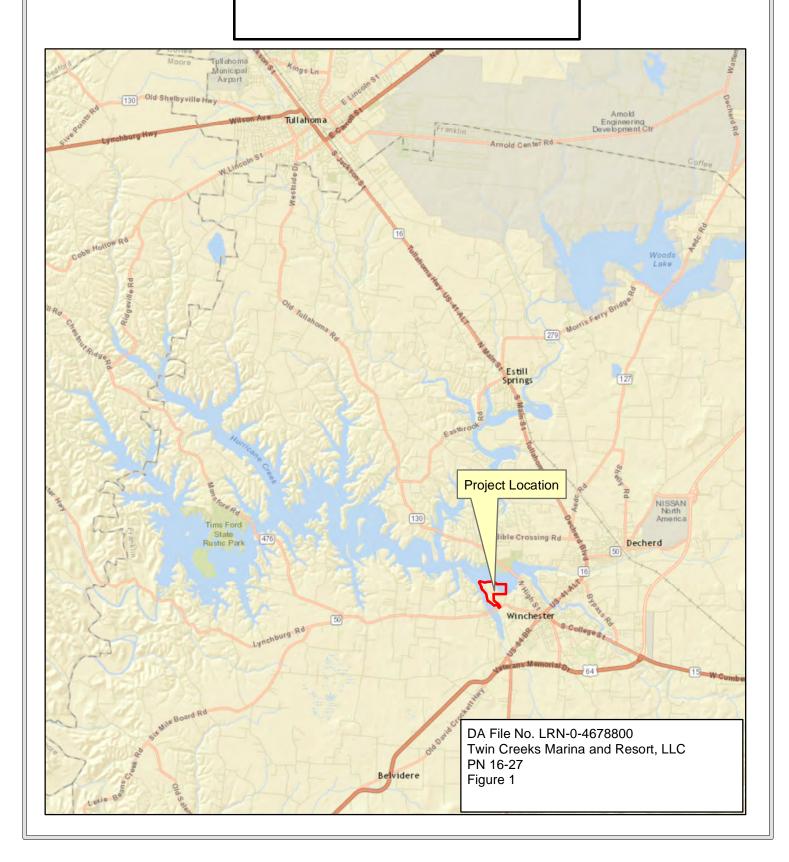
Regulatory Division U.S. Army Corps of Engineers

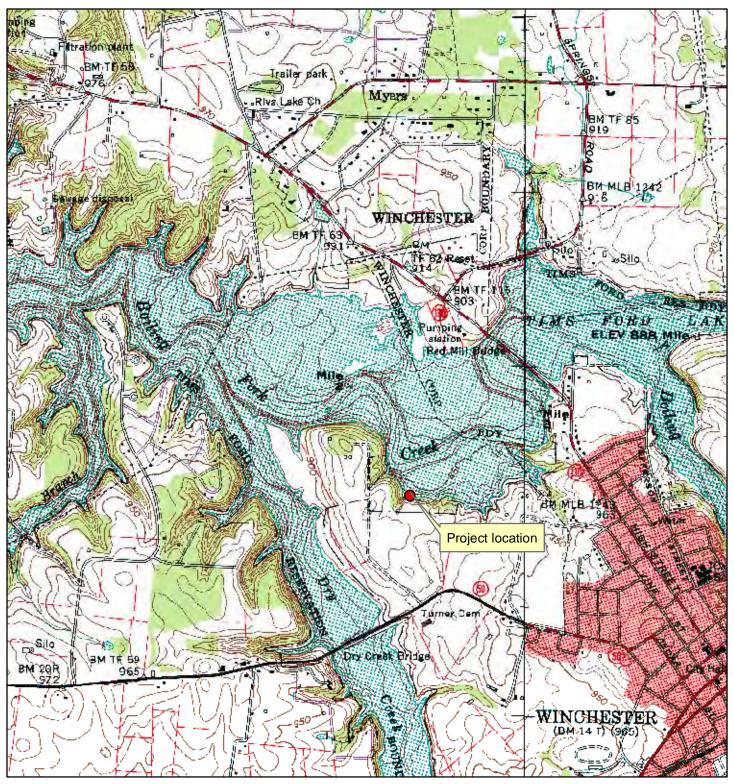


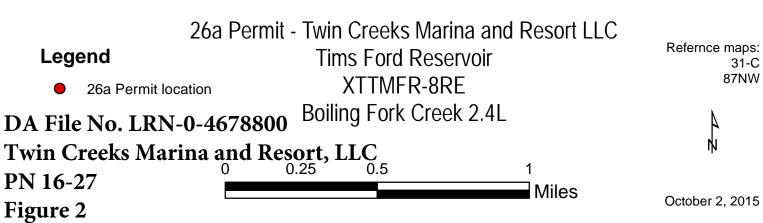
US Army Corps of Engineers Western Regulatory Field Office

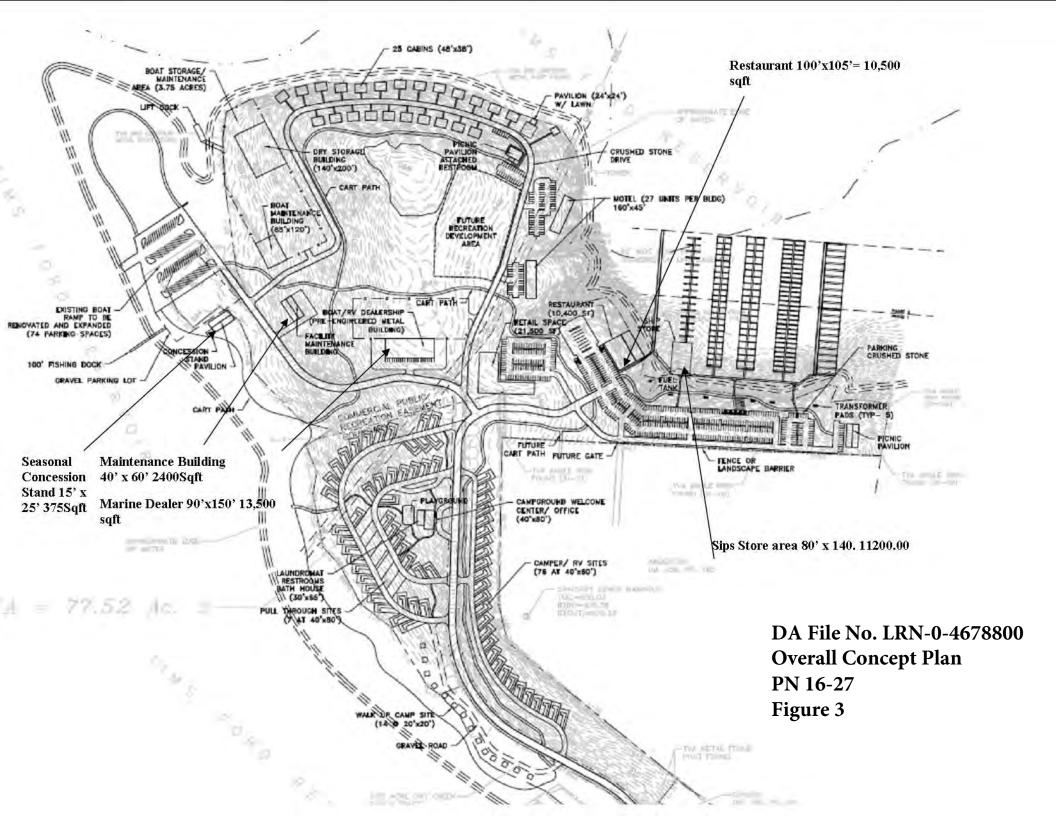
2424 Danville Road SW, Suite N Decatur, Alabama 35603

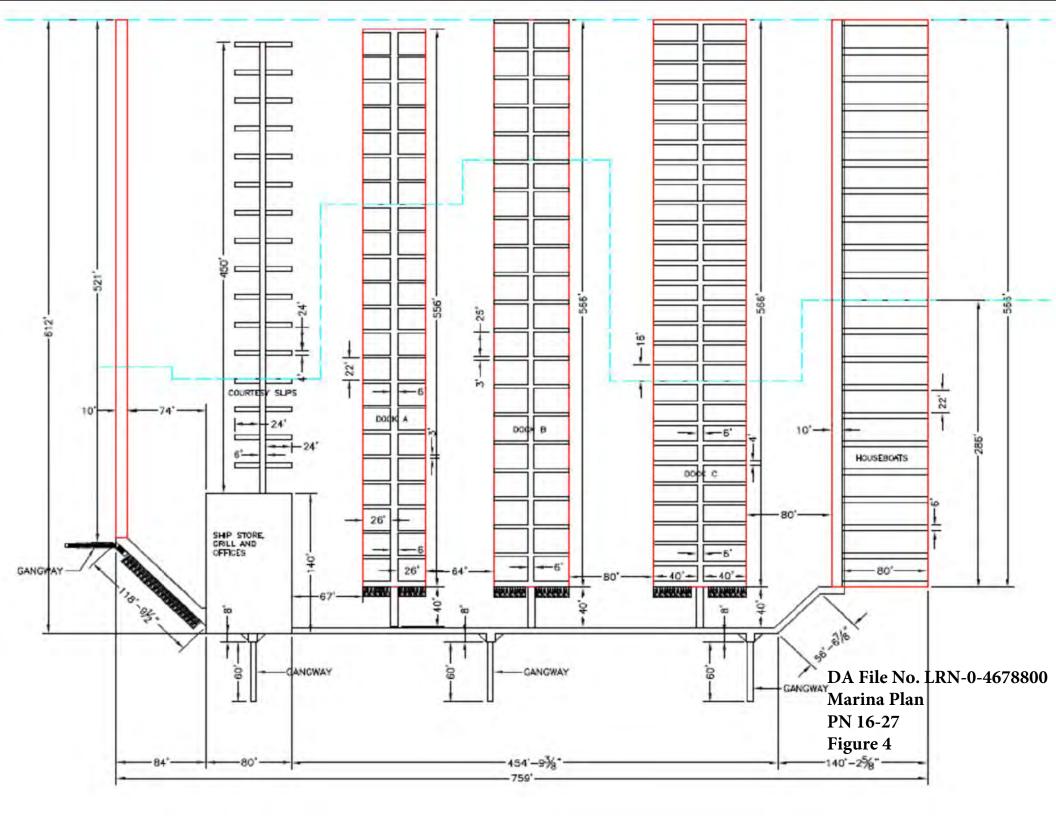


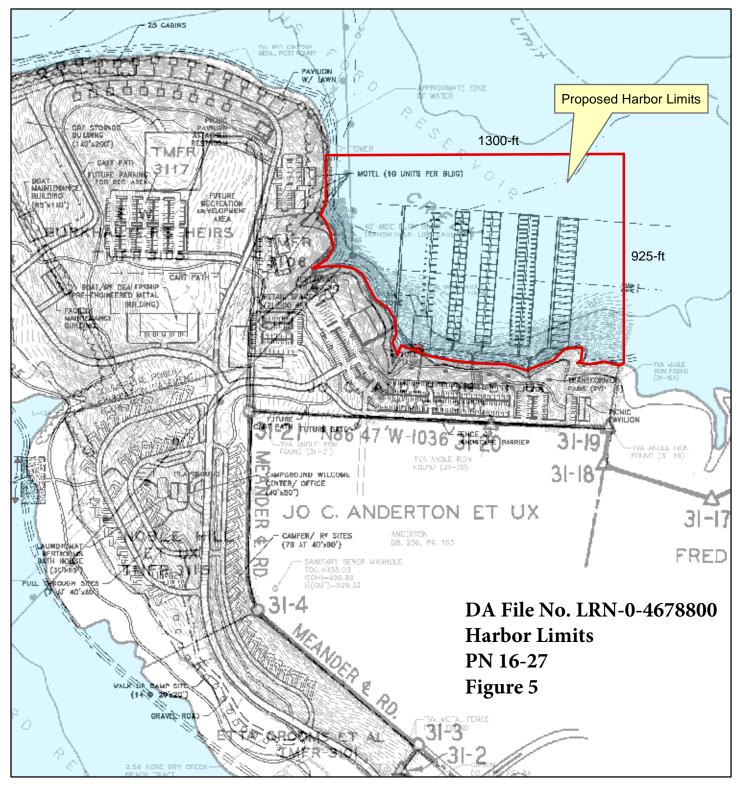












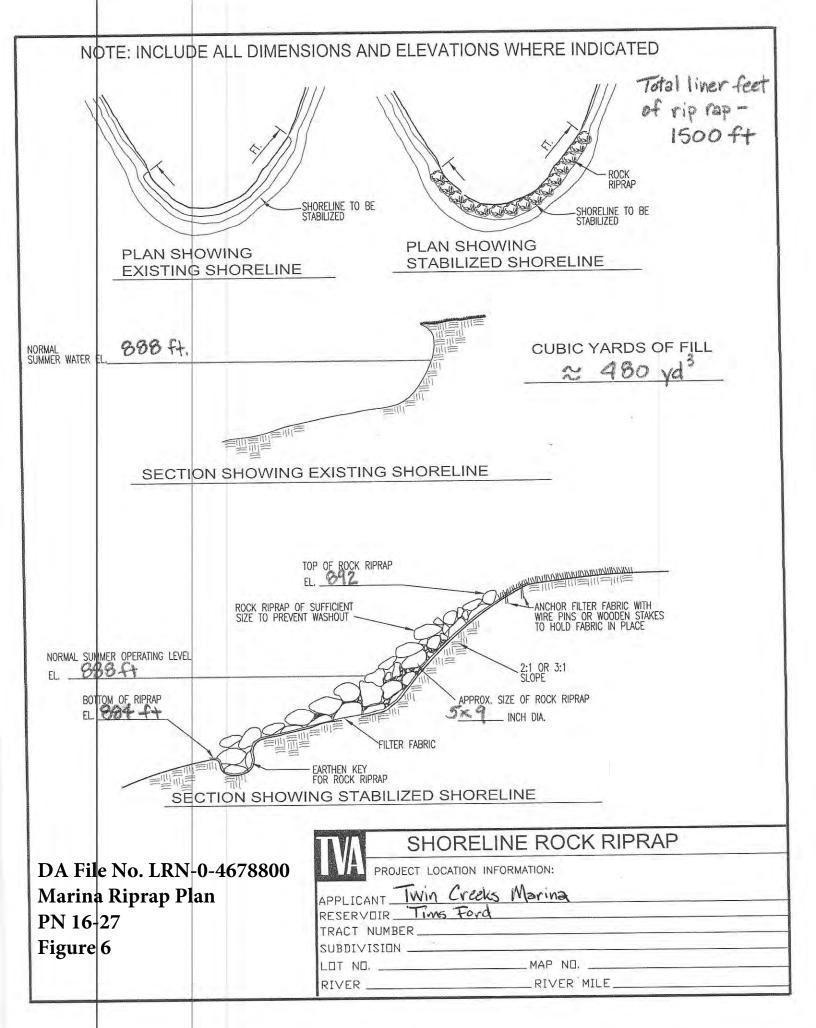
26a Permit - Twin Creeks Marina and Resort LLC
Tims Ford Reservoir
XTTMFR-8RE

26a Permit location Boiling Fork Creek 2.4L

Refernce maps: 31-C 87NW



0 0.05 0.1 0.2 Miles





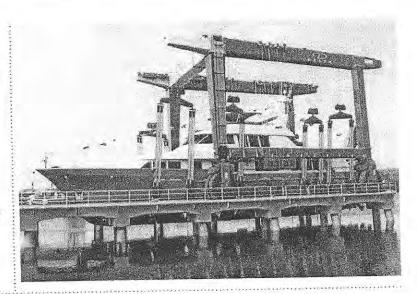
LAUNCHING PIERS

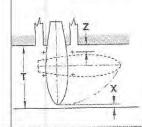
GUIDELINESBFMII AND C-SERIES

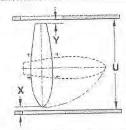
MARINE TRAVELIFT

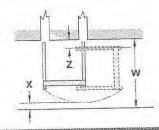
YOUR MARINA PIER INSTALLATION CAN BE DESIGNED TO MEET YOUR NEEDS!

- Proper pier installation increases efficiency improves profits.
- Wood piling, steel piling or pre-stressed concrete styles are most popular.
- Pier designs can be adapted to utilize more than one size hoist - use an accredited engineering design firm.
- The use of curb rails help guide the operation. Only use a steel rail to keep the hoist block clearance.
- Allow for an adequate turning radius depending on the type of boats your marina handles –promotes faster boat hauling.
- Running clearance depends on the size and model of your Marine Travelift - see specifications.









Section 1	► DIMEN:			DISTRICTOR W.	DIMENSION Z
MODEL	TYPICAL BOAT LENGTH	DIMENSION T	DIMENSION U	DIMENSION W	
BFMII	55'0"	42'6"	61'9"	34'4"	5'0"
BFMII	55'0"	42'6"	61'9"	34'4"	5'0"
BFMII	65'0"	48'6"	71'9"	36'1"	5'0"
BFMII	75'0"	5713"	81'9"	41'11"	7.6"
BFMII	75'0"	58'0"	81'9"	44'7"	7'6"
0 BFMII	105'0"	78'3"	111'9"	56'1"	9'0"
150CII	105'0"	79'3"	111'9"	62'9"	9'0"
200CII	125'0"	95'6"	131'9"	69'5"	13'0"
250C	125'0"	98'0"	131'9"	73'3"	13'0"
300CII	150'0"	110'6"	156'9"	78'9"	13'0"

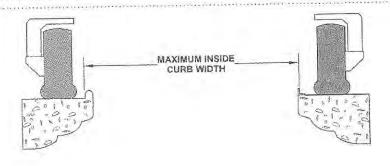
Note: The above sketches depict typical space requirements and boat length and may be adapted to suit specific circumstances. Qearance Dimensions " $X^* = 1'9"$ (0.53m), " $Y^* = 5'0"$ (1.5m). Descriptions subject to change without notice.

HOW TO MEASURE INSIDE CURB WIDTH (SPECIFICATIONS FOUND ON REVERSE SIDE UNDER COLUMN "C")

DA File No. LRN-0-4678800 Travel Lift Concept Plan

PN 16-27

Figure 8



AUNCHING PIERS SUGGESTED GUIDELINES

MARINE & TRAVELIFT

DA File No. LRN-0-4678800 Marine Travel Lift Plan PN 16-27

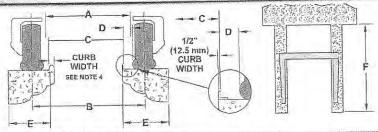
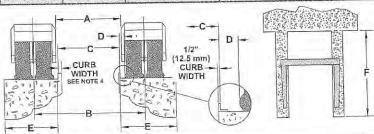


Figure 9

guite		- \$11	I ELE TIRE	MODEL SI	PECIFICAT	TONS				
MODEL	UNIT INSIDE CLEAR	UNIT TREAD WIDTH	MAXIMUM INSIDE CURB	MINIMUM TIRE CLEAR-	MINIMUM PIER WIDTH	RECOMMENDED MINIMUM PIER LENGTH	LOAD PER	CORNER	TIRES PER CORNER	APPROX. GROUND PRESSURE
	WIDTH	В	C	(LOADED)	E	F	VERTICAL LBS	LATERAL LBS		PSI
15 BFMII	17'0"	19'0"	16'9"	0'4"	2'7"	45'0"	21,700	2,170	1	110
25 BFMII	17'0"	19'0"	16'9"	0'4"	2'7"	45'0"	21,700	2,170	1	110
35 BFMII	17'0"	19'0"	16'9"	0'4"	2'7"	50'0"	30,300	3,030	1	120
50 BFMII	20'0"	22'0"	19'10'	0'4"	2'8"	55'0"	45,200	4,520		125
75 BFMII	21'0"	28'4"	20/11"	0'4"	2'11"	60'0"	61,300	6,130	1	140
100 BFMII	26'0"	29'2"	25'8"	0'5"	4'1"	75'0"	90,000	9,000	1	116
600C-IL8	38'0"	43'10"	38'2"	1'0"	6'9"	150'0"	596,900	59,690	2	120

DUALTIRE



		DU.	L TIRE W	ODEL SPE	CIFICATIO	NS				
MODEL	UNIT INSIDE CLEAR WIDTH	UNIT TREAD WIDTH	MAXIMUM INSIDE CURB WIDTH	MINIMUM TIRE CLEAR- ANCE	MINIMUM PIER WIDTH	RECOMMENDED MINIMUM PIER LENGTH	LOAD PER	CORNER	TIRES PER CORNER	APPROX. GROUND PRESSURE
	A	В	c	(LOADED)	Ε	F	VERTICAL LBS	LATERAL LBS		PSI
150CII	28'0"	33'0"	27'10"	0'6"	5'9"	90'0"	128,900	12,890	2	150
200CII	30'0"	36'4"	30'0"	0'6"	6'10"	100'0"	186,800	18,680	2	145
250C	30'0"	36'6"	29'8"	0'6"	7'4"	100'0"	234,400	23,440	2	130
300CII	32'0"	39'0"	31'8"	0'7"	7'10"	100'0"	271,200	27,120	2	145
400C	35'0"	42'8"	34'4"	0'9"	9'0"	120'0"	370,200	37,020	2	135
500C	38'0"	45'0"	37'3"	0'10"	9'0"	130'0"	493,100	49,310	4	130
600C	38'0"	45'0"	37:1"	0'10"	9'0"	150'0"	596,900	59,690	4	145
700C	38'0"	46'6"	37'4"	1111	10'0"	150'0"	721,500	72,150	-4	135
800C	48'0"	59'6"	45'9"	1'2"	14'2"	180'0"	813,200	81,320	2	145
1000C	55'0"	67'0"	55'0"	1'2"	13'0"	200'0"	1,090,100	109,010	4	105

^{1.} Unit inside clear width "A" is shown for a standard machine. Dimension "A" may be varied to sull customer's desired width. Dimensions "B" and "C" will change by the same amount.

Marine Travelift, Inc. • 49 E. Yew St • Sturgeon Bay, WI 54235 USA • Phone: 920.743.6202 • Fax: 920.743.1522 • E-mail: sales@marinetravelift.com • www.marinetravelift.com ined within this brachure is believed to be correct at time of printing. Not all accessories shown in photos or described may be available as standard equipment or as an option. Options, features and specifications are subject to change without notice. Launching Piers-091614 © 2014

^{2.} Dimension "D" is the minimum recommended. This dimension can be increased slightly by increasing clear width "A" (see note 6). Dimension "E" will increase by the same amount as the increase

^{3.} Excessively increasing the curb width or dimension "A" without increasing dimension "C" may cause interference when attempting to lower the sling blacks past the pier.

^{4.} The minimum pier width "E" is the width of the pier required to provide a minimum tire clearance space on both sides of the tires when traveling on a pier. This width "E" does not include space for alkway or the curb width.

^{5.} The customer must obtain approved plans from his own engineering firm for actual pier construction.

- total linear feet of wall \$20 - total yards of material

to be removed and

placed above 895'

elevation

\$\int(\epsilon) \text{6046}\$

A excavation to be taken place at low weter level by means of a hydraulic excavator

DA File No. LRN-0-4678800 Marine Travel Lift Seawall Cross Section Plan PN 16-27 Figure 10

NOT TO SCALE

20,	oxisting over bed	slope 3:1 4:1 4:1 the and side slopes to be stabilized with rip rap if applicable	- total yards of material removed and placed above sens elevation 2 100 yd	65 slope protection 3 43yd 3 Not to scale
((ood)	elevation 885	A proposed	so,	DA File No. LRN-0-4678800 Dredge Plan PN 16-27 Figure 11
988' elevation (Summer pool)	A excavation to be taken place of low water level by Means of a hydraulic excavator	dredged motorio	16 appr. length of dredge appr. width of dredge	873' clevation (winter pool)

DA File No. LRN-0-4678800 Fishing Dock Plan PN 16-27 Figure 12 Parking Lot Area to be Expended BOAT LAUNCH RAMP NOT TO BE MODIFIED OR EXPANDED. **Fishing Dock Changed to Horizontal with Shoreline** 100' Long-Distance out 60' CONCESSION 100' FISHING DOCK(100' x 10') **PAVILION** GRAVEL PARKING LOT

ATTACHMENT C

Categorical Exclusion Checklist for Proposed TVA Actions

Categorical Exclusion Number Claimed	Organization ID Number RLR274585			Tracking No	umber (NEPA Administration Use Only)	
Form Preparer		Project Initiator/Manager		Business Unit		
Samantha J Strickland		Samantha J Strickland		P&NR - Commercial & Public Recreation		
Project Title 26a Category 3 RLR 274585 Twin Creeks Marina and Resort Tims Ford Reservoir					Hydrologic Unit Code	
Description of Proposed Action (Include An For Proposed Action See Attachments and	•	es of Implementation)		Conti	nued on Page 3 (if more than one line)	
Initiating TVA Facility or Office Central/Western Region			TVA	A Business U	nits Involved in Project	
Location (City, County, State) FRANKLIN, TN, County, State: FRANKLIN, TN Map Sheet(s): 31 C/D Stage 87 NW (uad S	heet Stream	(s): Boiling Fork Cr 2.40 L	

Parts 1 through 4 verify that there are no extraordinary circumstances associated with this action:

Part 1. Project Characteristics

Is th	nere evidence that the proposed action	No	Yes	Commit- ment	Information Source for Insignificance
	1.ls major in scope?	Х			Strickland, Samantha J. 11/10/2016
	2.Is part of a larger project proposal involving other TVA actions or other federal agencies?	Х			Strickland, Samantha J. 11/10/2016
*	3.Involves non-routine mitigation to avoid adverse impacts?		Х	No	For comments see attachments
	4.Is opposed by another federal, state, or local government agency?	Х			Strickland, Samantha J. 11/10/2016
*	5. Has environmental effects which are controversial?	Х			Strickland, Samantha J. 11/10/2016
*	6.Is one of many actions that will affect the same resources?	Х			Strickland, Samantha J. 11/10/2016
	7.Involves more than minor amount of land?		Х		For comments see attachments

^{*}If "yes" is marked for any of the above boxes, consult with NEPA Administration on the suitability of this project for a categorical exclusion.

Part 2. Natural and Cultural Features Affected

			Permit	Commit-	Information Source for
Would the proposed action	No	Yes		ment	Insignificance
1.Potentially affect endangered, threatened, or special status species?		Х	No	Yes	For comments see attachments
2.Potentially affect historic structures, historic sites, Native American religious or cultural properties, or archaeological sites?		Х	No	No	For comments see attachments
Potentially take prime or unique farmland out of production?	Х		No	No	Strickland, Samantha J. 11/30/2016
Potentially affect Wild and Scenic Rivers or their tributaries?	Х		No	No	Fouse, Jerry G. 03/17/2016
5.Potentially affect a stream on the Nationwide Rivers Inventory?	Х		No	No	Fouse, Jerry G. 03/17/2016
6.Potentially affect wetlands?	Χ		No	No	For comments see attachments
7.Potentially affect water flow, stream banks or stream channels?	Х		No	No	For comments see attachments
8.Potentially affect the 100-year floodplain?		Х	No	No	For comments see attachments
9.Potentially affect ecologically critical areas, federal, state, or local park lands, national or state forests, wilderness areas, scenic areas, wildlife management areas, recreational areas, greenways, or trails?	Х		No	No	For comments see attachments
10.Contribute to the spread of exotic or invasive species?	Х		No	No	For comments see attachments
11.Potentially affect migratory bird populations?	Х		No	No	For comments see attachments
12.Involve water withdrawal of a magnitude that may affect aquatic life or involve interbasin transfer of water?	Х		No	No	Strickland, Samantha J. 11/30/2016
13.Potentially affect surface water?	Х		No	No	Strickland, Samantha J. 11/30/2016
14.Potentially affect drinking water supply?	Х		No	No	Strickland, Samantha J. 11/30/2016
15.Potentially affect groundwater?	Х		No	No	Strickland, Samantha J. 11/30/2016
16.Potentially affect unique or important terrestrial habitat?		Х	No	No	For comments see attachments
17.Potentially affect unique or important aquatic habitat?	Х		No	No	For comments see attachments

Part 3. Potential Pollutant Generation

Would the proposed action potentially (including accidental or unplanned)	No	Yes	Permit	Commit- ment	Information Source for Insignificance
1.Release air pollutants?	Х		No	No	For comments see attachments
2.Generate water pollutants?	Х		No	No	For comments see attachments
3.Generate wastewater streams?	Х		No	No	Strickland, Samantha J. 11/30/2016
4.Cause soil erosion?		Х	No	No	For comments see attachments
5.Discharge dredged or fill materials?		Х	Yes	No	For comments see attachments
6.Generate large amounts of solid waste or waste not ordinarily generated?	Х		No	No	Strickland, Samantha J. 11/30/2016
7.Generate or release hazardous waste (RCRA)?	Х		No	No	Strickland, Samantha J. 11/30/2016
8.Generate or release universal or special waste, or used oil?		Х	No	No	For comments see attachments
9.Generate or release toxic substances (CERCLA, TSCA)?	Х		No	No	Strickland, Samantha J. 11/30/2016
10.Involve materials such as PCBs, solvents, asbestos, sandblasting material, mercury, lead, or paints?		Х	No	No	For comments see attachments
11.Involve disturbance of pre-existing contamination?	Х		No	No	Strickland, Samantha J. 11/30/2016
12.Generate noise levels with off-site impacts?		Х	No	No	For comments see attachments
13.Generate odor with off-site impacts?	Х		No	No	Strickland, Samantha J. 11/30/2016
14.Produce light which causes disturbance?	Х		No	No	Strickland, Samantha J. 11/30/2016
15.Release of radioactive materials?	Х		No	No	Strickland, Samantha J. 11/30/2016
16.Involve underground or above-ground storage tanks or bulk storage?		Х	No	No	For comments see attachments
17.Involve materials that require special handling?	Х		No	No	Strickland, Samantha J. 11/30/2016

Part 4. Social and Economic Effects

Would the proposed action	No	Yes	Permit	Commit- ment	Information Source for Insignificance
1.Potentially cause public health effects?	Х			No	Strickland, Samantha J. 11/30/2016
2.Increase the potential for accidents affecting the public?	Х			No	Strickland, Samantha J. 11/30/2016
3.Cause the displacement or relocation of businesses, residences, cemeteries, or farms?	Х			No	Strickland, Samantha J. 11/30/2016
4.Contrast with existing land use, or potentially affect resources described as unique or significant in a federal, state, or local plan?	Х			No	Strickland, Samantha J. 11/30/2016
5.Disproportionately affect minority or low-income populations?	Х			No	Strickland, Samantha J. 11/30/2016
6.Involve genetically engineered organisms or materials?	Х			No	Strickland, Samantha J. 11/30/2016
7.Produce visual contrast or visual discord?		Х		No	For comments see attachments
8.Potentially interfere with recreational or educational uses?		Х		No	For comments see attachments
9.Potentially interfere with river or other navigation?		Х	Yes	No	For comments see attachments
10.Potentially generate highway or railroad traffic problems?	Х			No	Strickland, Samantha J. 11/30/2016

Part 5. Other Environmental Compliance/Reporting Issues

Would the proposed action	No	Yes	Commit- ment	Information Source for Insignificance
1.Release or otherwise use substances on the Toxic Release Inventory list?	Х		No	Strickland, Samantha J. 11/30/2016
2.Involve a structure taller than 200 feet above ground level?	Х		No	Strickland, Samantha J. 11/30/2016
3.Involve site-specific chemical traffic control?	Х		No	Strickland, Samantha J. 11/30/2016
4.Require a site-specific emergency notification process?	Х		No	Strickland, Samantha J. 11/30/2016
5.Cause a modification to an existing environmental permit or to existing equipment with an environmental permit or involve the installation of new equipment/systems that will require a permit?	Х		No	Strickland, Samantha J. 11/30/2016
6.Potentially impact operation of the river system or require special water elevations or flow conditions??	Х		No	Strickland, Samantha J. 11/30/2016
7.Involve construction of a new building or renovation of existing building (i.e., major changes to lighting, HVAC, and/or structural elements of building of 2000 sq. ft or more) on which TVA will pay/pays the utilities??	Х		No	Strickland, Samantha J. 11/30/2016

Therefore, this proposal qualifies for	a significant impact on the quality of a categorical exclusion under Section	f the human environment and that no on 5.2. of TVA NEPA I	•
Project Initiator/Manager Samantha J Strickland			Date 11/30/2016
TVA Organization P&NR	E-mail sjstrick@tva.g	'	hone
Environmental Co	ncurrence Reviewer	Prepar	er Closure
W. Doug White	11/30/2016	Samantha J Strickland	11/30/16
Ş	Signature		ignature

Signature Signature

Other Review Signatures (as required by your organization)

Attachments/References

Description of Proposed Action Continued from Page 1

In 1985, TVA granted a perm. easmnt for commercial rec the state of TN, XTTMFR-8RE on Tims Ford Reservoir. City of Winchester, leased to Twin Creeks Resort and Marina, LLC for devlpmt of a marina & resort complex on 55 ac TVA easmt, along with ~20 ac of TDEC property. Proposed for 26a approval is existing boat ramp, expand parking, add concession space and restroom building; picnic pavilion and picnic sites; courtesy dock & public fishing pier; marina facility to be constructed in two phases: 20 each 80' slips, 56 each 40' long slips, 80 each 32' slips, 88 each 26' slips and 64 courtesy slips; the marina will also have a floating ships store, fuel dock & harbor limits with the Boiling Fork Creek embayment. Additional landbased facilities requested, including utilities, campground, hotel and retail shops. A complete project description and plans are attached to the record. Applicant(s): Twin Creeks Marina and Resort 5385 Lynchburg Road Winchester TN 37398

CEC General Comment Listing

19.

0_0 00	g
1.	NO COMMENT TEXT
2.	By: 26a Added Comment NO COMMENT TEXT
3.	By: 26a Added Comment NO COMMENT TEXT
4.	By: 26a Added Comment NO COMMENT TEXT
5.	By: 26a Added Comment NO COMMENT TEXT
6.	By: 26a Added Comment NO COMMENT TEXT
7.	By: 26a Added Comment NO COMMENT TEXT
8.	By: 26a Added Comment NO COMMENT TEXT
9.	By: 26a Added Comment NO COMMENT TEXT
10.	By: 26a Added Comment NO COMMENT TEXT
11.	By: 26a Added Comment NO COMMENT TEXT
12.	By: 26a Added Comment NO COMMENT TEXT
13.	By: 26a Added Comment master plans for development
14.	By: 26a Added Comment marina plans
15.	By: 26a Added Comment NO COMMENT TEXT
16.	By: 26a Added Comment NO COMMENT TEXT
17.	By: 26a Added Comment NO COMMENT TEXT
18.	By: 26a Added Comment detailed project description
40	By: 26a Added Comment

additional information on proposed facilities.

By: 26a Added Comment

	20.	NO COMMENT TEXT		
		By: 26a Added Comment		
:	21.	NO COMMENT TEXT		
:	22.	By: 26a Added Comment NO COMMENT TEXT		
:	23.	By: 26a Added Comment cabin plans		
:	24.	By: 26a Added Comment gas dock location; AST location.		
:		By: 26a Added Comment hotel plans		
:	26.	By: 26a Added Comment proposed Boiling Fork harbor limits main marina		
:	27.	By: 26a Added Comment Proposed Dry Creek harbor limits (fishing pier and ramp)		
:	28.	By: 26a Added Comment bank stabilization		
:	29.	By: 26a Added Comment excavation at travel lift.		
;	30.	By: 26a Added Comment travel lift specifications		
;	31.	By: 26a Added Comment chapel/park pavilion plans		
;	32.	By: 26a Added Comment SHPO letter sent 07-28-2016		
;	33.	By: 26a Added Comment TVA concurrence/approval of lease from Winchester to Twin Creeks Ma	arina and Resort, LLC. OCt 2015	
		By: 26a Added Comment		
CEC Comment Listing				
Part 1 Comments				
	7.	See EA for discussion on land use.		
		•	11/30/2016	
	3.	See EA for non-routine mitigation. EA commitments will be tracked in I instead of CE commitments. By: Samantha J Strickland	ENTRAC under EA commitments 11/30/2016	
	1.	See attached TZ input and note the following commitment: Twenty tree	s (sixteen hardwood snags, one	
		southern magnolia, one black locust, one American beech, and one southern red oak) within the project footprint may provide some suitable summer roosting habitat for Indiana bat and northern long-eared bat. These trees have been flagged with blue and white flagging in the field. In addition, approximately		
		0.84 acres of suitable bat habitat exists in the TDEC parcel within this project footprint. All of these trees must be avoided in order to ensure impacts to federally listed bat species are avoided.		
		By: Elizabeth B Hamrick	03/06/2016	
			03/06/2016	20.11 Bytes
	1.	CEC33902 - TZ Map.pdf See attached table for records of special status aquatic species based	03/06/2016 off of search of TVA natural	243.65 Bytes
	1.	heritage data on 1/28/2016. Review of project plans, site photos, and T project is not likely to adversely affect these species or their habitat.	VA heritage data shows that the	
		•	01/28/2016 01/28/2016	73.97 Bytes
1.	1.	A January 21, 2016 query of the TVA Heritage database indicates no fe		73.97 Dytes
		five state-listed plant species are known from within five miles of the pro-	oposed project. Three federally-	
		listed plant species are known from Franklin County, Tennessee, where No rare plants or habitat capable of supporting rare plants was observe		
	field survey of the project area. The proposed action would not result in impacts to rare plant			
		populations. By: David T Nestor	02/01/2016	
			02/01/2016	27.24 Bytes
	2.	Please find attached EA input with findings and commitments		- ,
		By: Michaelyn S Harle	10/12/2016	
		Files: Cultural Resources Information for Twin Creeks EA.docx	10/12/2016	16.71 Bytes
	8.	See EA for Floodplain review		
		By: Samantha J Strickland	11/10/2016	

9. Review of TVA heritage data shows 2 managed areas, 2 special areas, and 4 natural areas within 5 miles of the project site. The project will not affect these resources due to its nature and its distance from these resources. By: Joshua Burnette 01/28/2016 10. Based on review of the proposed actions, maps and photos provided by the project lead, the proposed project would not contribute to the spread of exotic or invasive terrestrial animal species. By: Elizabeth B Hamrick 02/28/2016 10. Review of TVA heritage data, site information and photos, and project plans shows that the project will not contribute to the spread of exotic or invasive species. By: Joshua Burnette The proposed project would not contribute to the spread of exotic or invasive species because the 10. project area does contain a sizable proportion of non-native, invasive species. These non-native, invasive species are distributed widely throughout the region and implementation of the proposed project would not change this situation. The project would not contribute to the spread of exotic or invasive species. By: David T Nestor 02/01/2016 11. No wading bird colonies have been documented within three miles of the project area. No heronries or aggregations of migratory birds were observed during field review on January 27, 2016. No other aggregations of migratory birds are known from the project area. Activities associated with the proposed project would not impact wading bird colonies or other aggregations of migratory birds. By: Elizabeth B Hamrick 02/28/2016 No uncommon plant communities are known from the vicinity of the project area and no rare plant 16. communities were observed during the field survey. Implementation of the proposed project would not potentially affect unique or important terrestrial habitat. 02/01/2016 One cave has been recorded within three miles of the project area. It is approximately 2.7 miles away 16. from the project footprint. This cave will not be impacted by the proposed actions. No caves were observed in the project footprint during field reviews on January 27, 2016. However, a partially flooded, old storm cellar was observed on the property. A survey of this structure was performed on February 24, 2016. No signs of bats were observed (staining, guano). There are no reported habitats unique or important to terrestrial animals within three miles of the proposed project. Activities associated with the proposed project would not impact unique or important terrestrial habitats. By: Elizabeth B Hamrick 02/28/2016 17. Most populations of state and federally listed mussels, snails and fishes were extirpated after the completion of Tims Ford Dam. Extant populations are known from some of the Elk River below the dams and from some of the unimpounded tributaries. Habitat at the proposed site, impounded embayment, is not suitable for the various state and federally listed aquatic species known to occur in the vicinity. By: Joshua Burnette 01/28/2016 After review of TVA's Heritage data and a site visit no wetlands were identified in the project area. There 6. will be no impact to wetlands. By: Joshua Burnette 10/14/2016 7. No significant impacts are anticipated. Actions will not affect water flow or existing condition of the stream channel. Stabilization along shoreline will help to prevent erosion and disturbances to shoreline will have insignificant and localized effect to stream bank. By: Joshua Burnette 01/28/2016 Part 3 Comments 1. Further analysis in EA By: Samantha J Strickland 11/30/2016 2. See EA By: Samantha J Strickland 11/30/2016 Soil disturbance would be temporary in nature and insignificant with implementation of applicable 4. Section 26a General and Standard Conditions including applicable BMPs By: Samantha J Strickland 11/30/2016 The proposed riprap is considered fill and will require a Corps permit under Section 404 of the Clean 5. Water Act. Material is from a commercial source. By: Samantha J Strickland 11/30/2016 If marine repair/service or Boat/RV dealership facility generates used oil in containers 55 gallons or 8. greater they must be in sized secondary containent. Smaller containers as a BMP should be in secondary containment. Note this containment requirement applies to new lube oil as well. By: Andrew F Polahar 12/17/2015 10. See EA By: Samantha J Strickland 11/30/2016 Construction noise would be noticeable for a short time. There would be a small increase in total noise 12. from powered watercraft similar to the noise currently produced on the reservoir and the people who might experience this increase are likely to be participating in the same powered watercraft activities. For these reasons, the environmental noise impacts of the proposed marina are expected to be insignificant. By: Samantha J Strickland 11/30/2016 16. Piping out to Fuel Dock, 510' from shore must be in double walled piping. Piping must be installed in such a way the interstial space can be inspected for the presence of liquid (water or fuel).

12/17/2015

By: Andrew F Polahar

16. Above ground fuel storage tank(s) must have sized secondary containment. This includes any bulk oil

storage starting at 55 gallons, therefore, 55 gallon drums must be in secondary containment.

By: Andrew F Polahar 12/17/2015

16. If the volume of oil on site (in containers 55 gallons and up) exceeds 1,320 gallons the Marina must have an SPCC plan in accordance with 40 CFR 112. This total includes fuels, lubricating oil,

transformer insulating oil, used oil, vegetable oil, animal fats and greases, fish and marine mammal oils,

including ois from seeds, nuts, fruits, and kernels.

By: Andrew F Polahar 12/17/2015

Part 4 Comments

7. see EA

By: Samantha J Strickland 11/30/2016

8. See EA

By: Samantha J Strickland 11/30/2016

9. Please see attached navigation comments.

By: Nicole Berger 08/24/2016

Files: 274585tfr Rev1 - 26a - Tims Ford Reservoir - Boiling Fork 08/24/2016 28.50 Bytes

Creek Mile 2.4L - Twin Creeks Marina.doc

CEC Permit Listing

Part 3 Permits

5. Section 404 Permit (¿404 Clean Water Act)

By: Samantha J Strickland 11/30/2016

5. State Water Quality Certification (¿401 Clean Water Act)

By: Samantha J Strickland 11/30/2016

Part 4 Permits

9. Section 10 Permit (¿10 Rivers and Harbor Act)

By: Samantha A Hartsell 03/15/2016

CEC Commitment Listing

Part 2 Commitments

User Defined: Twenty trees (sixteen hardwood snags, one southern magnolia, one black locust, one American beech, and one southern red oak) within the project footprint may provide some suitable summer roosting habitat for Indiana bat and northern long-eared bat. These trees have been flagged with blue and white flagging in the field. In addition, approximately 0.84 acres of suitable bat habitat exists in the TDEC parcel within this project footprint. All of these trees must be avoided in order to ensure impacts to federally listed bat species are avoided.

By: Elizabeth B Hamrick 03/06/2016

ATTACHMENT D



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, TN 37902

July 26, 2016

Mr. E. Patrick McIntyre, Jr. Executive Director Tennessee Historical Commission 2941 Lebanon Pike Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

TENNESSEE VALLEY AUTHORITY (TVA), TWINS CREEK RESORT AND MARINA, FRANKLIN COUNTY, TENNESSEE

TVA proposes to issue a 26a approval for the construction of infrastructure for a resort and marina on Tims Ford Reservoir, Franklin County, Tennessee. In 1985, TVA granted a 55-acre permanent easement for commercial recreation to the state of Tennessee. The City of Winchester leased the TVA easement to Twin Creeks Resort and Marina, LLC (Applicant) for the development of a marina and resort complex on the easement along with 20 acres of TDEC property. The proposed 26a approval is for an existing boat ramp, expanded parking area, concession space and restroom building, picnic pavilion, picnic sites, courtesy dock and public fishing pier (Figure 1). TVA determined the area of potential effects (APE) to be 77-acre tract of TVA fee-owned land subject to 26a approval and the visual/architectural APE to be the .5 mile radius within the direct line of sight from the project area.

TVA contracted with Tennessee Valley Archaeological Research (TVAR) to conduct a Phase I archaeological survey. Please find enclosed the resulting report, titled A Phase I Cultural Resources Survey of the Proposed Tims Ford Marina on Tennessee Valley Authority's (TVA) Fee Owned Land near Winchester, Franklin County, Tennessee. The survey resulted in the identification of one archaeological site (40FR623). Additionally, TVAR revisited four previously recorded sites (40FR190, 40FR191, 40FR494, and 40FR495). TVA finds that sites 40FR494, 40FR495 and 40FR623 are ineligible for the National Register of Historic Places (NRHP). TVA finds sites 40FR190 and 40FR191 may have the potential to address research questions regarding the prehistory and history and therefore should be considered undetermined. The purposed marina plans depict a proposed walking trail at the location of 40FR190 and a portion of a parking area at 40FR191. The walking trail will be located on an existing ATV trail, and no additional grading would occur. Gravel will be placed along the path to protect from additional erosion. The proposed parking lot will be shifted to avoid site 40FR191, and the area will be left as a green space. The Applicant proposes the removal of invasive vegetation in these locations. All work will be done by hand with the use of herbicide, and no mechanical equipment will be allowed within a 20-foot buffer of 40FR191.

Mr. E. Patrick McIntyre, Jr. Page Two July 26, 2016

TVAR also conducted the survey of the architectural APE. As a result of the survey, TVAR documented and assessed 12 architectural resources located within the APE, consisting of two previously documented (FR-4 and FR-882) architectural resources and 10 (IS-1-IS-10) newly recorded properties. TVA finds that FR-4, FR-882 and 1S-1 – IS-10 are ineligible for the NRHP based on their lack of architectural distinction and loss of integrity caused by modern alterations. Furthermore, for both sites FR-4 and FR-882, visual line of site to the project is partially obstructed by vegetation, and the historic setting has already been compromised by modern residential development. Should your office disagree with TVA's finding that FR-4 and FR-882 are not eligible for NRHP, TVA finds that the proposed undertaking would not have an adverse visual effect to FR-4 and FR-882.

Pursuant to 36 CFR Part 800.3(f)(2), TVA is consulting with federally recognized Indian tribes regarding properties within the proposed project's APE that may be of religious and cultural significance to them and eligible for the NRHP.

If you have any questions, please contact Michaelyn Harle at (865) 632-2248 or by email at mharle@tva.gov.

Sincerely,

Clinton E. Jones

Manager, Biological and Cultural Compliance Safety, River Management and Environment

WT11C-K

MSH:CSD Enclosures cc (Enclosures):

> Ms. Jennifer Barnett Tennessee Division of Archaeology 1216 Foster Avenue, Cole Bldg. #3 Nashville, Tennessee 37210

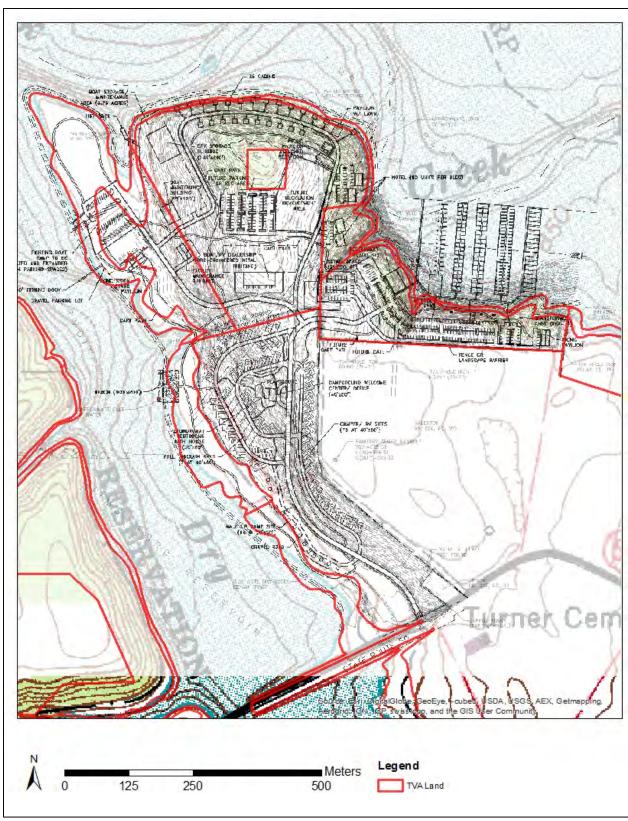


Figure 1: Master plan of the proposed resort and marina depicting TVA land shown in red

A Phase I Cultural Resources Survey of the Proposed Tims Ford Marina on Tennessee Valley Authority's Fee-Owned Land near Winchester, Franklin County, Tennessee





INTERNAL COPIES:

Michelle Cagley, KFP 1T-KST Amy Henry, WT11D-K Susan Jacks, WT11C-K Samantha Hartsell, MPB 1H-M Emily Willard, MR 4G-C EDMS, WT CA-K



TENNESSEE HISTORICAL COMMISSION STATE HISTORIC PRESERVATION OFFICE 2941 LEBANON ROAD NASHVILLE, TENNESSEE 37243-0442

/ILLE, TENNESSEE 37243-04 OFFICE: (615) 532-1550

August 24, 2016

Mr. Clinton E. Jones Tennessee Valley Authority 400 W. Summet Hill Dr. Knoxville, Tennessee, 37902-1499

RE: TVA, TWINS CREEK RESORT AND MARINA, WINCHESTER, FRANKLIN COUNTY

Dear Mr. Jones:

In response to your request, received on Wednesday, July 27, 2016, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800. You may wish to familiarize yourself with these procedures (Federal Register, December 12, 2000, pages 77698-77739) if you are unsure about the Section 106 process.

After considering the documents you submitted, we determine that THERE ARE NO NATIONAL REGISTER OF HISTORIC PLACES LISTED OR ELIGIBLE PROPERTIES AFFECTED BY THIS UNDERTAKING. We have made this determination either because: the undertaking will not alter any characteristics of an identified eligible or listed Historic Property that qualify the property for listing in the National Register, the undertaking will not alter an eligible Historic Property's location, setting or use, the specific location, scope and/or nature of the undertaking precluded affect to Historic Properties, the size and nature of the undertaking's area of potential effects precluded affect to Historic Properties, or, no National Register listed or eligible Historic Properties exist within the undertaking's area of potential effects. Therefore, we have no objections to your proceeding with your undertaking.

If your agency proposes any modifications in current project plans or discovers any archaeological remains during the ground disturbance or construction phase, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act. If you are applying for federal funds, license or permit, you should submit this letter as evidence of consultation under Section 106 to the appropriate federal agency, which, in turn, should contact us as required by 36 CFR 800. If you represent a federal agency, you should submit a formal determination of eligibility and effect to us for comment. You may find additional information concerning the Section 106 process and the Tennessee SHPO's documentation requirements at http://www.tennessee.gov/environment/hist/federal/sect106.shtm. You may direct questions or comments to David Calease (615) 770-1092.This office appreciates your cooperation.

Wairk

E. Patrick McIntyre, Jr. Executive Director and

State Historic Preservation Officer

EPM/dic

ATTACHMENT E

McNamee, Loretta Anne

From: Hamrick, Elizabeth Burton

Sent: Friday, October 14, 2016 6:06 PM

To: Strickland, Samantha J; McNamee, Loretta Anne

Subject: FW: FWS 16-CPA-0622 Twin Creeks Marina and Resort LLC - Request for

acknowledgement of no effect findings

Ladies,

Please see email below for our documentation of fulfillment of Section 7 requirements under the ESA. This documentation should satisfy US ACE needs. Please note Gary Davis was CC'd on the email below from USFWS.

Thanks,

Liz Hamrick

Terrestrial Zoologist Biological Permitting and Compliance Tennessee Valley Authority 400 W Summit Hill Dr, WT 11C-K 865-632-4011

From: Robbie Sykes [mailto:robbie_sykes@fws.gov]

Sent: Friday, October 14, 2016 4:28 PM

To: Hamrick, Elizabeth Burton **Cc:** gary.l.davis@usace.army.mil

Subject: RE: FWS 16-CPA-0622 Twin Creeks Marina and Resort LLC - Request for acknowledgement of no effect findings

TVA External Message. Please use caution when opening.

Liz,

The Service has reviewed your bat habitat assessment for the proposed Twin Creeks Marina and Resort facilities on Tims Ford Lake in Franklin County, Tennessee. You have indicated that 20 trees/snags have potential for providing suitable roosts for Indiana and northern long-eared bats. TVA placed a commitment on the permit issued to Twin Creeks Marina and Resort LLC that all flagged trees (suitable bat roost trees) in the project action area, and all trees in the area owned by TDEC, must be avoided. TVA has determined that the proposed actions would not affect the Indiana bat or northern long-eared bat. You have requested that the Service confirm that the USACE and TVA has met its Fish and Wildlife Coordination Act and Endangered Species Act Section 7 requirements for this project. The following constitute the comments of the U.S. Department of the Interior, provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Based on the permit conditions, the Service believes your "no effect" determination for the Indiana and northern longeared bat is appropriate. Therefore, based on the best information available at this time, we believe that the requirements of the Fish and Wildlife Coordination Act and section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. Obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of the action that may affect listed species or critical habitat in a manner not previously considered, (2) the action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the action.

If you have any questions concerning these comments, please do not hesitate to ask.

Thanks,

Robbie Sykes
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
446 Neal Street
Cookeville, TN 38501
(tele. 931/525-4979)
(fax. 931/528-7075)
robbie sykes@fws.gov

NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties.

From: Hamrick, Elizabeth Burton [mailto:ecburton@tva.gov]

Sent: Wednesday, October 05, 2016 3:41 PM

To: Robbie Sykes (robbie sykes@fws.gov) <robbie sykes@fws.gov>

Subject: FWS 16-CPA-0622 Twin Creeks Marina and Resort LLC - Request for acknowledgement of no effect findings

Dear Robbie,

On August 22, 2016, your office issued a letter (FWS 16-CPA-0622) to Lt. Colonel Stephen F. Murphy in response to a Public Notice issued by the US ACE for the creation of the Twin Creeks Marina and Resort facilities on Tims Ford Lake in Franklin County, Tennessee. In the letter you request that a qualified individual assess potential impacts of the proposed project on the Indiana bat and northern long-eared bat. TVA previously assessed the project action area and determined that the proposed actions would not affect either species.

On February 24, 2016, TVA Terrestrial Zoology staff surveyed this project action area for the proposed Twin Creeks Marina and Resort for suitable summer roosting habitat for Indiana bat and northern long-eared bat following the 2015 Range-wide Indiana Bat Summer Survey Guidelines. TVA staff identified mature hardwood forest with 20 potentially suitable individual trees within the project action area that may offer suitable summer roosting habitat for either of these bat species (sixteen hardwood snags, one southern magnolia, one black locust, one American beech and one southern red oak). In addition one area owned by TDEC (approximately 0.84 acres) exists immediately next to the proposed action area. In it, eighteen live white oaks and five hardwood snags suitable for summer roosting bats were noted. Suitable summer roosting trees were flagged in the field with blue and white flagging tape and marked on the attached map.

TVA placed a commitment on the permit issued to Twin Creeks Marina and Resort LLC that all flagged trees in the project action area, and all trees in the area owned by TDEC, must be avoided. Best Management Practices are also required around water ways. Should the scope of the project change to require removal of any of the identified bat trees, consultation with your office would be required. Therefore, TVA determined that the proposed actions would not affect Indiana bat or northern long-eared bat.

In order to satisfy documentation needs of US ACE, TVA respectfully requests acknowledgment of our no effect determination and fulfillment of our Section 7 obligations under the Endangered Species Act.

If you have any questions, please don't hesitate to call.

Thank you!

Liz Hamrick

Terrestrial Zoologist Biological Permitting and Compliance Tennessee Valley Authority 400 W Summit Hill Dr, WT 11C-K 865-632-4011