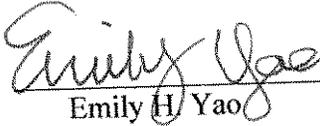


Thank you for your time and consideration, and please include these comments and the enclosed Globally Green report as part of the public record.

Sincerely,


Emily H. Yao

Encl: "Adverse Environmental Impacts Associated with Proposed Shady Oaks and Jagger Branch Developments: Jagger Branch Embayment, Guntersville Lake, Alabama,"
Prepared by Globally Green Consulting

CC: Ronald J. Mikulak, U.S. EPA – Region 4 - Wetlands Regulatory Section, Chief
(via email, without appendices)

James D. Giattina, U.S. EPA – Region 4 – Water Management Division, Director
(via email, without appendices)

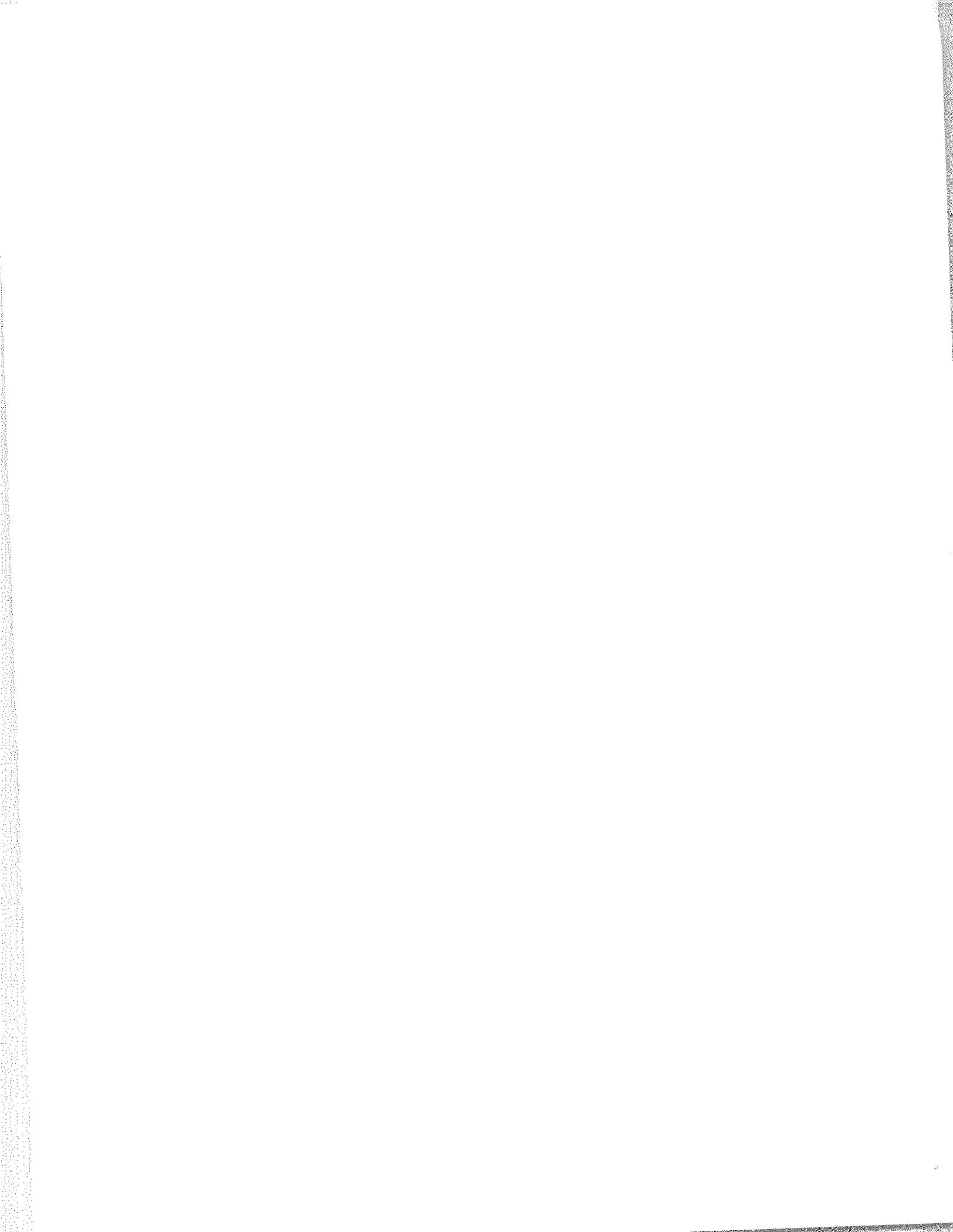
Heinz Mueller, U.S. EPA – Region 4 – NEPA Program Office, Chief
(via email, without appendices)

William J. Pearson, USFWS-Daphne, AL, Field Supervisor
(via email, without appendices)

Kyla Gatlin, ADEM, Field Operations Division (Mining & Non-point Source)
(via email, without appendices)

Brad Bishop, USACE-Nashville, Permit Manager
(via email, without appendices)

Clients



Jagger Branch

Protecting A Valuable Public
Resource

Controlling Boat Density

- Boat density
 - Acres of water divided by number of boats (acres per boat)
- USACoE Study: Lucky Peak Master Plan*
- Must be Optimum for:
 - I. Protecting the resource
 - II. Protecting the participant

* <http://www.nww.usace.army.mil/planning/er/lpeak/sptdata/spt11.htm>

I. Protecting the Resource

- **Size of the reservoir**
- **Amount of boat traffic**

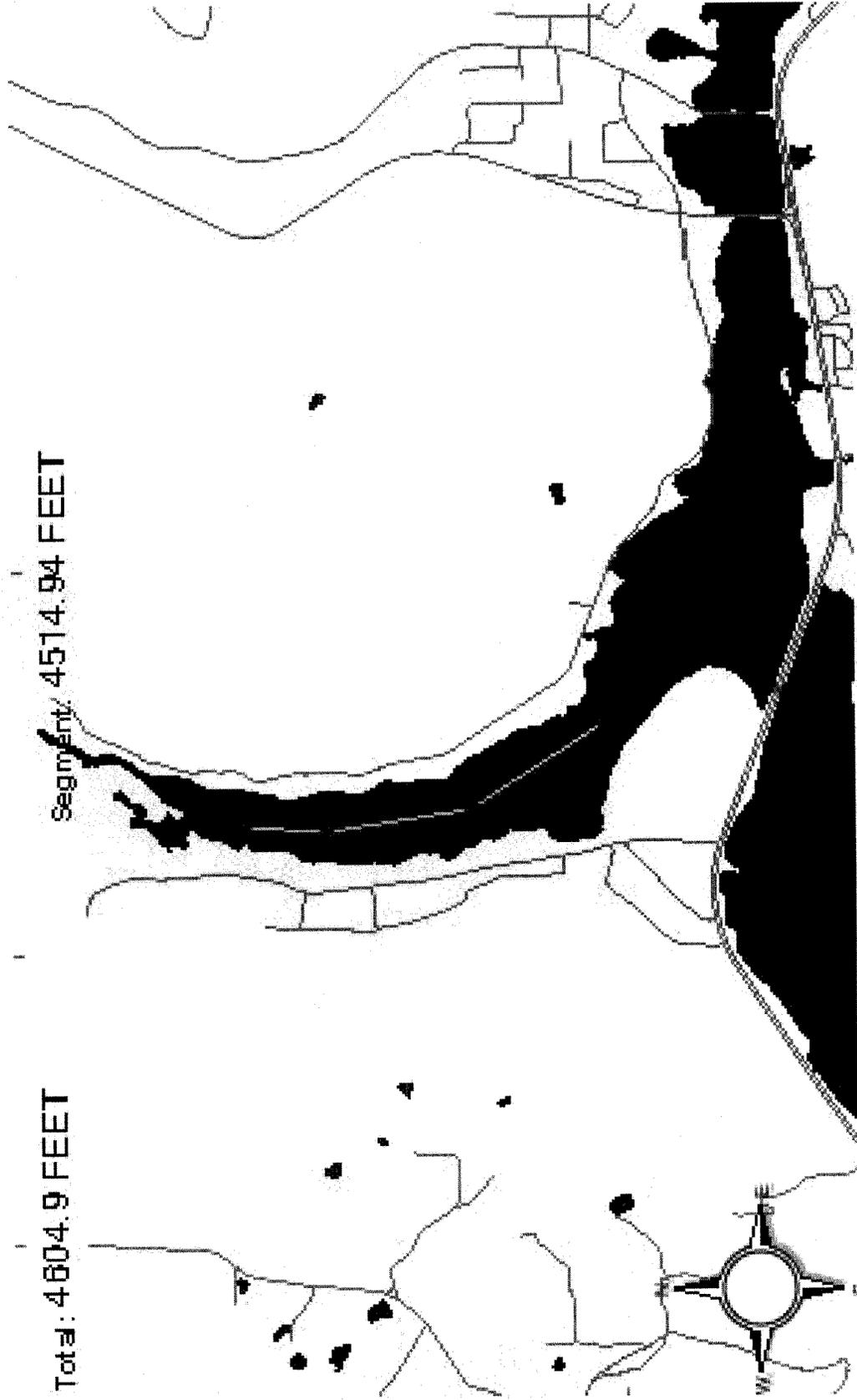
I. Protecting the Resource

- Size of the reservoir
- Amount of boat traffic

Length

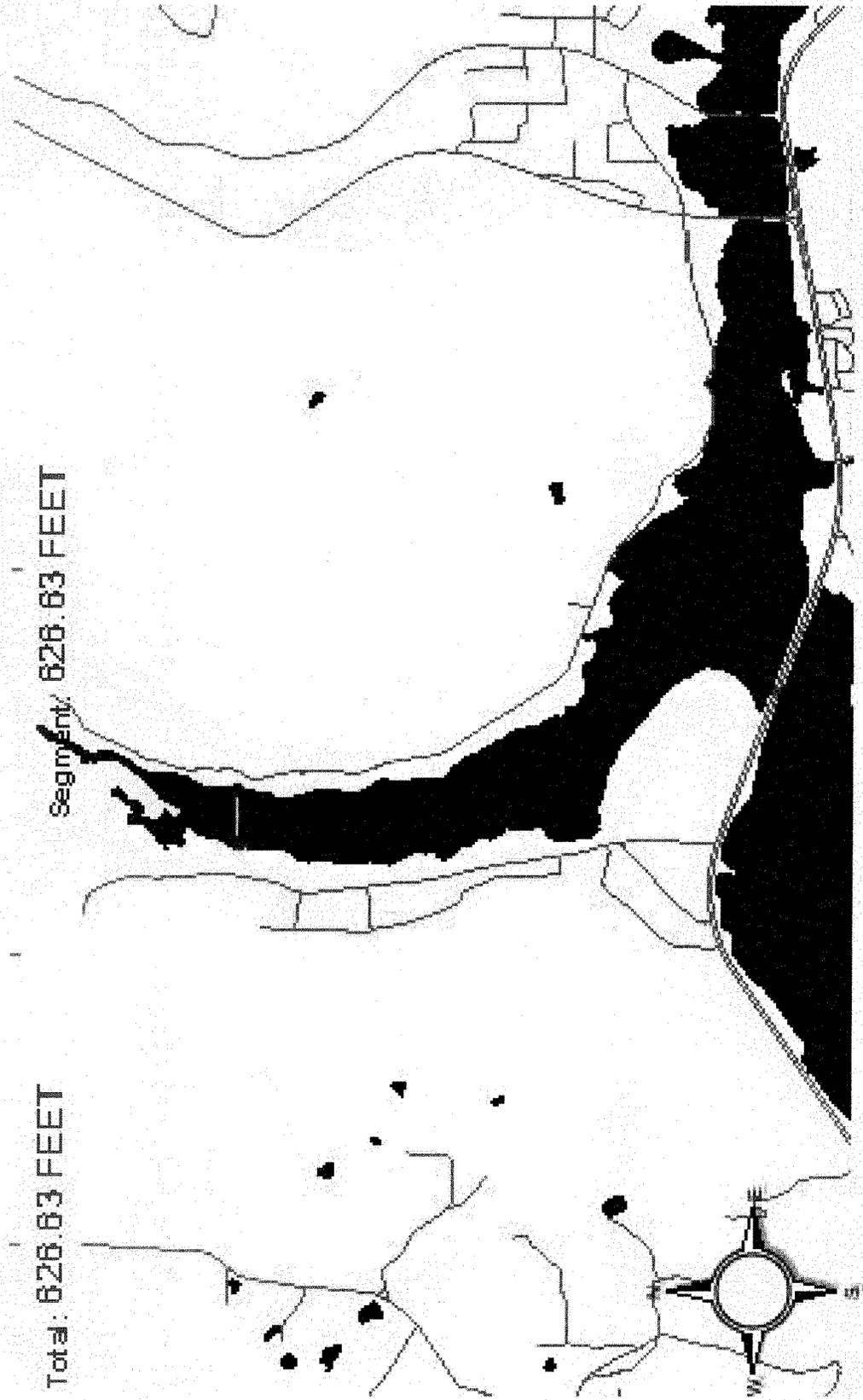
Total: 4804.9 FEET

Segment: 4514.94 FEET



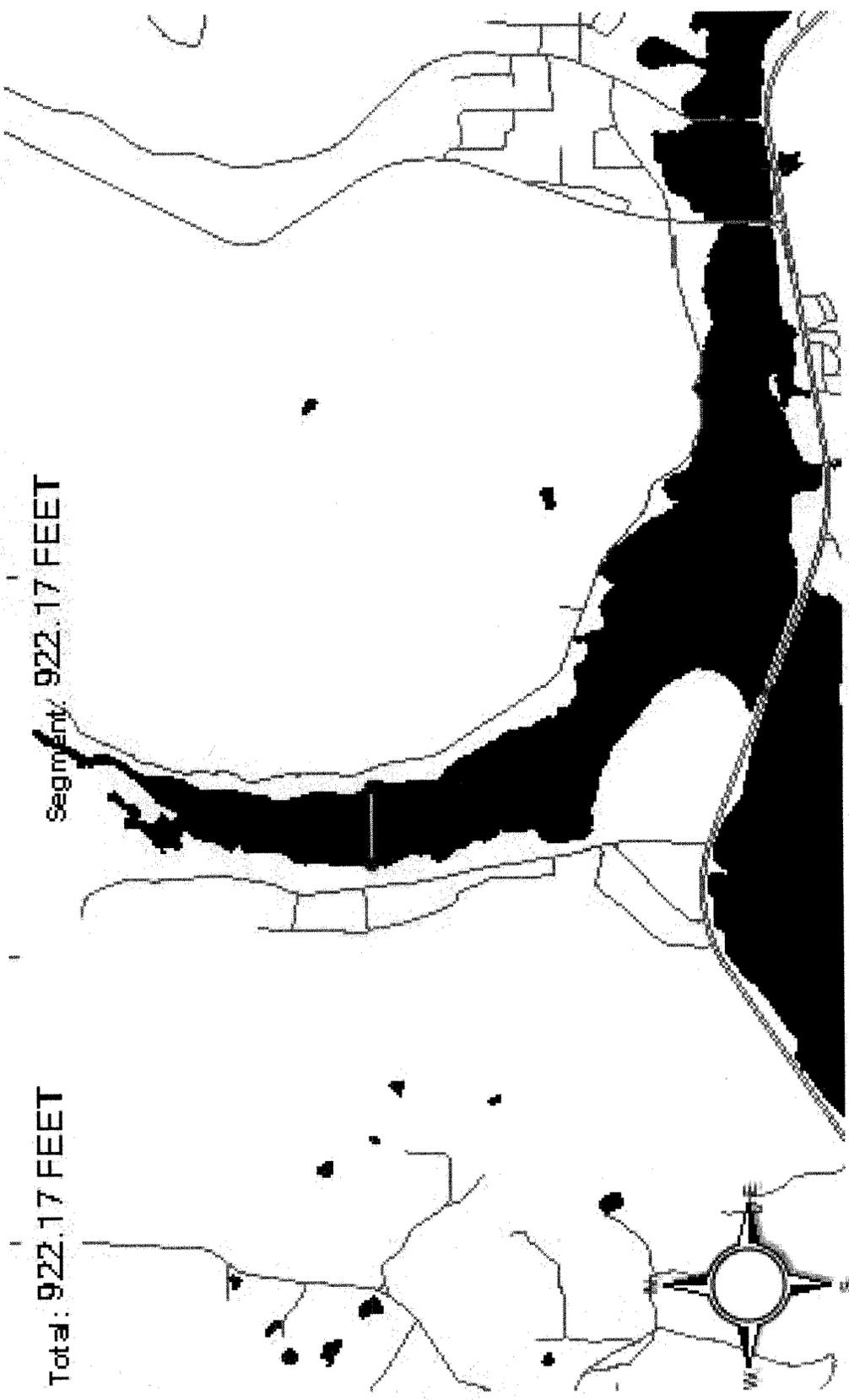
There is no guarantee that this information is accurate ~~as of~~ ~~up to date~~ 3293ft

Width



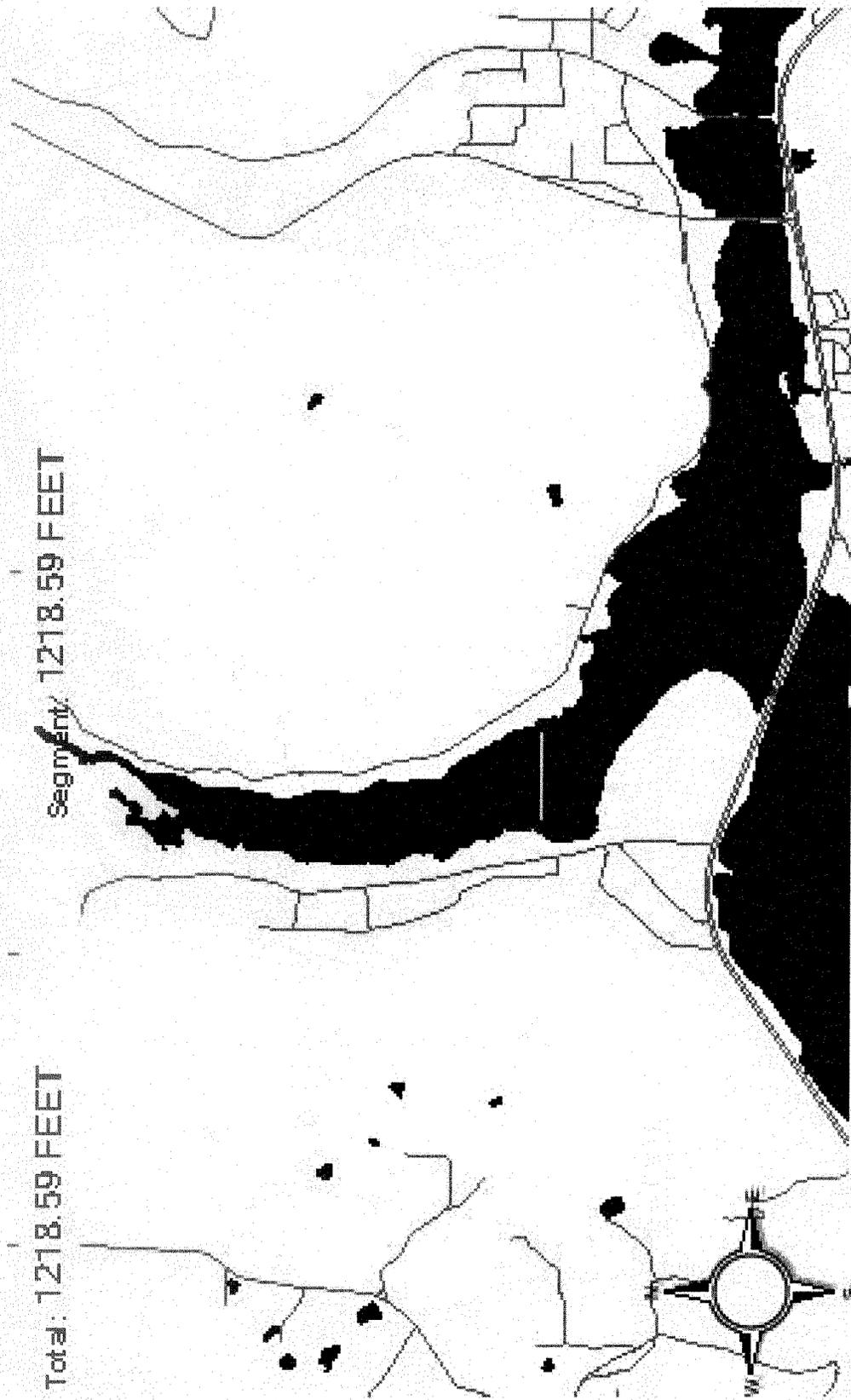
There is no guarantee that this information is accurate @ is up to date 3293ft

Width (cont'd)



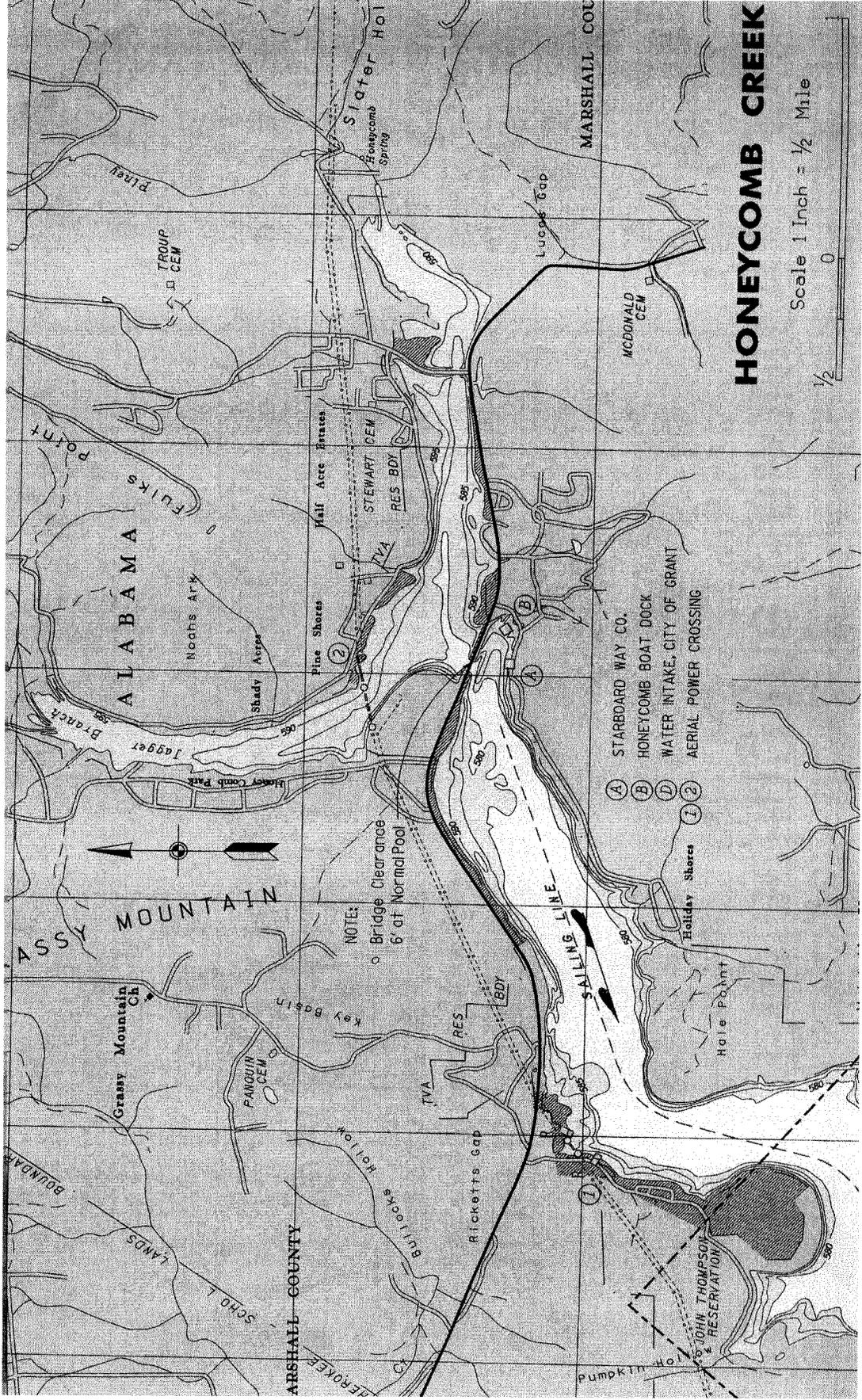
There is no guarantee that this information is accurate Φ is up to date 3293ft

Width (cont'd)



There is no guarantee that this information is accurate Φ is up to date. 3293ft

Depth (less than 9 ft.)



Tennessee River Navigation Charts, US Army Corp Of Engineers, January 2000

I. Protecting the Resource

- Size of the reservoir
- Amount of boat traffic

I. Protecting the Resource (Cont'd)

- Size of the reservoir
- Amount of boat traffic
 - Disruption of mud bottom
 - Shoreline erosion
 - Detrimental to habitat

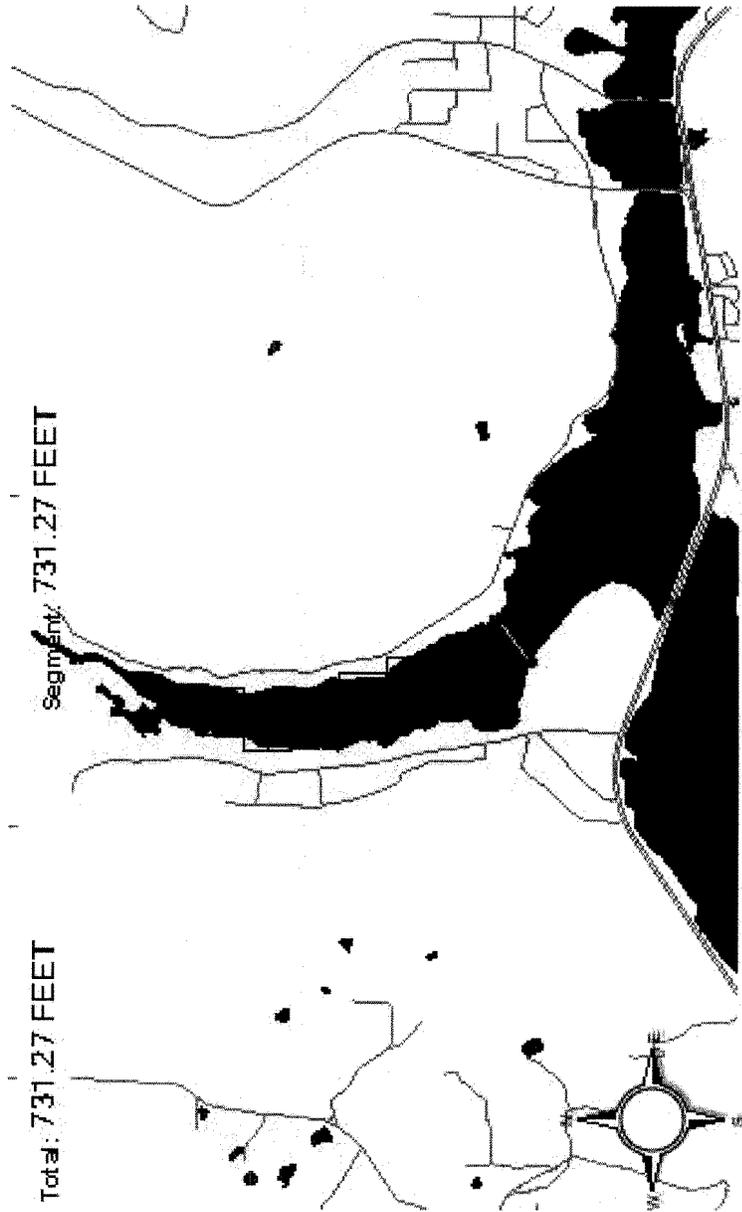
II. Protecting the Participant

- **Water Skier Density**

		Density*			
Low		Optimum		High	
20 Acres per skier		12 Acres per skier		7 Acres per skier	

*<http://www.nww.usace.army.mil/planning/er/lpeak/sptdata/spt11.htm>

Skier Areas of 12 Acres Each - 6



Total: 731.27 FEET

Segment: 731.27 FEET

There is no guarantee that this information is accurate as of the date 3293ft

II. Protecting the Participant (Cont'd)

- **Boat Density**

Density*	
Low	High
<u>18 Acres per boat</u>	<u>3 Acres per boat</u>

* <http://www.nww.usace.army.mil/planning/er/lpeak/sptdata/spt11.htm>

Boat Areas of 9 Acres Each - 8



Jagger Branch Today

- 103 boat slips (HCA count)
- Less than 1 in 16 (6%) can be used for skiing
- Less than 1 in 12 (8%) can be used for boating
- Does not count visitors

Add More?

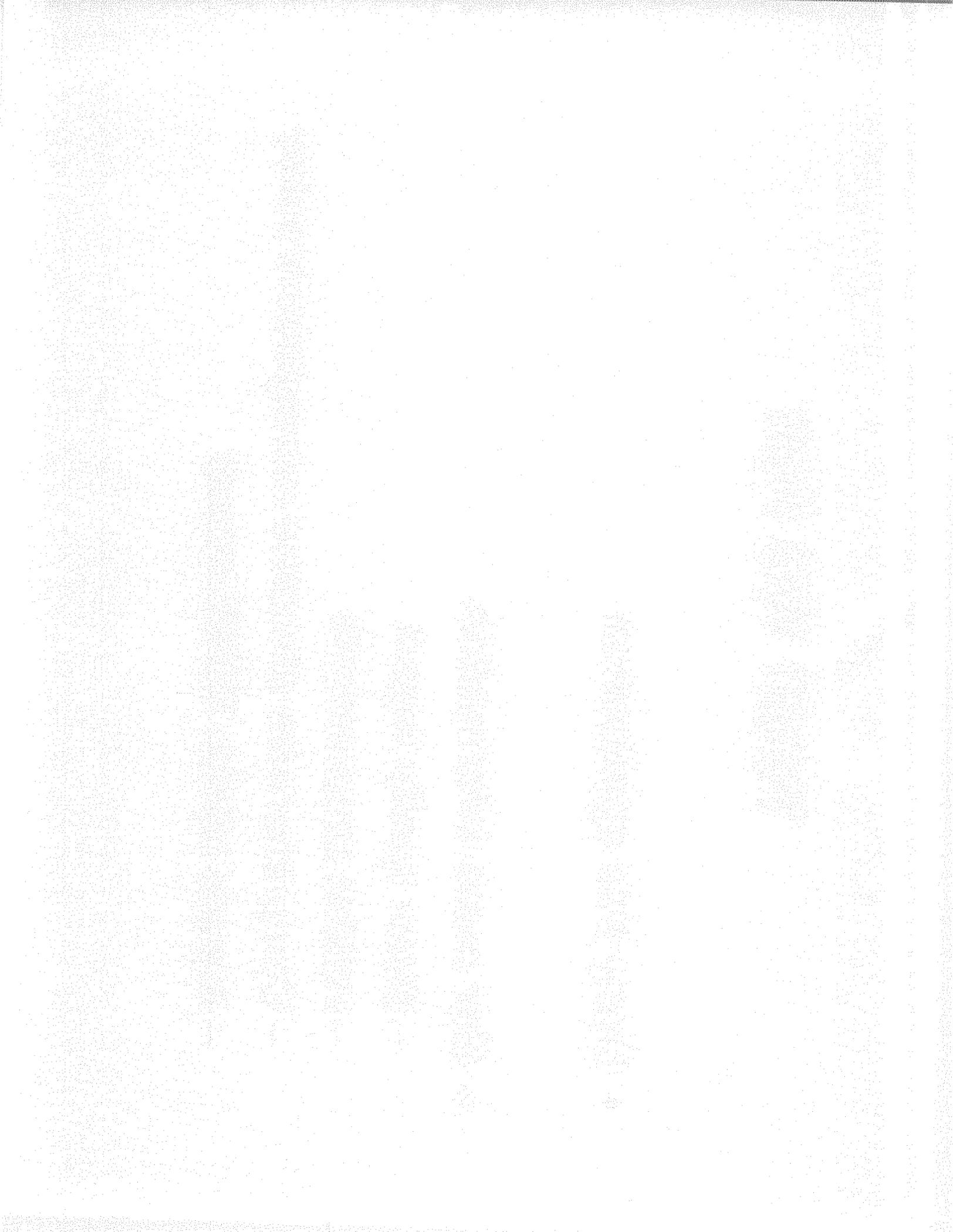
- 20 Shady Oaks Development
- 40 Jagger Branch Development
- Next?

HCA Not Opposed to Growth

- Welcome single-family homes / boat houses
- Oppose unbridled growth
- Oppose destroying link between number of shoreline lots and number of boat slips

What We Ask

- Deny this application
- Get more information
 - Water quality impact
 - Habitat assessments
 - Comprehensive shoreline management policy
 - Assess LONG-TERM impact



Computation of Surface Area in Acres

File	Length	Width	Minus for Shoreline	Total Sq. Ft.
A,B	4,514.94	626.63	(200)	1,926,209
C	4,514.94	856.30	(200)	2,963,155
D	4,514.94	922.17	(200)	3,260,554
E	4,514.94	922.76	(200)	3,263,218
F	4,514.94	1,218.59	(200)	4,598,873
G	4,514.94	1,375.40	(200)	5,306,860
H	4,514.94	731.27	(200)	2,398,652
	Average sq. ft.			3,388,217

$$\text{Sq. ft / ac. } 43,560.00 = 77.78 \text{ Ac.}$$

Computation of Boat Density

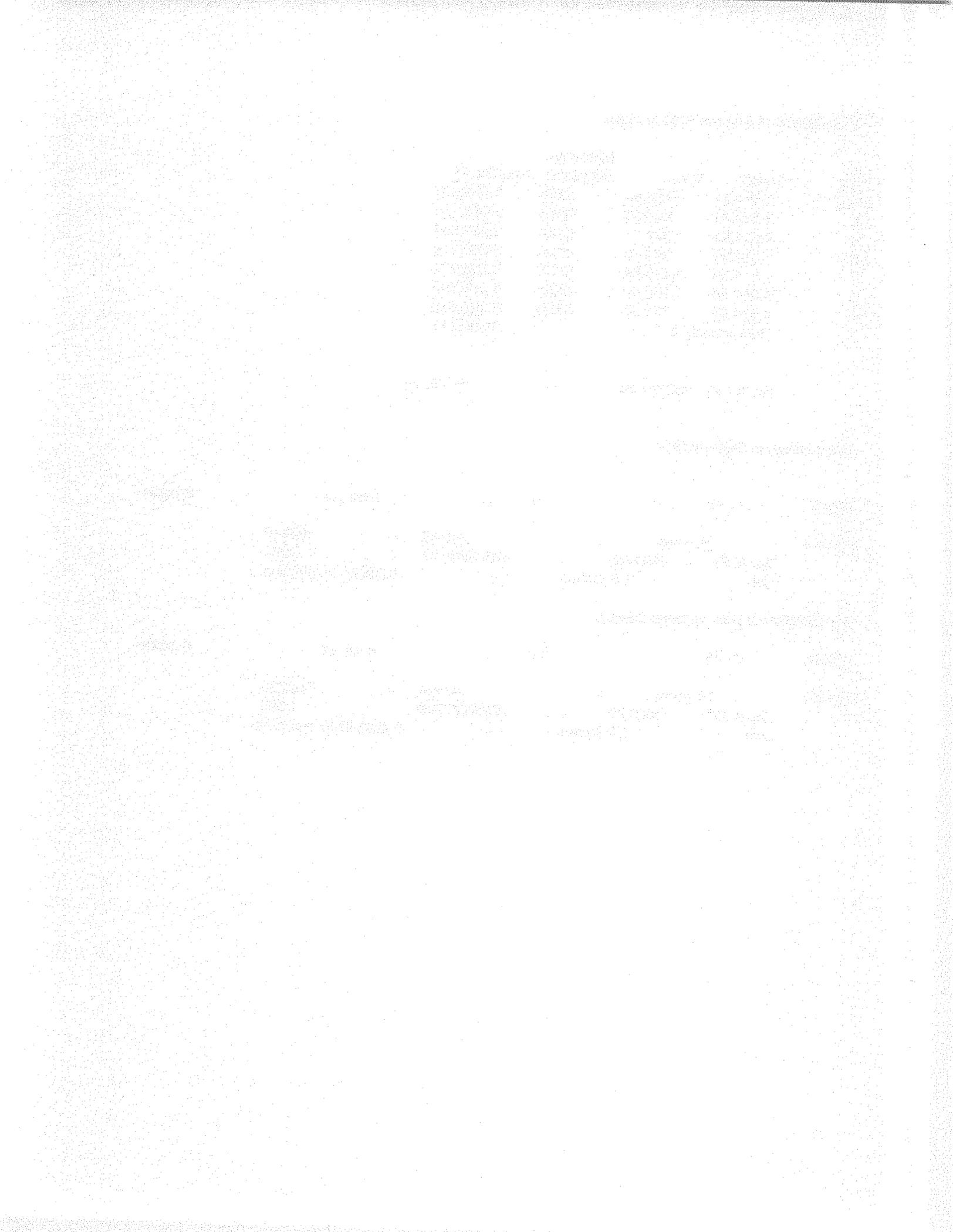
$$\text{Calc} = 77.78 / 9 = 8.64 \text{ or } 8 \text{ boats}$$

$$\text{Scale} = \frac{9 \text{ acres} \times 43560}{\text{Sq. rt. Of } 392040} = \frac{392040}{626.1309767} = \frac{392040}{3293} = 0.28521 \text{ in. per boat}$$

Computation of Boat w/ Skier Density

$$\text{Calc} = 77.78 / 12 = 6.48 \text{ or } 6 \text{ boats}$$

$$\text{Scale} = \frac{12 \text{ acres} \times 43560}{\text{Sq. rt. Of } 522720} = \frac{522720}{722.9937759} = \frac{522720}{3293} = 0.329332 \text{ in. per boat}$$



Comments Regarding Application No. 2006-01175
Proposed Shady Oaks Facility
Grant, Alabama
Roger P. Whitaker

(Slide 1) We have a very valuable resource in Jagger Branch and many of us are interested, even passionate, about preserving this resource for future generations.

(Slide 2) One of the ways to preserve this valuable resource is to monitor and control boat density. Boat density is the acres of water area divided by the number of boats on the water and it is usually stated in acres per boat.

The Corp of Engineers has performed many studies over the years in planning the infrastructure and boat capacity of lakes. I chose the Lucky Peak study because it was relevant to our discussion of issues for Jagger Branch and also it had been recently updated. The Corp uses certain principles in their planning process on one of those is that boating density must be optimum or reasonable in order to: 1) protect the resource and habitat and 2) provide for the safety of the participants.

(Slide 3) Now, let's look at primary factors affecting the protection of the resource and begin with the size of the reservoir.

(Slide 4) From the map here you see Hwy. 431 at the bottom and the Grant road on the right. Our slough is fairly long by Guntersville lake standards extending almost a mile from the mouth (some 4,500 feet) to the end. By the way, this was taken from the interactive map site of MarshallCounty.org.

(Slide 5) One of the biggest shortcomings with respect to boating traffic is that Jagger Branch is very narrow. As you can see near the end of the boating access the slough is a little over 800 feet wide.

(Slide 6 and 7) Near the middle of the slough the width is about 900 feet and (Slide 7) near the mouth the width is a little over 1,200 feet. Averaging these widths with others taken in a similar fashion and deducting about 100 feet on each shoreline for non-usage, and multiplying by the length of the slough yields an area of a little more than 75 acres.

(Slide 8) But the most detrimental factor to water flowing and refreshing in and out of the slough is its shallowness. Based on the navigation map published by the Corp, practically the entire branch North of Hwy. 431 is blue – meaning it is less than nine feet deep at low pool. This creates more of a “backwater” effect by significantly reducing the slough's ability to purge pollutants and replace them with cleaner water.

(Slide 9 and 10) Now let's move to the second factor affecting the resource or habitat and that is the boat traffic in the slough. If you have ever pulled out a skier or made a

quick start in the boat you would have noticed quite a bit of mud was suspended in the water – and it doesn't go away until the next day. Last year I had to put rip rap on my shore line because it was quickly eroding. And the more boat traffic there is, the more erosion there is. All this affects the habitat negatively.

(Slide 11) Now let's move to the second objective in monitoring boat density and that is the safety of the participant. As you can see, the optimum or base density for a boat pulling a water skier is 12 acres. Given the 75 acre area of our slough that means roughly six skiers can ski on our slough at any one time. (Slide 12) This is graphically represented by overlaying six squares of 12 acres each (based on the given scale) on the water area. (Slide 13) Similarly, the optimum or base density for a boat only is about nine acres per boat. (Slide 14) Again, eight squares of nine acres each have been overlaid on the slough area.

(Slide 15) But a recent count of boat slips already on Jagger Branch yielded 103. That means only 6% or about 1 in 16 boats currently available in our slough can pull a skier at one time. Only 8% or about 1 in 12 boats can tour on the slough at any one time. And that doesn't include visitors to the slough. (There is a public boat ramp within one-half mile of the mouth of the slough.)

(Slide 16) And yet we are considering adding more boat slips to make more boats available – possible up to 60 more. The homeowners of Jagger Branch are concerned what will be the next proposed project.

(Slide 17) Honeycomb Community is not opposed to growth. We are opposed to uncontrolled growth. We welcome single family homes and boat slips. I would welcome a single family home next to me – look at the eyesore we have now since the developer pushed over all the trees and walked away. You, see we used to have a link that served to stop uncontrolled growth – the link between shoreline lots and boat slips. Now with that important link appearing to vanish, we are concerned as to where this will end and what it will do to our valuable resource.

(Slide 18) We believe that TVA already has sufficient information from the homeowners and our consultants to deny this application. However, if TVA feels it does not, we ask that you require the developers to prove through reasonable means the development will not harm future water quality. Ask them to prove the development will not harm the existing habitat. To date they have not. And we ask TVA to develop a comprehensive shoreline management policy so we can know what rules and guidelines we are operating under.

The bottom line is, this is far-reaching project with a long-term impact to a very valuable resource. Let's make sure we have done the due diligence to know what the long-term impact is; otherwise let's stop it in its tracks.