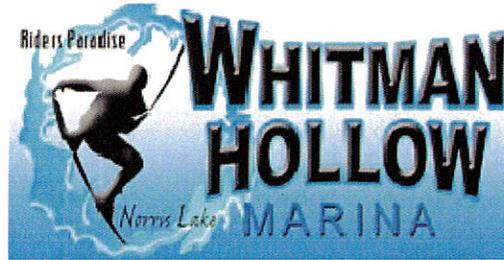


Whitman Hollow Application Boating Infrastructure Grant Program Criteria Summary:

Criteria:

- |                                       |   |
|---------------------------------------|---|
| 1) Partnerships:                      | Page 26   |
| 2) Innovativeness:                    | Page 37   |
| 3) Non-Federal Match:                 | Page 18   |
| 4) Cost Efficiency:                   | Page 7  |
| 5) Way Point Link/Safe Harbor:        | Page 27   |
| 6) Access Cultural/Natural Resources: | Page 28   |
| 7) Economic Impact:                   | Page 29   |
| 8) Multi-State Coordination           | Not included in their application, but Tennessee is part of the Southeast Coordination agreement (attached) |



1203 Whitman Hollow Road  
LaFollette, TN 37766  
Chuck Samples, Owner, President  
419-305-5459  
[chuck@whitmanhollow.com](mailto:chuck@whitmanhollow.com)

21 October 2013

Mr. Ed Poolos  
Tennessee Wildlife Resources Agency  
P.O. Box 40747  
Nashville, TN 37204

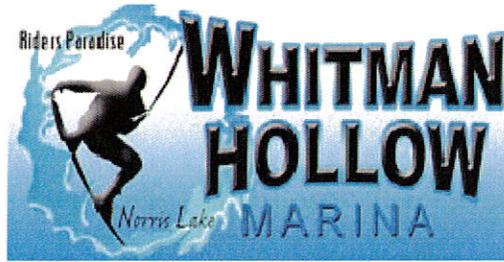
Dear Mr. Poolos:

Attached is an Application for Federal Assistance through the BIG Program for a project proposed at Whitman Hollow Marina on Norris Lake. We appreciate having an opportunity to partner with TWRA and the U.S. Fish and Wildlife Service.

Thank you once again.

*Chuck Samples*

Chuck Samples, Owner President  
Whitman Hollow Marina  
LaFollette, Tennessee



Whitman Hollow Marina, LLC requests a Boating Infrastructure Grant (BIG) in the amount of \$ 350,000.00 to match \$350,000.00 of marina funds to add 24 tie-up slips, catwalks, utilities, ADA compliant restrooms, showers, and Boater's Information and Assistance Center at an existing 126 slip marina on the 33,840 acre, 73-mile long Norris Reservoir.

The marina stays full with annual and seasonal customers and has difficulty accommodating any transient customers, particularly those with non-trailerable watercraft 26' feet or larger. There are no other facilities available in the Big Creek area of Norris Lake that can accommodate these customers. Transient boaters in non-trailerable vessels 26' feet or larger on the 14-mile long Big Creek have no tie-ups slips available to access marina and shore services. This project will provide tie-up facilities for these vessels.

**Application for Federal Assistance SF-424**

Version 02

* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	* 2. Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	* If Revision, select appropriate letter(s): <input type="text"/> * Other (Specify) <input type="text"/>
--	--	---

* 3. Date Received: <input type="text" value="10/24/2013"/>	4. Applicant Identifier: <input type="text"/>
--	--

5a. Federal Entity Identifier: <input type="text"/>	* 5b. Federal Award Identifier: <input type="text"/>
--	---

**State Use Only:**

6. Date Received by State: <input type="text"/>	7. State Application Identifier: <input type="text"/>
---	---

**8. APPLICANT INFORMATION:**

\* a. Legal Name:

* b. Employer/Taxpayer Identification Number (EIN/TIN): <input type="text" value="62-6001445"/>	* c. Organizational DUNS: <input type="text" value="838215267"/>
--	---

**d. Address:**

* Street1:	<input type="text" value="P. O. Box 40747"/>
Street2:	<input type="text"/>
* City:	<input type="text" value="Nashville"/>
County:	<input type="text" value="Davidson"/>
* State:	<input type="text" value="TN: Tennessee"/>
Province:	<input type="text"/>
* Country:	<input type="text" value="USA: UNITED STATES"/>
* Zip / Postal Code:	<input type="text" value="37204"/>

**e. Organizational Unit:**

Department Name: <input type="text"/>	Division Name: <input type="text"/>
--	--

**f. Name and contact information of person to be contacted on matters involving this application:**

Prefix: <input type="text" value="Mr."/>	* First Name: <input type="text" value="Barry"/>
Middle Name: <input type="text" value="Dean"/>	
* Last Name: <input type="text" value="Sumners"/>	
Suffix: <input type="text"/>	

Title:

Organizational Affiliation:

* Telephone Number: <input type="text" value="615-781-6555"/>	Fax Number: <input type="text" value="615-781-6551"/>
---	---

\* Email:

**Application for Federal Assistance SF-424**

Version 02

**9. Type of Applicant 1: Select Applicant Type:**

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

**\* 10. Name of Federal Agency:**

Fish and Wildlife Service

**11. Catalog of Federal Domestic Assistance Number:**

15.622

CFDA Title:

Sportfishing and Boating Safety Act

**\* 12. Funding Opportunity Number:**

F13AS00254

\* Title:

Boating Infrastructure Grant Program - Tier 2

**13. Competition Identification Number:**

F13AS00254

Title:

**14. Areas Affected by Project (Cities, Counties, States, etc.):**

Campbell County, TN

**\* 15. Descriptive Title of Applicant's Project:**

Transient boat docking facilities at Whitman Hollow Marina on Norris Lake

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

**Application for Federal Assistance SF-424**

Version 02

**16. Congressional Districts Of:**

\* a. Applicant

\* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

**17. Proposed Project:**

\* a. Start Date:

\* b. End Date:

**18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="350,000.00"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="350,000.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="700,000.00"/>

**\* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- a. This application was made available to the State under the Executive Order 12372 Process for review on
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372.

**\* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

- Yes  No

**21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

\*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix:  \* First Name:

Middle Name:

\* Last Name:

Suffix:

\* Title:

\* Telephone Number:  Fax Number:

\* Email:

\* Signature of Authorized Representative:  \* Date Signed:

**Application for Federal Assistance SF-424**

Version 02

**\* Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

# **Boating Infrastructure Grant**

# **BIG**

## **Application**



1203 Whitman Hollow Road  
LaFollette, TN 37766

Chuck Samples, Owner, President  
419-305-5459

[chuck@whitmanhollow.com](mailto:chuck@whitmanhollow.com)

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## **Standard Grant Narrative**

### **Introduction**

Whitman Hollow Marina appreciates having the opportunity to present an application for project funding offered by The 2014 Boating Infrastructure Grant Program through the U.S. Fish & Wildlife Service and the Tennessee Wildlife Resources Agency.

Proposed in this BIG application is a project on the TVA's Norris Reservoir in LaFollette, Tennessee. The project is the addition of public facilities to accommodate and service transient non-trailerable recreational boat traffic for watercraft 26' feet and larger boating on Norris Lake in the 14-mile long Big Creek area. The proposed project includes creating publicly accessed tie-up slips, catwalks, utilities, restrooms, showers and an information and assistance center for transient boaters at Whitman Hollow Marina.

The total project cost is \$700,000.00, and the application requests 50% in BIG funding (\$350,000.00) to match the 50% of Non-Federal project funds the sub-grantee applicant pledges (\$350,000.00).

### **The Need for the Proposed Project**

As one of the most desirable vacation destinations in the southeast, the Norris Reservoir has a history dating back to 1911 when the location of the future Norris Dam was discovered.

On March 4, 1936, Norris Dam was completed when the gates closed on the 265 feet high and 1,860 foot-long dam, impounding the Clinch and Powell Rivers and flooding the 34,200 acres of mostly farmland, timber and small villages creating Norris Lake.



By January of 1937, the lake was filled completely creating the largest reservoir on a tributary of the Tennessee River.

The lake has approximately 809 miles of shoreline bordering thousands of acres of wildlife management areas, but also has thousands of acres of developed properties, homes, and commercial businesses like Whitman Hollow Marina.



Five counties in Tennessee surround this deep and winding lake, including: Anderson County, Claiborne County, Campbell County, Grainger County, and Union County.

Today Norris Dam has multiple missions including flood control in the Tennessee Valley, the production of hydro-electric power for thousands of homes and businesses, assuring water quality and maintaining minimum navigational channel depths on the Tennessee River. The cold water



flowing from the deep reservoir also cools water discharged into the Tennessee River from the fossil fuel plant at Bull Run, and from Watts Bar and Sequoyah nuclear power plants downstream.

At the bottom of the list but

extremely important to the overall economic vitality of the region is lake recreation for visitors from all over the United States and the world.

Breathtaking rolling hills frame the perfectly placid and amazingly clear turquoise-green deep waters. For those seeking water-based recreation surrounded by picturesque majesty and beauty Norris Lake is truly a rare and treasured find discovered and revisited by tens of thousands each year.



Whitman Hollow Marina was established in 1954 to provide lake recreation services for the boating public on Norris Lake in the Big Creek area. Over the years facilities have improved and expanded to where today many visitors from numerous states in mostly southeast and mid-west America patronize Whitman Hollow Marina each year.



In the years since the dam was built and the lake was created the size of boats on Norris have grown steadily larger. Today the lake has a significant population of boats over 26' feet in length, but these boats have very limited access to tie-up facilities that can accommodate and service them. On a lake the size of Norris boaters in large vessels can often find themselves many miles from facilities they can utilize, particularly, in the Big Creek area of Norris Lake where Whitman Hollow Marina is located.

The only other marina on Big Creek is Indian River Marina, which is primarily a small watercraft marina at capacity with annual customers. Indian River Marina has no tie-up facilities sufficient to accommodate transient boat traffic or any plans for facility expansion at present.

While Whitman Hollow Marina would like to offer marina services to larger boats current customers with annual leases have taken all-available boat slips and tie-up spaces. In order to service non-trailerable transient vessels 26' and larger Whitman Hollow will need to undertake the construction of the facilities proposed in this application.

While the lack of facilities for non-trailerable transient watercraft 26' and larger is of concern now, the real concern is for the future as each year brings more of these larger size boats to Norris Lake. Planning for future boating needs on the Norris Reservoir, particularly for those larger vessels over 26' feet, is clearly in the public interest. There is a definite and ever-growing need for tie-up spaces and facilities capable of accommodating marine needs for boats 26' feet or larger all over Norris Lake. The boating public will benefit by having these facilities available to them at Whitman Hollow Marina where in the Big Creek area there are none.

**Project Objectives**

This application details a project at Whitman Hollow Marina on Norris Lake with quantifiable and verifiable objectives to be accomplished within a specific period of time. The application includes a project design and layman engineering with detailed drawings and plans for the infrastructure and facilities proposed for construction.

The materials required for construction of the component parts, i.e., the tie-up slips, connecting catwalks, mooring infrastructure, restrooms, showers, information and assistance center and utilities have been listed with costs estimated.



Should this application be awarded funding in March 2014 the project would immediately initiate with a target completion date by the start of the 2014 tourism season in June or soon thereafter. The plans proposed in the application would immediately convert into an action plan beginning with the acquisition of materials needed for assembly and construction of the component parts.

The professional and dependable staff at Whitman Hollow Marina are skilled and experienced in marine construction, maintenance and services that the project will require. The proposal is for an existing facility as an addition of services targeted to meet the needs of an underserved boating population on Norris Lake. The project location as part of an existing marina operation should help speed along completion of objectives.

As the daily workmanship of the marina staff moves the project toward completion individual component parts will become recognizable,

quantifiable structures with material compositions that can be identified, quantified, and verified individually and as a wholly assembled infrastructure in place for public use.



**An example of slip construction similar to what this application proposes.**

In the end, what is proposed in this application will be in fact what exists as the completed facilities, and the entirety of the project will be located for easy inspection and verification.

### **Expected results or benefits from accomplishing the objectives**

At present on the 14-mile Big Creek area of Norris Lake the transient boating public in watercraft 26' feet or larger have no tie-up options for accessing bathrooms, showers, sewage pump out facilities, utilities, food and entertainment services, boat maintenance services, information and assistance, and all that the nearby metropolitan LaFollette, Tennessee area has to offer.

Once the objectives proposed here in this application are achieved facilities will exist to accommodate the personal and boating needs of a significant number of underserved vessels 26' feet and larger on Norris Lake. The 24 covered boat slips and support facilities proposed will be adequate to meet current need and future demand as well.

When completed the project is expected to bring the significant benefits detailed herein to transient boaters in larger vessels in the Big Creek area of Norris Lake.

**The approach to be used in meeting the objectives, including specific procedures, schedules, key personnel, and cooperators**

Whitman Hollow Marina has a professional, full-time staff of skilled maintenance, building and construction workers. The marina staff is also engaged in building privately owned docks and boat slips for property owners on Norris Lake and have just this past year constructed 28 new covered slips at Whitman Hollow. The marina staff has the exact kind of skill set needed to build the component parts and the whole of the facilities proposed in this application.

Additionally, the owner of Whitman Hollow Marina, Chuck Samples, has 30 years of experience in the building and construction industry, and has been in the marina business for seven years. Mr. Samples has extensive knowledge and experience related to estimating costs, material acquisition, and managing projects to timely completions.

Specifically, the component parts for the project proposed in this application are:

- 24 covered tie-up slips for non-trailerable vessels 26' feet or longer;
- Slip dimensions are 14' wide x 38' long x 14' high;
- An interior covered catwalk with dimensions being 8' wide x 200' long running the entire length of the tie-up slip structure;
- A mooring infrastructure for the tie-up slips and catwalks consisting of 5/8" galvanized steel cable, 3,500 pound concrete mooring blocks, 4,000 pound winches
- Dockside utilities with 30 amp and 50 amp service;
- Dockside communication services including internet and telephone;
- A Boaters Information and ADA Facility;
- ADA compliant male and female bathroom and shower facilities;
- A catwalk connecting the tie-up slip infrastructure to other existing marina infrastructure;

**Cost Efficiency: The proposed project is an addition to existing facilities**

Whitman Hollow Marina has an existing infrastructure consisting of 126 covered slips of various sizes, 8', 9' and 10' wide by 16', 20', 24' and 32' feet long. Customers with annual leases occupy these boat slips. The marina has a restaurant and ship store, which offers marine products, fuel, oil, fishing supplies, live bait, groceries, ice, beverages and its famous soft serve ice cream. Free entertainment is offered to the public every weekend throughout the season.



**Cost Efficiency: The proposed project blends perfectly with existing infrastructure at Whitman Hollow Marina**



The addition of 24 covered tie-up boat slips and other components of the proposed project will connect to and blend in perfectly with the existing infrastructure at Whitman Hollow Marina. A previously underserved boating public with watercraft 26' feet and longer will now have

facilities allowing them access to amenities and services previously unavailable to them in the Big Creek area, and these folks will blend in perfectly as well. We believe the Federal cost/docking per slip is between \$12,500.00 to \$25,000.00 per slip range.

**The address and location for the project proposed in this application**

Whitman Hollow Marina  
1203 Whitman Hollow Road  
LaFollette (Campbell County) Tennessee 37766

**GPS Coordinates**

Latitude        36 degrees            19minutes        2.6976 seconds  
Longitude      --84 degrees          5 minutes        39.6162 seconds

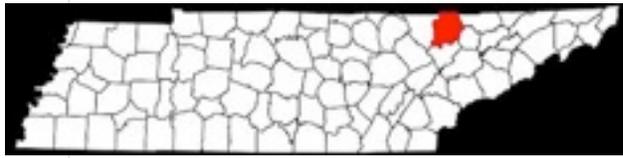
We have determined using as reference the *Water Recreation Opportunity Spectrum (WROS) Users' Guidebook* (U.S. Department of the Interior, Bureau of Reclamation, 2004) that the area where Whitman Hollow Marina is located falls in the classification of being Rural Developed with Rural Natural nearby.

The WROS defines a *Rural Developed Zone* as being one where *“Occasional or periodic opportunities to see, hear, or smell the natural resources exist due to the common and frequent level of development, human activity, and natural resource modification. Brief periods of solitude are likely, although the presence of other visitors is expected. There is probability for a diverse range of visitors and activities. Moderate levels of comfort and convenience are expected.”*

The *Rural Natural Zone* is defined as being one where *“Frequent opportunities exist to see, hear, or smell the natural resources due to an occasional or periodic level of development, human activity, and natural resource modification. Independence and freedom with a moderate level of management presence are important. There is probability for a diverse range of visitors and activities, although experiences tend to be more resource-dependent. Comfort and convenience are not important or expected.”*

Most TVA reservoirs are currently in the “Rural Developed” to “Urban” classifications but are shifting toward the “Suburban” to “Urban” classifications as development increases. While there is significant development on the Norris Reservoir the 24,444 acre Chuck Swan Wildlife Management Area takes much of the eastern shoreline of the lake. There is also the 2,450 acre Cove Creek Wildlife Management Area that consists of a peninsula with ridge terrain that runs southeast between Big Creek and Cove Creek. The peninsula is a largely forested with some small fields mixed in amongst the woods and is located about two miles down the lake from the Whitman Hollow Marina harbor.

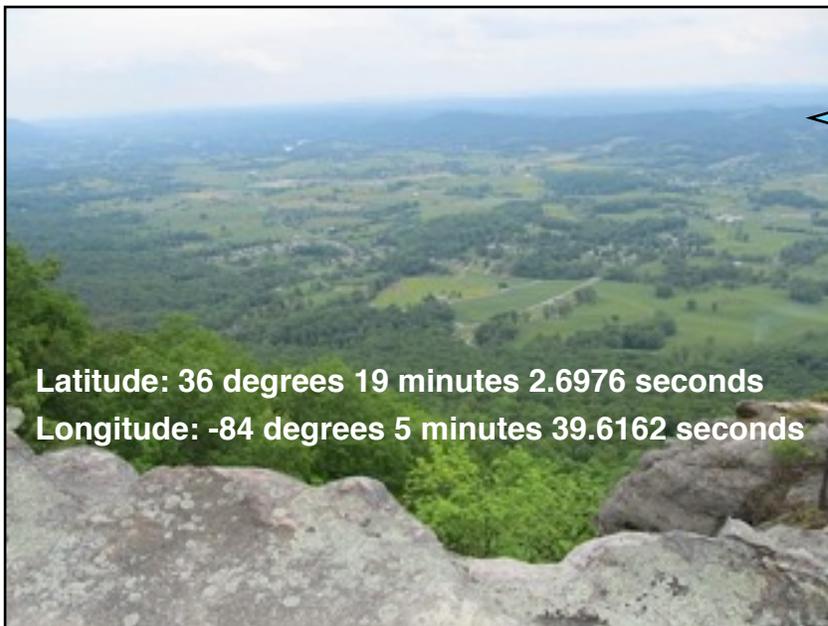
# Project Location Campbell County, Tennessee



Campbell County, Tennessee is a high poverty area located in the heart of Southern Appalachia. Local residents depend on jobs tourism creates in an area of the country where few job opportunities exist.



A Regional Map of East Tennessee depicting the location of Campbell County, TN



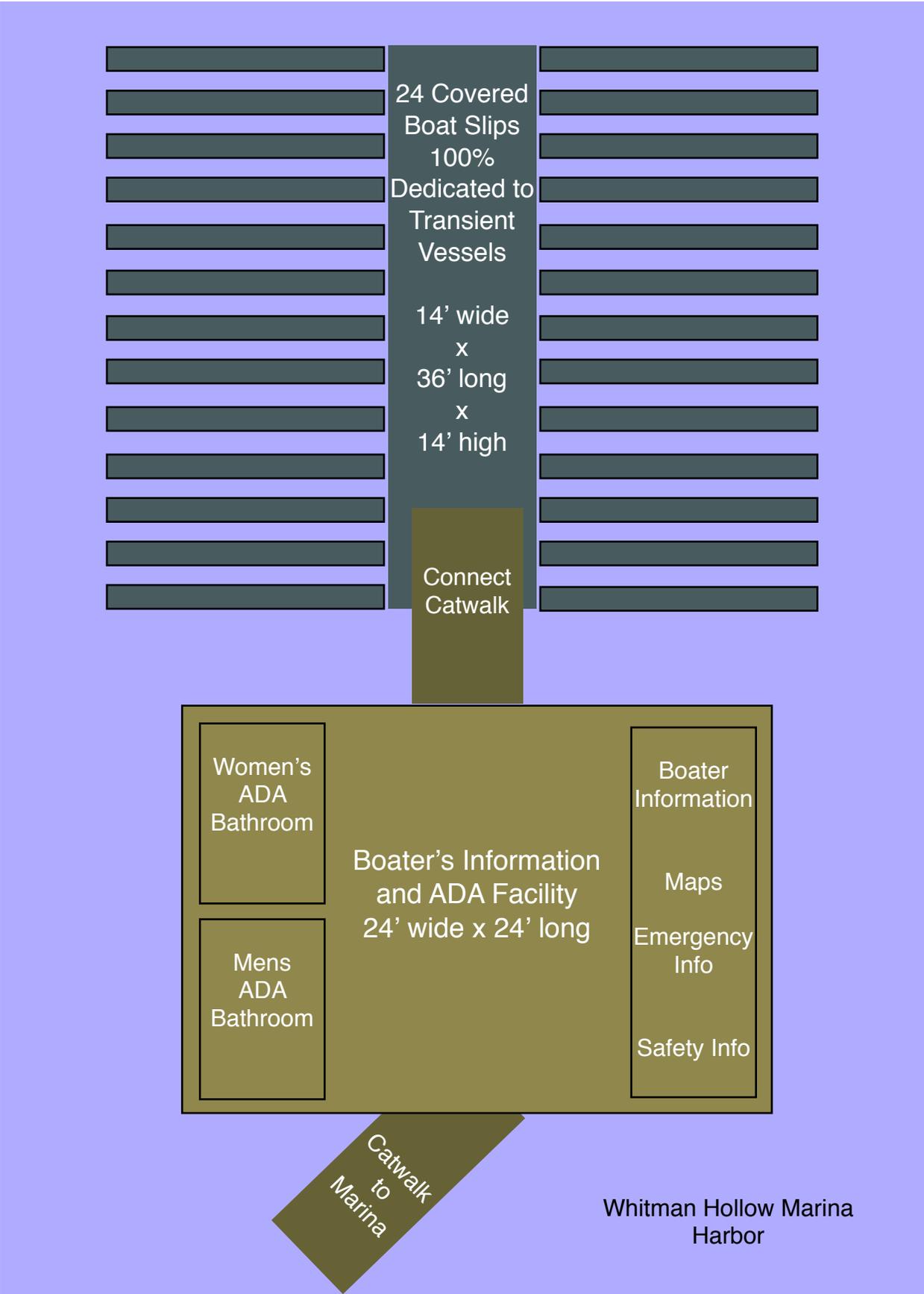
Latitude: 36 degrees 19 minutes 2.6976 seconds  
Longitude: -84 degrees 5 minutes 39.6162 seconds



Approximate location of Whitman Hollow Marina LaFollette, Tennessee

## **Diagrams and drawings of all proposed project components**

- 24 Tie-Up Slips 100% Dedicated for Transient Non-Trailerable Vessels  
26' Feet or Longer
- Dedicated Connecting Catwalk
- Utilities
- ADA Restroom Facilities
- ADA Shower Facilities
- Boater's Information and ADA Facility



## **Estimated Costs**

This is a cost estimation worksheet for all costs associated with the 24 dedicated slips for transient vessels.

### **24 Covered Tie-up Slips for Boats 26' Feet and Longer**

Slip dimensions are 14' wide x 36' long x 14' high

Encased floatation devices for slip fingers and catwalk

Estimated Cost \$ 92,704.00

Steel frame slip infrastructure

Estimated Cost \$ 129,968.00

Roofing 16,000 square feet to be covered

Estimated Cost \$ 75,000.00

Catwalk finger flooring 7,488 square feet to be covered

Estimated Cost \$ 76,000.00

Main catwalk flooring 1,600 square feet to be covered

Estimated Cost \$ 16,400.00

Fasteners

Estimated Cost \$ 2,300.00

Bumper guards

Estimated Cost \$ 11,200.00

Tie-down underwater infrastructure

Estimated Cost \$ 24,600.00

Slip/dockside utilities—breakers, panel boxes, etc.  
Estimated Cost \$ 40,000.00

Marine grade electric wiring/plug sockets for 30/50 amp service  
Estimated Cost \$ 18,000.00

Water service and delivery spigots  
Estimated Cost \$ 24,000.00

Lighting  
Estimated Cost \$ 4,200.00

Signage + ADA Signage  
Estimated Cost \$ 1,200.00

Dockside communication services—internet and telephone  
Estimated Cost \$ 8,400.00

**Subtotal for the 24 Covered Dedicated Tie-up Slips: \$523,972.00**

## **Boater's Information and ADA Facility**

This structure is proposed as a stand-alone facility with dimensions being 24' feet wide by 24' feet long.

This facility is envisioned as a single structure similar to welcome centers and rest area facilities located off the Eisenhower Interstate Highway System at special exits throughout the United States. Typically, information is offered in a lobby area centered between ADA compliant bathrooms—and for our purposes showers—located to either side of the main foyer.

Encased floatation foundation needed for 24' feet wide x 24' long structural base

Estimated Cost \$ 5,700.00

Fasteners

Estimated Cost \$ 1,050.00

Steel framing infrastructure

Estimated Cost \$ 9,004.00

Sub-flooring needed to cover the base

Estimated Cost \$ 4,304.00

Framing walls and rafters

Estimated Cost: \$5,760.00

Windows, doors (interior and exterior), hardware for doors

Estimated Cost \$ 7,200.00

Interior finish floors—lobby area, bathrooms

Estimated Cost \$ 3,200.00

HVAC Air-conditioning and heat  
Estimated Cost \$ 12,500.00

Interior and exterior lighting  
Estimated Cost \$ 3,900.00

Interior finish ceiling  
Estimated Cost \$ 4,100.00

Electrical wiring, sockets, plugs, panel, breakers  
Estimated Cost \$ 4,850.00

Insulation  
Estimated Cost \$ 4,210.00

Interior finish  
Estimated Cost \$ 6,800.00

Exterior roofing and siding  
Estimated Cost \$ 5,700.00

Display shelving for information brochures and emergency information  
Estimated Cost \$ 1,250.00

**ADA Compliant Male and Female Bathroom and Shower Facilities**

Plumbing rough-in materials for showers, toilets, sinks, water heaters and holding tanks.

Estimated Cost \$ 14,200.00

Two ADA showers, two ADA toilets, one ADA wall urinal, two mirrors, two ADA sinks, vanities, two hand blower machines, two hand soap dispensers.

Estimated Cost \$ 7,500.00

**Subtotal for the Boater's Information and ADA Facility with ADA Showers and Restrooms: \$101,228.00**

**A dedicated catwalk connecting the tie-up slip infrastructure and Boater's Information and ADA Facility to other existing marina infrastructure**

Catwalk dimensions are 60' feet long x 8' feet wide

Encased floatation devices for the above sized catwalk  
Estimated Cost \$ 22,800.00

Steel frame infrastructure  
Estimated Cost \$ 20,280.00

Catwalk flooring  
Estimated Cost \$ 11,320.00

Catwalk lighting and electrical  
Estimated Cost \$ 18,400.00

Fasteners  
Estimated Cost \$ 2,000.00

**Catwalk Subtotal: 74,800.00**

**Project Grand Total: \$700,000.00**

**BIG Funding 50% or \$350,000.00**

**Non-Federal Sub-grantee Match \$350,000.00**

Description	24 Tie-up Boat Slips Dedicated to Eligible Transient Boaters in vessels 26' +	Boater's Information and ADA Facility with ADA Showers and Bathrooms	Catwalk connecting dedicated project with existing marina facility	Project Cost Totals
Construction Cost	\$523,972.00	\$101,228.00	\$74,800.00	\$700,000.00
BIG Grant	\$261,986.00	\$50,614.00	\$37,400.00	\$350,000.00
Non-Federal Match	\$261,986.00	\$50,614.00	\$37,400.00	\$350,000.00

**Estimated Cost of Proposed Project**

The estimated total cost of the project is \$700,000.00. The application requests a 50% Federal Match (\$350,000.00) through the Boating Infrastructure Grant to go with the \$350,000.00 Non-Federal financial contribution from the sub-grantee, Whitman Hollow Marina.

At present Whitman Hollow Marina is a 126 slip marina with houseboat moorings in its harbor. These 126 boat slips are committed to customers with annual leases, which means currently there are no tie-up slips available for transient, non-trailerable recreational vessels at Whitman Hollow Marina or anywhere else in the 14-mile Big Creek area of Norris Lake.

The intent of Whitman Hollow Marina is to have 100% of the facilities proposed in this application dedicated to eligible boaters. The 24 slips proposed in this application will be dedicated for eligible transient, non-trailerable recreational vessels. The Boater's Information and ADA Facility is proposed as a dedicated facility as well with only incidental use by the general public. This ADA facility will be open 24-7.

## **The 2010 ADA Standards for Recreational Boating Facilities**

On September 15, 2010, the United States Department of Justice published in the Federal Register the revised regulations for Titles II and III of the Americans with Disabilities Act of 1990. The Department has provided guidance on the final rules and revised regulations on scoping and technical requirements for new construction and alterations. There are some exceptions intended to provide some flexibility where existing structures and terrain precludes full compliance. The taken on this project will be consistent with the goals of the ADA.

### **Accessible Route**

2010 Standards require an accessible route to all accessible boating facilities, including boat slips and boarding piers at boat launch ramps. But because of water level fluctuations at some facilities it may be difficult to provide an accessible route. Section 1003.2.1 provides a list of exceptions applicable to structures such as gangways, transition plates, floating piers, and structures containing combinations of these elements that are affected by water level changes. The list of exceptions specifies alternate design requirements applicable to these structures which, because of water level variables, cannot comply with the slope, cross slope, and handrail requirements for fixed ramps contained in sections 403.3, 405.2, 405.3, 405.6, and 405.7 of the 2010 Standards.

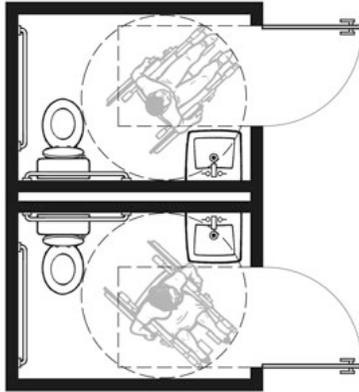
### **Accessible Boarding Piers**

Where boarding piers are provided at boat launch ramps, sections 235.3 and 1003.3.2 of the 2010 Standards require that at least five percent (5%) of boarding piers, but at least one, must be accessible.

### **Accessible Boat Slips**

Sections 235.2 and 1003.3.1 of the 2010 Standards require that at specified number of boat slips in each recreational boating facility meet specified accessibility standards. One accessible boat slip is required for facilities containing 25 or fewer total slips. The slip section proposed in this application is for 24 total slips.

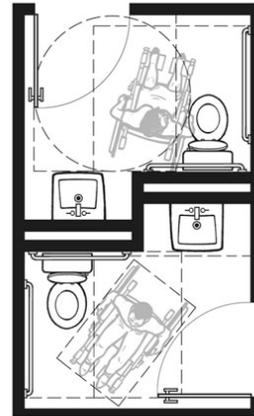
## 2010 Standards



Plan-1B Pair: 2010  
Standards with  
Out-Swinging Doors

Two 7'-0" x 5'-0" Rooms  
70.00 Square Feet Total

## 2010 Standards



Plan-2C Pair: 2010  
Standards with  
In-Swinging Doors

Two 7'-2" x 6'-6" Rooms  
82.00 Square Feet Total

## ADA Bathroom and Shower Facilities

### Shower Compartments

The 2010 Standards at section 608 contain technical requirements for transfer-type and roll-in shower compartments. The 2010 Standards provide more flexibility than the 1991 Standards.

Transfer-type showers are exactly 36 inches wide by 36 inches long. The 2010 Standards permit a 1/2 inch maximum curb in transfer-type showers.

Roll-in showers are 30 inches wide minimum by 60 inches long minimum. Alternate roll-in showers are 36 inches wide by 60 inches long minimum and have a 36-inch minimum wide opening on the long side of the compartment. The 2010 Standards permit alternate roll-in showers to be used in any facility, only require a seat in transient lodging guest rooms, and allow location of controls on the back wall opposite the seat.

**Shower Spray Controls**

In accessible bathtubs and shower compartments, sections 607.6 and 608.6 of the 2010 Standards require shower spray controls to have an on/off control and to deliver water that is 120iF (49iC) maximum.

**Toilet Paper Dispensers**

The provisions for toilet paper dispensers at section 604.7 of the 2010 Standards require the dispenser to be located seven inches minimum and nine inches maximum in front of the water closet measured to the centerline of the dispenser. the paper outlet of the dispenser must be located 15 inches minimum and 48 inches maximum above the finish floor. In the 2010 Standards the mounting location of the toilet paper dispenser is determined by the centerline of the dispenser and the location of the outlet for the toilet paper.

## List of Primary Project Contacts

Charles "Chuck" Samples, President, Owner  
Whitman Hollow Marina, LLC  
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Ed Poolos  
Tennessee Wildlife Resources Agency  
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Nashville, TN 37204  
[Ed.Poolos@TN.gov](mailto:Ed.Poolos@TN.gov)

### **Addressing the Criteria**

Proposed work must be activities that are intended to construct and/or renovate, maintain facilities for transient, non-trailerable (26 feet and over) recreational vessels. Prospective grantees must *clearly* address all criteria.

This section of the application clearly addresses all criteria set forth.



## **Program priorities**

Below follows a discussion about how the proposal in this application follows the priorities identified in the State's boating needs assessment plan.

## **How this application advances the Tennessee Wildlife Resources Agency mission**

The mission of the Tennessee Wildlife Resources Agency is to preserve, conserve, manage, protect, and enhance the fish and wildlife of the state and their habitats for the use, benefit, and enjoyment of the citizens of Tennessee and its visitors. The Agency will foster the safe use of the state's waters through a program of law enforcement, public education and access.



The part of the above TWRA mission statement that this application and proposed project advances is the promotion of the safe use of the state's waters through public education and access for the use, benefit and enjoyment of the citizens of Tennessee and its visitors.

The Tennessee Safe Boating Act of 1965 charged TWRA with the responsibility of managing the State's boating program. The "Act" requires the TWRA to promote boating safety, and foster the development, use and enjoyment of the waters of Tennessee. The Act also requires the maintenance and construction of boating access areas, including ramps, parking areas, access roads, and docks for transient or non-trailerable boats. The Act requires efforts to educate the boating public about safe boating practices, and a heightened awareness of safety and courtesy represent the primary objective of the education program. These mandates are delivered through the five major program categories of administration, registration, enforcement, education, and facilities.

This application will help advance TWRA efforts to educate the boating public about safe boating practices and courtesies, and help meet the mandate for access to docks and tie-up facilities for transient and non-trailerable boats.

## **How this application advances objectives of the Tennessee Wildlife Resources Agency Strategic Plan for Boating 2006-2012**

The goal of the strategic plan for boating in Tennessee is to ensure that Tennessee waterways are safe and enjoyable for all users by providing a comprehensive program of public education and law enforcement, and a program providing for public access and facilities.

The strategic plan objectives for achieving the goal are:

1. Continually provide a safe boating experience fostering relationships between partners, stakeholders and users to maintain the quality of service through enforcement, education, and outreach programs.
2. Enhance waterway usage through improved access and facilities.
3. Address ever increasing Tennessee waterway user demands on Agency resources, paying particular attention to trends in residential shoreline development, urban waterfront renewal, Tennessee's waterways as a vacation destination, and increased commercial traffic.
4. Enhance the effectiveness of boating programs by assessing human resources inside the TWRA as well as stakeholders.

This application contributes to furthering objectives one, two and three. The application proposes a Boater's Information and ADA Facility designed to provide education and outreach to the boating public. The application proposes the construction of facilities at an existing marina that includes 24 covered boat slips with tie-up facilities for vessels 26' feet and longer, catwalks, ADA compliant restroom and shower facilities and the Boater's Information and ADA Facility. The completed project will work to improve Tennessee waterways, in particular, the Norris Reservoir, as a vacation destination, and work to help handle increased boat traffic now and in the future.

One of the problems identified in the Strategic Plan is the need to create more active partnerships between the TWRA user groups, stakeholders, and the tourism industry to advance mutual goals. This application proposes a active partnership between Whitman Hollow Marina, the Tennessee Wildlife Resources Agency and the U.S. Fish & Wildlife Service to implement shared goals and objectives.

## Partnerships

Whitman Hollow Marina proposes to partner with members of the U.S. Coast Guard Auxiliary Norris Lake Flotilla to promote public education and safe boating on Norris Lake.

The Auxiliary is the civilian component of the U.S. Coast Guard. Established by an act of Congress in 1939, the nearly 32,000 men and women members of the United States Coast Guard Auxiliary are *Semper Paratus*, “Always Ready.”

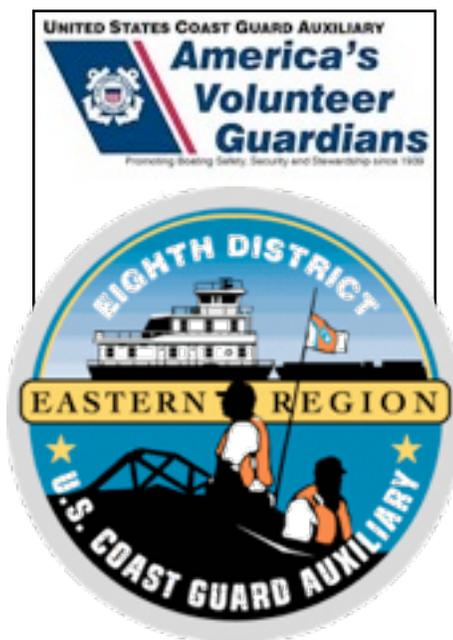
This a unique force that carries out an array of responsibilities touching almost every facet of the U.S. maritime environment. The primary mission of the U.S. Coast Guard Auxiliary is Recreational Boater Safety.

In its National Strategic Plan The U.S. Coast Guard Auxiliary's goals and strategies are to ensure the public has a safe, secure, and enjoyable recreational boating experience by implementing programs that minimize the loss of life, personal injury, and property damage while cooperating with environmental and national security efforts.

Vessel safety checks, harbor patrols, safe boating courses, search and rescue marine environmental protection are but a few of the services provided by the Auxiliary. Each year members volunteer more than two million hours benefiting boaters and their families.

In 2014 the flotilla will begin its sixth year on Norris Lake. While on lake patrol flotilla members are in radio contact with U.S. Coast Guard Ohio Valley Headquarters personnel in Kentucky and with Tennessee Wildlife Resources Agency officers on the lake.

The partnership with the Norris Lake Flotilla will bring valuable in-kind resources to the project by providing trained personnel for boater safety education at Whitman Hollow Marina twice a year. This partnership will also contribute to advancing goals and objectives of the TWRA and the U.S. Fish & Wildlife Service.



## The Safe Harbor at Whitman Hollow Marina

In 2012 there were 12,101,936 recreational vessels registered by the 50 states. According to the U. S. Coast Guard there were 4,515 recreational boating accidents in 2012 that involved 651 deaths, 3,000 injuries and approximately \$38 million dollars of damage to property.



Many times throughout the year inclement weather and storms are present on Norris Lake. When these weather events occur boaters rush for cover, most often heading to the nearest marina. Whitman Hollow Marina is situated squarely within a protected cove with



Photos of the Whitman Hollow Marina harbor and surrounding elevated terrain.

elevated terrain surrounding its facilities that helps to provide protection from inclement weather and storms and improves safety.

But at present on the 14-mile stretch of Norris Lake that is Big Creek there are no existing facilities for boats greater than 26' feet to tie-up at Whitman Hollow or elsewhere.

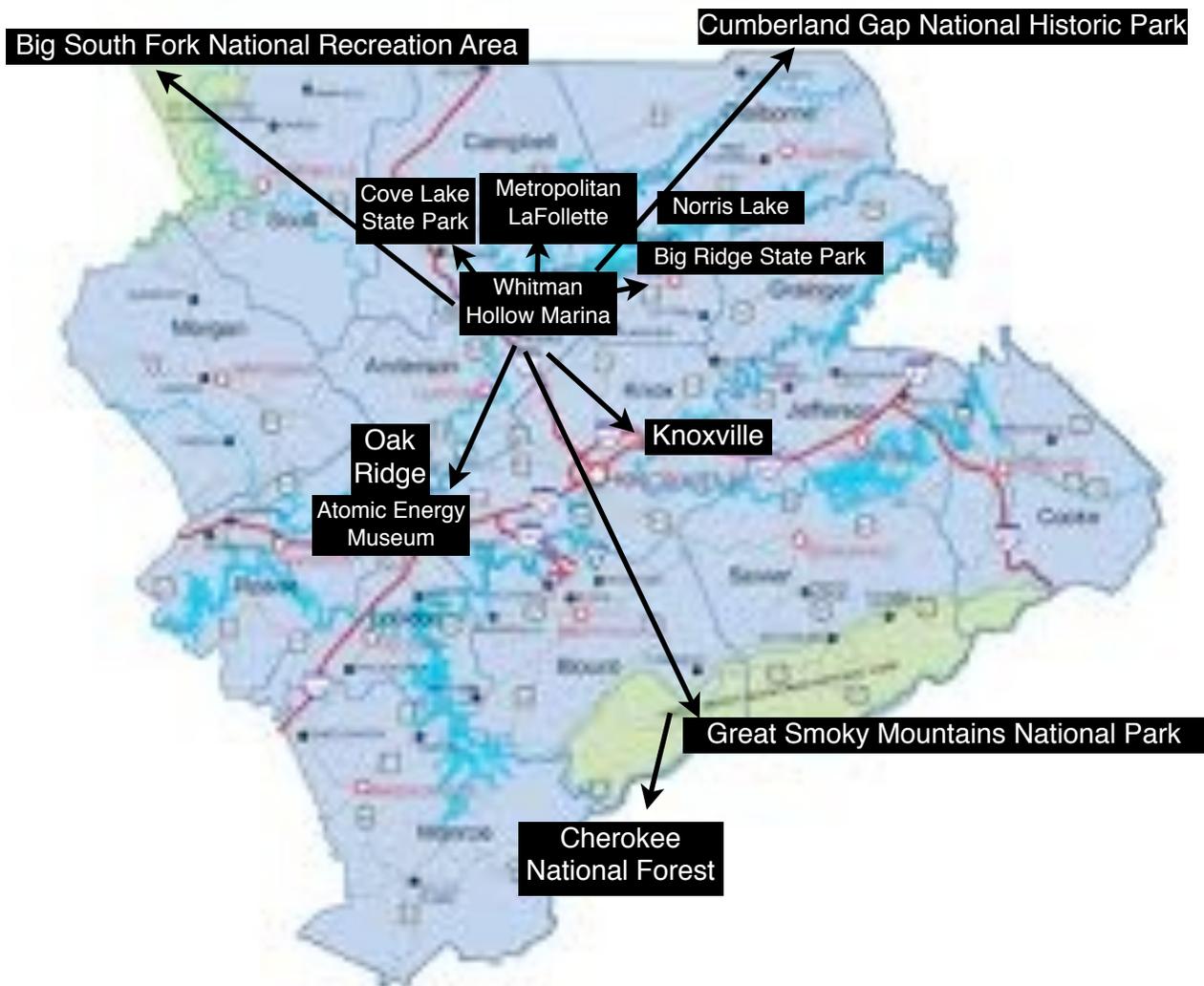


Occasionally, boaters come in off the lake only to find there is no place for them to tie-up, and they are forced to turn back. These boaters are on their own left to ride the storm out as best they can.

**Waypoint connections: Whitman Hollow Marina links boaters to prominent destination waypoints in the area**

Once shore side at Whitman Hollow Marina customers are only six miles from metropolitan LaFollette, Tennessee and all it has to offer. The downtown area includes access to medical facilities, banking, food and other retail services. Also, which is sometimes very important, quick access to marine service centers and boat repair parts.

From Whitman Hollow Marina transient boaters can dock and tie-up and then access any one of numerous recreational, historic, cultural, natural and scenic opportunities of local, regional and national significance within an hour's drive. Information about accessing these opportunities will be available to boaters in the Boater's Information and ADA Facility.



## Supporting Document: The Tourism Industry in Tennessee: State and Local Impact

The tourism industry is one of the most important industries in Tennessee, and Whitman Hollow Marina has played an important role in making tourism in Tennessee a great success story.

In 2012, travelers to Tennessee brought in a total economic impact of more than \$16 billion, a 5.2 percent increase over the previous year. In Campbell County, the economic impact was around \$70 million. Locally, and in the multi-county region, it is gross expenditures on the Norris Reservoir that drives job and income creation. The lake economy directly impacts local industries in a positive way, in particular, banking, real estate, wholesale and retail trade, advertising, telecommunications, construction and energy/utilities.



Tourism provides jobs that help thousands of Tennesseans thrive. Overall, domestic and international traveler expenditures directly supported 146,200 jobs in Tennessee in 2012, up 1.6 percent from 2011. Locally, Whitman Hollow Marina employed 12 individuals total this past season and keeps 6 employed full-time.

Tourism helps bring tax relief to Tennesseans. Last year was yet another consecutive year of more than \$1 billion in state and local sales tax revenue generated by the tourism industry. These taxes help provide essential services like education, fire and police protection, and much more to the citizens of our state.



To continue making Tennessee the destination of choice for millions of vacationers from around the country and the world will take the efforts of the entire tourism industry, including recreational tourism businesses like Whitman Hollow Marina.

Tennessee’s great natural beauty and world-class attractions will continue to draw millions to our state each year, but it is the front-line people who provide outstanding customer service and access to facilities like Whitman Hollow Marina on Norris Lake who will keep visitors coming back.

The giant wheel that is the local economy will not be turned in any significant way by building 24-dedicated tie-up slips and other transient boater facilities with BIG funds at Whitman Hollow Marina. However, these are the kind of important investments that are essential supporting spokes in the economic wheel, and work in concert with other such “spoke” type of investments, amenities and services that bring help continue bringing visitors to Tennessee, to Norris Lake and Whitman Hollow Marina.



P, U, B, L, I, C,  
B, E, N, E, F, I, T,



A targeted investment of BIG funds in a well-established tourism-related business in Tennessee will return benefits that flow directly to the boating public. Having tie-up slips and other service facilities needed to meet needs of transient boat customers on Norris Lake is an important part of long-term planning at Whitman Hollow Marina. Adding boating infrastructure of this kind contributes to the overall ability of the local area to offer visitors facilities they need to access and enjoy Norris Lake, and thus is an important spoke in the wheel that drives the local economy.

## Economic impact of Travel on Tennessee Counties 2013 Report

Project Location: Campbell County, Tennessee

Expenditures (\$ Millions)	Payroll (\$ Millions)	Employment (Thousands)	State Tax Receipts (\$ Millions)	Local Tax Receipts (\$ Millions)
47.64	8.47	0.41	2.64	2.44

### Tennessee Industry Impact

Lake recreation continues to be a big reason visitors come to Tennessee each year. Providing these visitors with lake-based amenities and services they need to make their stay as pleasurable as possible is the business of Whitman Hollow Marina. The company makes every effort to capture for its business as much of the tourism dollar spent in our state as possible, in particular, those dollars spent in Campbell County on Norris Lake.

The profile data for visitors coming to Tennessee is more or less the profile data of those visitors patronizing Whitman Hollow Marina. Below follows data highlighting tourism in Tennessee in 2012, and by extension, reflects the tourism industry in Campbell County, on Norris Lake, and at Whitman Hollow Marina.

### 2012 Highlights:

- Overall visitation continues to grow, Tennessee saw more visitors, staying longer, spending more in 2012!
- Boomers and Gen-Xers are the dominant generations of visitors
- Summer is the dominant travel season
- Tennessee hosted visitors an average of 2.15 nights (including day trips) higher than the national average of 2.04. 92.05 million person-stays; 5.9% increase, ranks 13th in U.S. for total travel.
- 55.842 million visits: 3.5% increase (person-trips).
- 2.41%: Share of U.S. travel.
- Daily per person spending is at \$131
- \$16.157 billion: Total economic impact; 5.2% increase.

- \$1 billion for the 7th consecutive year: State and local taxes collected total \$1.2 Billion in 2012.
- \$19 ROI: (Return on Investment) 19:1 visitor spending per ad dollar invested, 2011.
- \$497 million: Total economic impact of international travel; 10.4% increase.
- Every \$110,524 spent by domestic and international travelers supports one job in Tennessee in 2012.
- 8.5 out of 10: High destination satisfaction rating and 8.6 value rating from Tennessee visitors.

### **Travel Impact on Tennessee--2012**

A big part of the business at Whitman Hollow Marina is in lodging, food and beverage services. Overnight and transient visitors to Whitman Hollow Marina represent an important part of the future growth plan for this marina and Norris Lake as well. The addition of 24 transient tie-up slips for non-trailerable vessels over 26' feet will greatly improve access and expand capacity to offer consumer services to this sector of the boating public.

### **Direct Travel Expenditures**

Travel spending in Tennessee by both domestic and international travelers reached nearly \$16.2 billion on transportation, lodging, food, entertainment and recreation and general retail trade, up 5.2 percent from 2011.

- In 2012, foodservice, the largest domestic traveler spending sector in Tennessee, reached \$4.8 billion and accounted for nearly one third (30.9%) of the state total domestic travel expenditures.
- Domestic traveler spending on auto transportation ranked second with more than \$3.3 billion in 2012, up 4.2 percent from 2011.
- Lodging accounted for 16.8 percent of the domestic total at \$2.6 billion. Smith Travel Research data show that total hotel rooms demand increased 2.9 percent from 2011, while total room revenue increased 6.9 percent.

Examples of boat slips recently constructed at Whitman Hollow Marina similar to those proposed in this application. Shown here in photos below under construction but not yet finished.



Other examples of tie-up boat slip facilities very similar to those proposed in this application for construction at Whitman Hollow Marina.



**Informing the Boating Public about the availability of transient tie-up slips at Whitman Hollow Marina**

Whitman Hollow Marina will include as part of its marketing efforts information about the addition of these transient tie-up slips available to the boating public with vessels 26' feet or longer. This will include adding this information to brochures, the marina website and other regular advertising. Each year Whitman Hollow Marina attends boat and travel shows in other states to market the marina to those seeking opportunities for water-based recreation. The addition of 24 dedicated transient tie-up slips and other service facilities will be an asset the marina will want to make known to the boating public.



**Boater Information**

Whitman Hollow Marina takes an interest in the local community working to keep the local population informed about what the marina has to offer. Upon completion of facilities proposed in this application Whitman Hollow Marina will host the monthly chamber coffee whereby local business people can see first hand the results of this collaboration between Whitman Hollow Marina, the U.S. Fish & Wildlife Service, and the Tennessee Wildlife Resources Agency. These business people, many who own boats 26' or longer themselves, will appreciate seeing this resource for larger boats added to the menu of services offered to the boating public on Norris Lake.

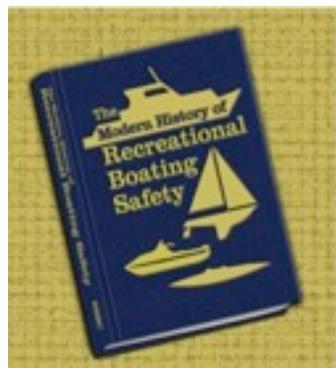
**Public/Private Partnership**

This application proposes a public/private partnership between the U.S. Fish & Wildlife Service, Tennessee Wildlife Resources Agency and Whitman Hollow Marina, a privately owned company, to construct 24 dedicated tie-up slips and other service facilities for non-trailerable vessels 26' feet or longer on Norris Lake, Campbell County, Tennessee.

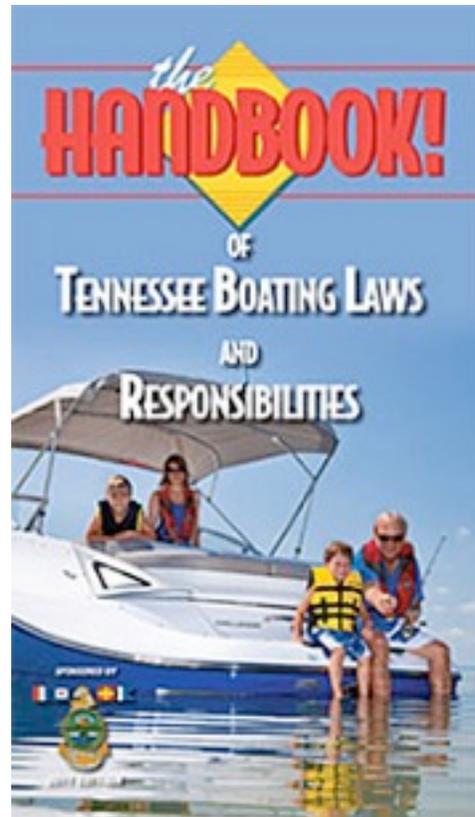
Once constructed, Whitman Hollow Marina will operate and maintain the constructed facilities as a regular part of daily maintenance and care of facilities at Whitman Hollow Marina.

## Boater's Information and ADA Facility

One of the component parts proposed in this application is what has been named a “Boater’s Information and ADA Facility.” The information and education facility is to be located as part of the bathroom and shower facilities, and will be open 24 hours daily. The information center will be stocked with maps and other important and useful information provided by the U.S. Fish & Wildlife Service, the Tennessee Wildlife Resources Agency, the U. S. Coast Guard, the Tennessee Valley Authority, the Army Corps of Engineers, the Tennessee Department of Tourism, the Norris Lake Marina Association, the Campbell County Chamber of Commerce and Tourism, the Anderson County Chamber of Commerce and Tourism,



Tennessee State Parks (there are three in the immediate area—Norris Dam, Cove Lake and Big Ridge), and the National Park Service (Cumberland Gap National Park and the Great Smoky Mountains National Park are only a short distance away from Norris Lake).



There is an important need for boat operators to understand that one of their responsibilities is to keep up-to- date with new developments in boating laws and safety information. State laws vary with regard to licensing, equipment requirements, accident reporting procedures, etc. Many boaters on Norris Lake are from other states and thus must

be informed of boating rules and laws in Tennessee. The boating equipment and safety information available to boat operators is constantly changing and improving. Boat operators who stay abreast of these changes will be ready for new situations, thus improving their own boating enjoyment as well as the safety of all boating participants.

Additionally, information about local consumer services will be available for such vendors as, grocery stores, pharmacies, retail variety stores, boat dealerships, parts and maintenance services, car rental and other transportation services, financial services and restaurants.

Finally, information about local emergency services like medical facilities, ambulance and law enforcement agencies (Tennessee state, local Campbell County, TVA and TWRA), will be available to the boating public as needed. First-Aid kits will be accessible at the Boater's Information and ADA Facility in case minor medical needs arise.



The Boater's Information and ADA Facility at Whitman Hollow Marina will be a one-of-a-kind facility on the Norris Reservoir offering access to information, education and knowledge that will be of great benefit to the boating public on Norris Lake.



## Innovativeness

### Suddenly in Command

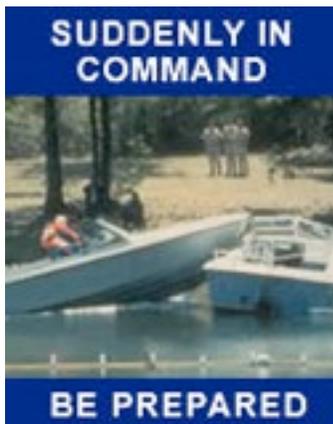
As a part of its continuing public education and community outreach program Whitman Hollow Marina will utilize the proposed Boater's Information and Assistance Center as a facility to host a unique boater's safety class called "*Suddenly in Command.*"

This class will be designed to help educate women who are not typically at the helm, and others who may have limited or no experience being a watercraft captain.

Your boat captain becomes incapacitated or falls overboard, for example. You're the First Mate and find yourself suddenly in command. What can you do? Where are you? What are your priorities? Are you prepared?

Whitman Hollow Marina will offer this innovative boating class designed for women who are not generally at the helm. The class will also help those who are typically only boat passengers to "be prepared" with practical knowledge and skills to apply in case of an emergency.

One of the primary goals of the BIG program is to provide the boating public with boater safety education and up-to-date information on state boating regulations, laws and guidelines. This class will focus on sub-groups within the general boating population that are not generally commanding watercraft, particularly in emergency situations.



Whitman Hollow Marina will advertise the special class well in advance in order to drum up participation. This will be accomplished by posting a notice on the marina website, preparing a leaflet for public distribution at the marina ship store and the Boater's Information and ADA Facility. The marina will also advertise the class in community

announcements and community calendars local newspapers and other media make available.





Above photo: An aerial view of Whitman Hollow Marina on Norris Lake  
Below photos: Whitman Hollow Marina Store and Entertainment Deck



## Supporting Document

### **WATERS DETERMINED BY THE U.S. COAST GUARD TO BE NAVIGABLE WATERS OF THE UNITED STATES**

Tennessee waters listed below are considered to be navigable by the U.S. Coast Guard and, as such, are subject to federal boating laws. The Coast Guard definition includes some waterways that are considered “navigable by historical use” and are not necessarily navigable by way of locks. The State of Tennessee (Wildlife Resources Agency) has jurisdiction on all public and commercial waters of Tennessee, and, therefore, maintains joint jurisdiction with the Coast Guard on federally navigable waters. Not all federal laws are in state statute or enforced by the state of Tennessee (Wildlife Resources Agency). The major river miles are abbreviated below by the following designations: Tennessee River Mile (TNRM), Cumberland River Mile (CRM), and the Lower Mississippi River Mile (LMRM).

#### **RIVERS**

**Clinch River (mouth <TNRM 567.5> to 202 miles upstream)  
(Norris Lake is the confluence of the Powell and Clinch Rivers)**

Cumberland River (entire length) CRM 74.6 upstream to 385.5

Duck River (mouth <TNRM 110.7> to 71 miles upstream)

Elk River (mouth <TNRM 285.1> to 153.6 miles upstream)

Emory River (mouth <TNRM 285.1 to 153.6 miles upstream)

Forked Deer River (mouth <Obion River M 3 to 25 miles upstream)

Forked Deer River, North Fork (mouth <Forked Deer River M 25> to 93 miles upstream)

Forked Deer River, South Fork (mouth <Forked Deer river M 25> to 6 miles upstream)

French Broad (mouth <TNRM 652.1> to 75 miles upstream)

Hatchie River (mouth <LMRM 772> to 140 miles upstream)

Hiwassee River (mouth <TNRM 499.4> to 41.5 miles upstream)

Holston River (mouth <TNRM 652.1> to 142.2 miles upstream)

Little Tennessee River (mouth <TNRM 601.1> to 61 miles upstream)

Little River (mouth <TNRM 635.6 to 31 miles upstream)

Loosahatchie (mouth <LMRM 74C.5> entire length)

Mississippi River (portion contiguous to Tennessee)

Obion (mouth <LMRM 819.5 to 69.1 miles upstream)

Ocoee River (mouth <Hiwassee River M 34.2> to 83.3 miles upstream)

Sequatchie (mouth <TNRM 422.7> to 3.5 miles upstream)

Stones (mouth <CRM 205.9> to 4 miles upstream)

Stones, West Fork (mouth <Stones River M 4 to 5.8 miles upstream)

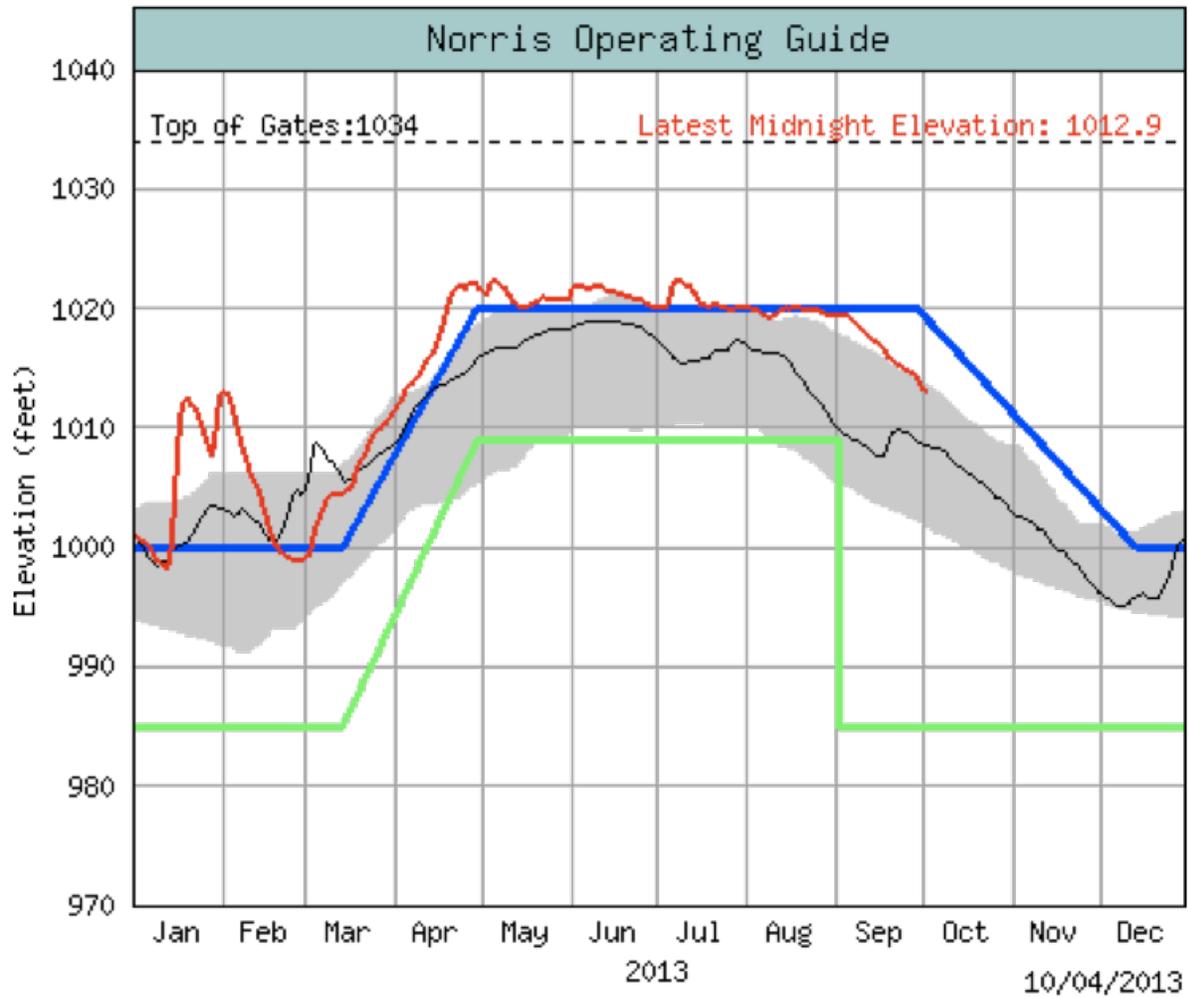
Tellico (mouth <Little Tennessee River M 19.1 to 30 miles upstream)

Tennessee River (entire length) TNRM 49.2 upstream to mile 652  
(French Broad and Holston Rivers)

Wolf (mouth <LMRM 738.6> to 9.1 miles upstream)

From a navigation interest, rivers and creeks are measured from the point where they empty into another body of water (considered the mouth and called river mile 0) upstream to the point where they are formed by other rivers or creeks or to where they are no longer capable of supporting navigation.

## Water depths at project location



- Red** \_\_\_\_\_ 2013 Observed Midnight Elevations
- Black** \_\_\_\_\_ 2012 Observed Midnight Elevations
- Green** \_\_\_\_\_ Balancing Guide
- Blue** \_\_\_\_\_ Flood Guide
- Gray Shaded** \_\_\_\_\_ Expected Elevation Range

Operating Guide Definitions on the following page.

## **Norris Operating Guide**

### **Observed midnight elevation**

Observed midnight elevations are shown for two years: last year and the current year to date. These are the actual elevations of the reservoir immediately upstream of the dam, measured at midnight of each day. The previous night's elevation is added to the graph by 6 a.m. the next morning.

### **Balancing guide**

The balancing guide is used to ensure that water is drawn from all tributary reservoirs equitably when water must be released from the reservoirs during the summer to meet downstream flow requirements. The operating objective is to keep the elevation of all reservoirs similar relative to their positions between their flood guide and their balancing guide.

### **Flood guide**

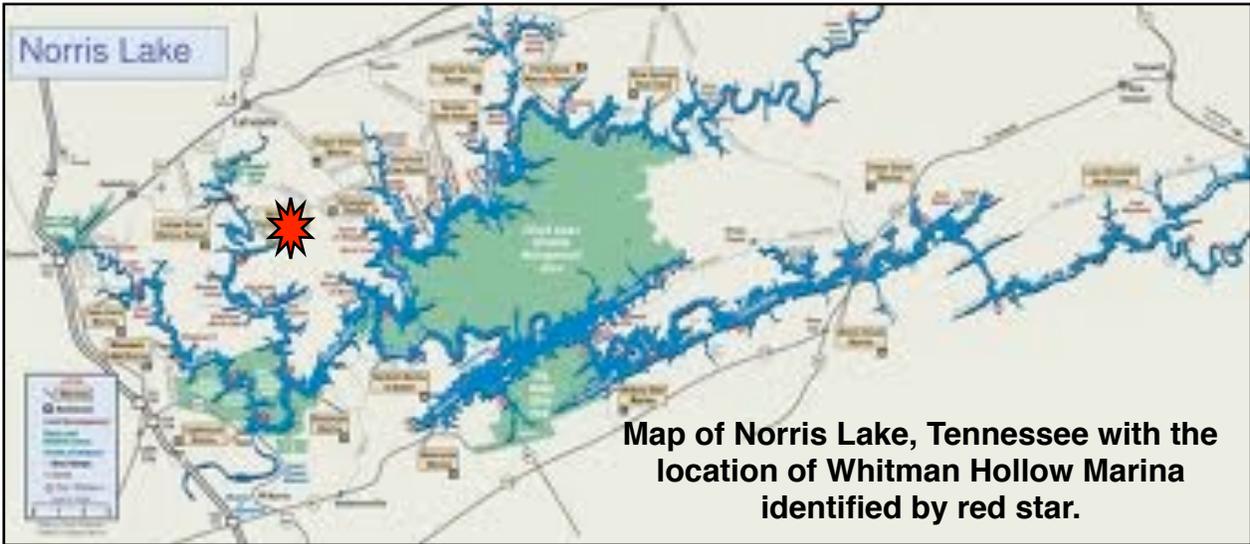
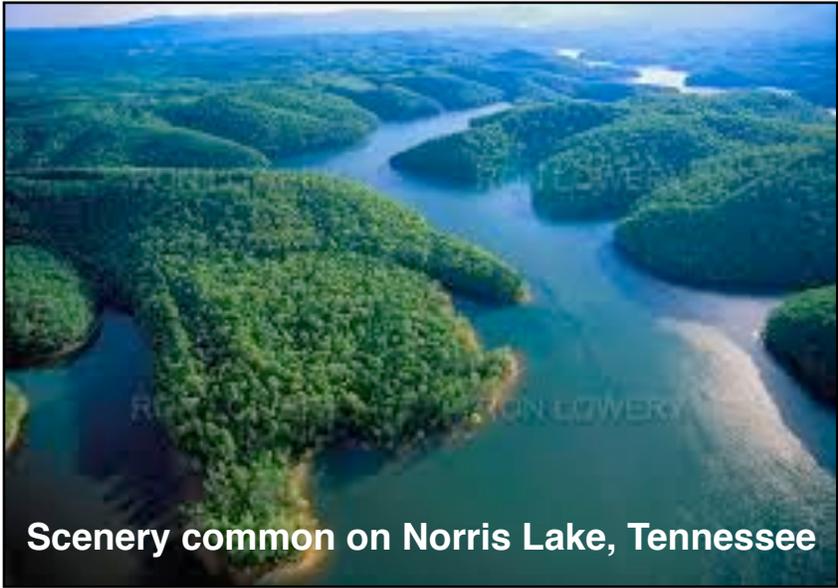
The flood guide line is a seasonal elevation guide that shows the amount of storage allocated in a reservoir for flood damage reduction. The operating objective is to keep the reservoir level at the dam at or below this line to be ready for flood events.

The reservoir level may rise above the flood guide as a result of large inflows, but the level is lowered to the flood guide as soon as it can be done without increasing downstream flood damage.

From June 1 through Labor Day, elevations are maintained as close as possible to this line to support recreation. During this time, elevations fall below this line only when rainfall and runoff are insufficient to meet system flow requirements.

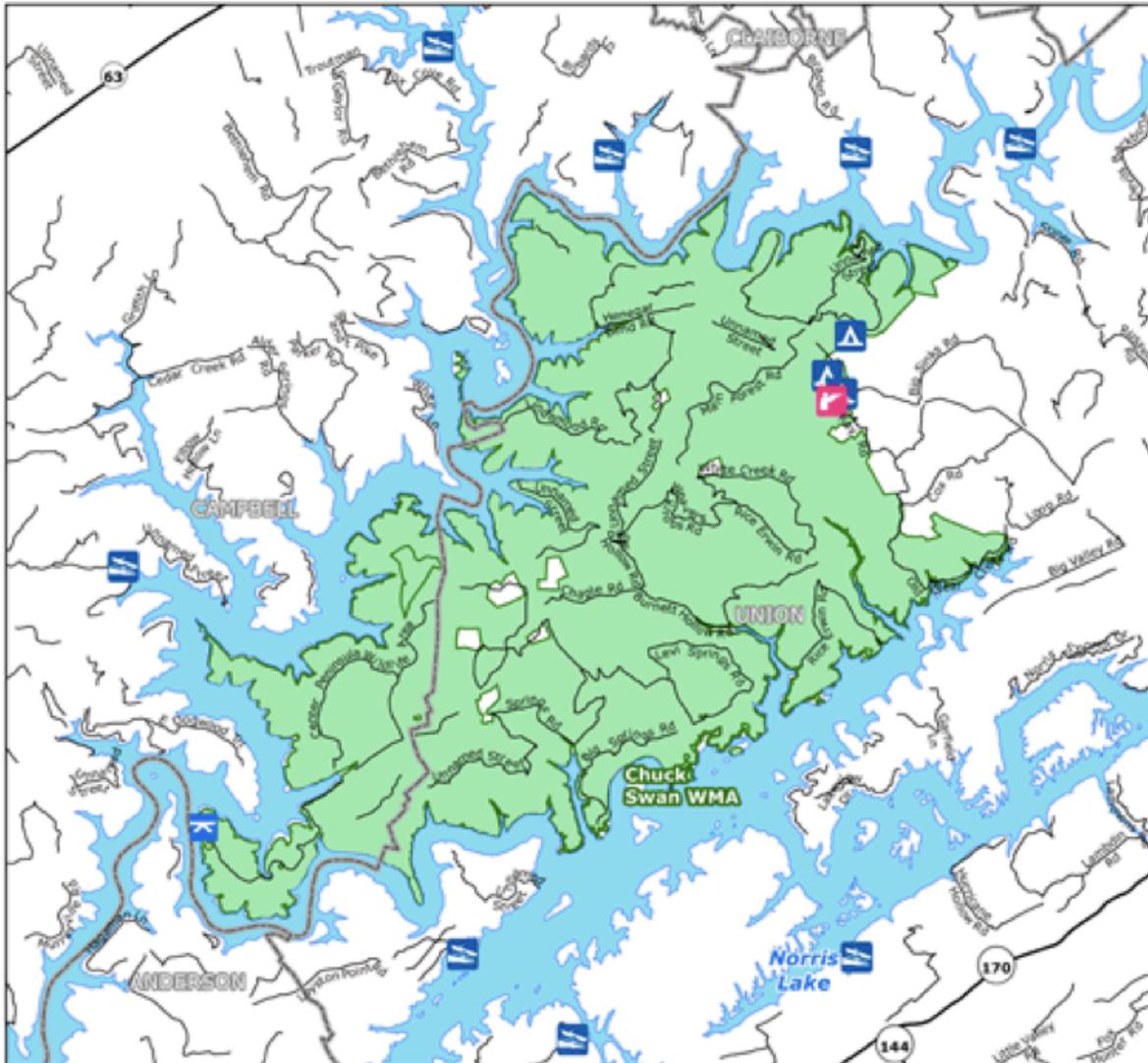
### **Expected elevation range**

The shaded area represents the reservoir's expected elevation throughout the year. Based on computer simulations using more than 100 years of historical rainfall and runoff data, the reservoir's elevation is expected to be in the shaded area an average of eight out of every 10 years on any given date. For this reason, it is also referred to as the 80 percent probability bound.



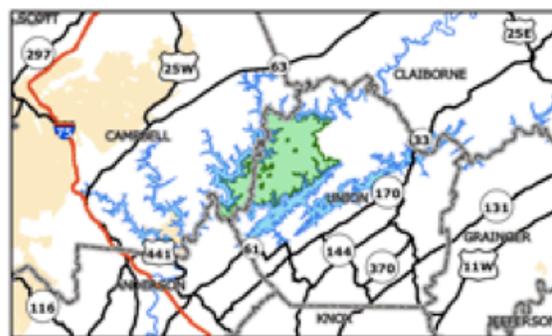


# Chuck Swan Wildlife Management Area Campbell and Union Counties



0 5 Miles

-  Boat Launch
-  Picnic Area
-  Rifle Range
-  Camp Site
-  Other Public Lands
-  Chuck Swan WMA



Produced by TWRA GIS (06/19/2011 sm)

## **Estimated Costs**

This is a cost estimation worksheet for all costs associated with the 24 dedicated slips for transient vessels.

### **24 Covered Tie-up Slips for Boats 26' Feet and Longer**

Slip dimensions are 14' wide x 36' long x 14' high

Encased floatation devices for slip fingers and catwalk

Estimated Cost \$ 92,704.00

Steel frame slip infrastructure

Estimated Cost \$ 129,968.00

Roofing 16,000 square feet to be covered

Estimated Cost \$ 75,000.00

Catwalk finger flooring 7,488 square feet to be covered

Estimated Cost \$ 76,000.00

Main catwalk flooring 1,600 square feet to be covered

Estimated Cost \$ 16,400.00

Fasteners

Estimated Cost \$ 2,300.00

Bumper guards

Estimated Cost \$ 11,200.00

Tie-down underwater infrastructure

Estimated Cost \$ 24,600.00

Slip/dockside utilities—breakers, panel boxes, etc.  
Estimated Cost \$ 40,000.00

Marine grade electric wiring/plug sockets for 30/50 amp service  
Estimated Cost \$ 18,000.00

Water service and delivery spigots  
Estimated Cost \$ 24,000.00

Lighting  
Estimated Cost \$ 4,200.00

Signage + ADA Signage  
Estimated Cost \$ 1,200.00

Dockside communication services—internet and telephone  
Estimated Cost \$ 8,400.00

**Subtotal for the 24 Covered Dedicated Tie-up Slips: \$523,972.00**

### **Boater's Information and ADA Facility**

This structure is proposed as a stand-alone facility with dimensions being 24' feet wide by 24' feet long.

This facility is envisioned as a single structure similar to welcome centers and rest area facilities located off the Eisenhower Interstate Highway System at special exits throughout the United States. Typically, information is offered in a lobby area centered between ADA compliant bathrooms—and for our purposes showers—located to either side of the main foyer.

Encased floatation foundation needed for 24' feet wide x 24' long structural base

Estimated Cost \$ 5,700.00

Fasteners

Estimated Cost \$ 1,050.00

Steel framing infrastructure

Estimated Cost \$ 9,004.00

Sub-flooring needed to cover the base

Estimated Cost \$ 4,304.00

Framing walls and rafters

Estimated Cost: \$5,760.00

Windows, doors (interior and exterior), hardware for doors

Estimated Cost \$ 7,200.00

Interior finish floors—lobby area, bathrooms

Estimated Cost \$ 3,200.00

HVAC Air-conditioning and heat  
Estimated Cost \$ 12,500.00

Interior and exterior lighting  
Estimated Cost \$ 3,900.00

Interior finish ceiling  
Estimated Cost \$ 4,100.00

Electrical wiring, sockets, plugs, panel, breakers  
Estimated Cost \$ 4,850.00

Insulation  
Estimated Cost \$ 4,210.00

Interior finish  
Estimated Cost \$ 6,800.00

Exterior roofing and siding  
Estimated Cost \$ 5,700.00

Display shelving for information brochures and emergency information  
Estimated Cost \$ 1,250.00

**ADA Compliant Male and Female Bathroom and Shower Facilities**  
Plumbing rough-in materials for showers, toilets, sinks, water heaters and holding tanks.  
Estimated Cost \$ 14,200.00

Two ADA showers, two ADA toilets, one ADA wall urinal, two mirrors, two ADA sinks, vanities, two hand blower machines, two hand soap dispensers.

Estimated Cost \$ 7,500.00

**Subtotal for the Boater's Information and ADA Facility with ADA Showers and Restrooms: \$101,228.00**

**A dedicated catwalk connecting the tie-up slip infrastructure and Boater's Information and ADA Facility to other existing marina infrastructure**

Catwalk dimensions are 60' feet long x 8' feet wide

Encased floatation devices for the above sized catwalk  
Estimated Cost \$ 22,800.00

Steel frame infrastructure  
Estimated Cost \$ 20,280.00

Catwalk flooring  
Estimated Cost \$ 11,320.00

Catwalk lighting and electrical  
Estimated Cost \$ 18,400.00

Fasteners  
Estimated Cost \$ 2,000.00

**Catwalk Subtotal: 74,800.00**

**Project Grand Total: \$700,000.00**

**BIG Funding 50% or \$350,000.00**

**Non-Federal Sub-grantee Match \$350,000.00**

<b>Description</b>	<b>24 Tie-up Boat Slips Dedicated to Eligible Transient Boaters in vessels 26' +</b>	<b>Boater's Information and ADA Facility with ADA Showers and Bathrooms</b>	<b>Catwalk connecting dedicated project with existing marina facility</b>	<b>Project Cost Totals</b>
Construction Cost	\$523,972.00	\$101,228.00	\$74,800.00	\$700,000.00
BIG Grant	\$261,986.00	\$50,614.00	\$37,400.00	\$350,000.00
Non-Federal Match	\$261,986.00	\$50,614.00	\$37,400.00	\$350,000.00

### **Estimated Cost of Proposed Project**

The estimated total cost of the project is \$700,000.00. The application requests a 50% Federal Match (\$350,000.00) through the Boating Infrastructure Grant to go with the \$350,000.00 Non-Federal financial contribution from the sub-grantee, Whitman Hollow Marina.

At present Whitman Hollow Marina is a 126 slip marina with houseboat moorings in its harbor. These 126 boat slips are committed to customers with annual leases, which means currently there are no tie-up slips available for transient, non-trailerable recreational vessels at Whitman Hollow Marina or anywhere else in the 14-mile Big Creek area of Norris Lake.

The intent of Whitman Hollow Marina is to have 100% of the facilities proposed in this application dedicated to eligible boaters. The 24 slips proposed in this application will be dedicated for eligible transient, non-trailerable recreational vessels. The Boater's Information and ADA Facility is proposed as a dedicated facility as well with only incidental use by the general public. This ADA facility will be open 24-7.