

Re-Balancing  
Project & Non-Project  
Lands  
FERC Project 516

# **Project 516**

- **SCE&G PROPOSES to PROTECT  
FROM RESIDENTIAL AND  
COMMERCIAL DEVELOPMENT**

**9,190 ACRES**

**185 MILES**



# Re-Balancing

- Current Project Lands
  - Future Development
  - Management Plan
- Recreation
  - Project & Non-Project
- Lower Saluda River Lands
- Non-Project Lands (Large Tracts)

# Re-Balancing

## Project Lands

SCE&G Future Development

Where Did We Start?

**SCE&G**  
**Management**  
**Prescriptions**  
**June 2008**

## **SCE&G Management Prescriptions June 2008**

<b><u>Lake Murray</u></b>	<b><u>Acres</u></b>	<b><u>Miles</u></b>
<b>75-Foot Setback</b>	<b>263.77</b>	<b>29.95</b>
<b>Causeway</b>	<b>4.16</b>	<b>1.23</b>
<b>Commercial Recreation</b>	<b>114.28</b>	<b>6.05</b>
<b>Natural Areas</b>	<b>42.17</b>	<b>1.57</b>
<b>Easement</b>	<b>7943.93</b>	<b>386.38</b>
<b>Easement w/75-Foot Setback</b>	<b>299.13</b>	<b>0</b>
<b>Forest Management</b>	<b>3570.23</b>	<b>100.13</b>
<b>Future Development —FDID 1-348</b>	<b>1818.10</b>	<b>90.84</b>
<b>Project Operations</b>	<b>1057.53</b>	<b>1.63</b>
<b>Public Recreation</b>	<b><u>765.47</u></b>	<b><u>37.78</u></b>
	<b>15,878.77</b>	<b>655.56</b>

# Re-Balancing of Classifications

	ACRES	MILES
Natural Areas	464.06	21.01
Forest Management	206.16	9.46
Recreation	189.70	9.26
Sub-Total	859.92	39.73
Future Development	958.18	51.11
Total	1818.10	90.84

## SCE&G Management Prescriptions by Acres

	<u>Current</u>	<u>Proposed</u>
<u>Lake Murray</u>	<u>Acres</u>	<u>Acres</u>
75-Foot Setback	263.77	263.77
Causeway	4.16	4.16
Commercial Recreation	114.28	114.28
Natural Areas(Conservation Areas)	42.17	506.23
Easement	7943.93	7943.93
Easement w/75-Foot Setback	299.13	299.13
Forest Management	3570.23	3776.39
Future Development —FDID 1-348	1818.10	958.18
Project Operations	1057.53	1057.53
Public Recreation	<u>765.47</u>	<u>955.17</u>
	15,878.77	15,878.77

## SCE&G Management Prescriptions by Miles

	<u>Current</u>	<u>Proposed</u>
<u>Lake Murray</u>	<u>Miles</u>	<u>Miles</u>
75-Foot Setback	29.95	29.95
Causeway	1.23	1.23
Commercial Recreation	6.05	6.05
Natural Areas (Conservation Areas)	1.57	22.58
Easement	386.38	386.38
Easement w/75-Foot Setback	0	0
Forest Management	100.13	109.59
Future Development —FDID 1-348	90.84	51.11
Project Operations	1.63	1.63
Public Recreation	<u>37.78</u>	<u>47.03</u>
	655.56	655.56

# RECREATION

LAKE MURRAY & LOWER  
SALUDA RIVER



# RECREATION

- EXISTING PUBLIC PARKS
- EXISTING FUTURE PARK SITES
- ISLANDS
- EXISTING LOWER SALUDA PARKS
- NEW FUTURE RECREATION SITES
  - LAKE MURRAY (Inside & Outside PBL)
  - LOWER SALUDA RIVER
- NON PROJECT TIMBER TRACTS

## Existing Park Sites

<b><u>Site Name (Site Number)</u></b>	<b>Acres</b>	<b>Shoreline</b>
Billy Dreher State Park (1-11)	348	12Miles
Dam (1-8)	6.8	1388Ft
Higgins Bridge (1-13)	1.1	375Ft
Hilton (1-7)	4.4	1219Ft
Kempson Bridge (1-14)	2.93	600Ft
Lake Murray Estates (1-22)	7.5	910Ft
Macedonia Church (1-12)	4.8	2491Ft
Murray Shores (1-3)	1.6	1016Ft
Parksite (1-1)	17.9	2271Ft
River Bend (1-4 & 4-A)	11.6	2720Ft
Rocky Point Creek (1-6)	1.7	258Ft
Shull Island (1-2B)	0.36	115.5Ft
Shull Island / Larry Koon (1-2)	1.8	434Ft
Sunset 1-(5)	2.3	640Ft
<b>Total</b>	<b>412.79</b>	<b>14.8 Miles</b>

## Existing Future Sites

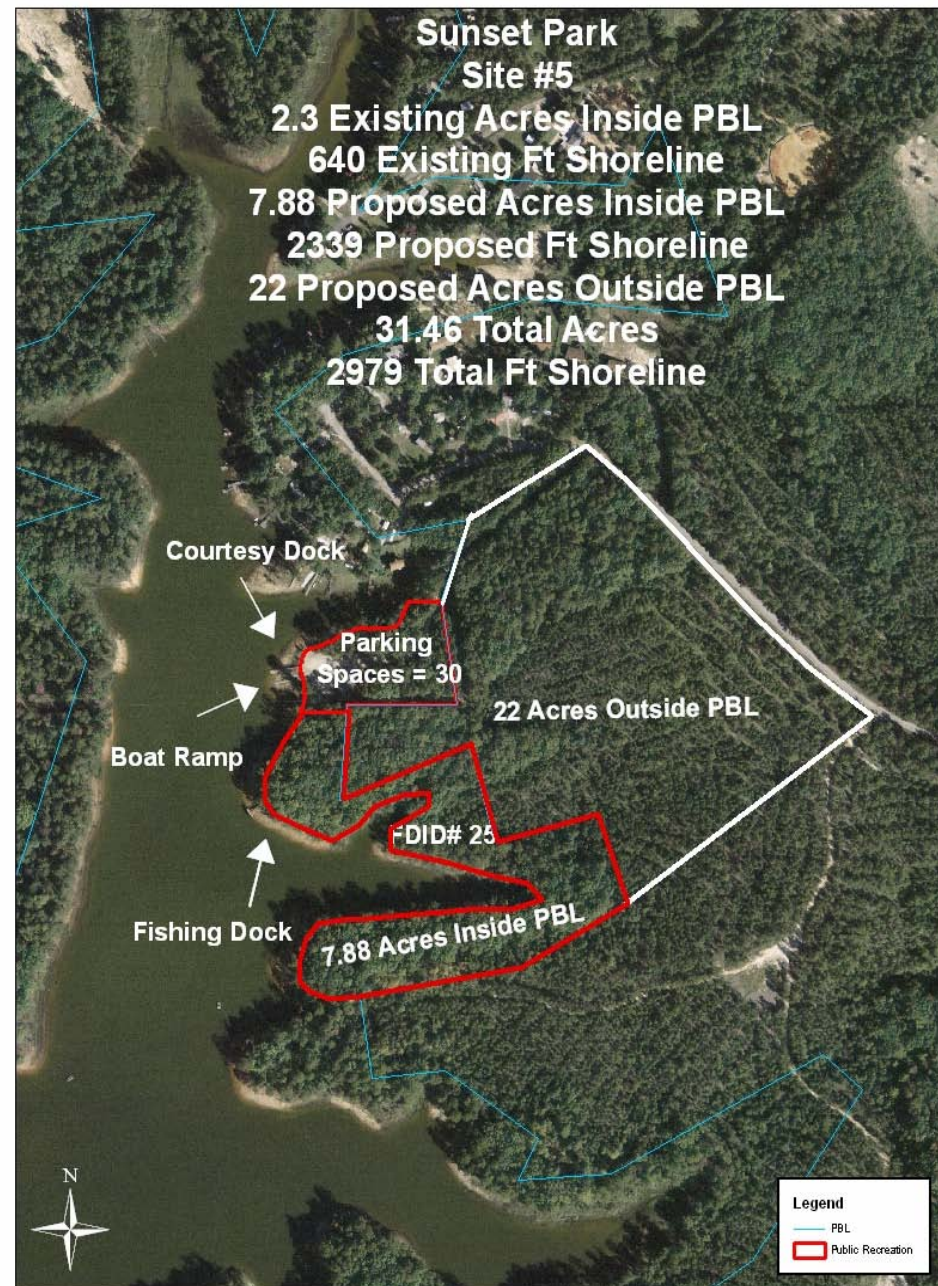
<b><u>Future Sites</u></b>	<b><u>Acres</u></b>	<b><u>Shoreline</u></b>
Shull Island (1-2A)	22.4	0
Simpson's Ferry (5-A)	11.58	3247Ft
Long Pine (6-A)	31.4	1.81 Miles
Hilton (1-7A)	27.86	1755Ft
Water Treatment Plant (16)	4.3	1429Ft
Stone Mountain (17)	26.47	1.94 Miles
Cloud's Creek (18)	3.04	3765Ft
Big Creek (19)	22.34	2613Ft
Little Saluda Point (20)	15.4	3765Ft
Bundrick Island (21)	87.89	2.23Miles
<b><u>Total</u></b>	<b>252.68</b>	<b>9.12 Miles</b>

# Islands and Lower Saluda River Existing Recreation

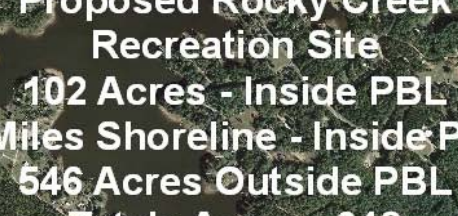
Site Name (Site Number)	Acres	Shoreline
<b><u>Islands (62)</u></b>	<b>100</b>	<b>13.81Miles</b>
<b><u>Lower Saluda River</u></b>		
Hope Ferry - Metts Landing (1-10)	1	150Ft
Saluda River Canoe Portage (1-15)	4.7	210Ft
Saluda Shoals Park (1-9)	160	1.3Miles
<b>Total</b>	<b>165.7</b>	<b>1.36 Miles</b>

<b><u>New Future Recreation Sites</u></b>	<b>Acres Outside PBL</b>	<b>Acres Inside PBL</b>	<b>Shoreline</b>
River Bend	0	5.87	787Ft
Sunset	22	7.88	2339Ft
Big Creek	15	0	0
Little Saluda River – Harmon's Bridge	0	2.83	432Ft
Shealy Road Access	12	15.62	1.5 Miles
Crayne's Bridge Park	38	9.9	3710Ft
Shealy Tract	3.2	36.9	1.5 Miles
Little Saluda Point	0	14.18	1147Ft
Rocky Creek	546	102	5 Miles
Old Corley Bridge Road Canoe Access	2	0	150Ft
Long Pine	20		
Candy Lane	0	3.08	400Ft
12 Mile Creek	0	52	1240Ft
<b>Total</b>	<b>658.20</b>	<b>250.26</b>	<b>9.93 Miles</b>

**TOTAL PROPOSED ACRES = 908.46**





An aerial photograph of a lush, green forested area. A dark, winding river or stream flows through the center of the image, surrounded by dense trees and vegetation. The lighting suggests a bright day, with some areas of the forest appearing slightly brighter than others.

**Proposed Rocky Creek  
Recreation Site**  
**102 Acres - Inside PBL**  
**5 Miles Shoreline - Inside PBL**  
**546 Acres Outside PBL**  
**Totals Acres - 648**



# SUMMARY

	Acres	Shoreline Miles
<b>Existing Recreation Sites</b>	<b>412.79</b>	<b>14.8</b>
<b>(Includes Billy Dreher Island)</b>		
<b>Existing Future Sites</b>	<b>252.42</b>	<b>9.12</b>
<b>Islands</b>	<b>100</b>	<b>13.81</b>
<b>Lower Saluda Recreation Sites</b>	<b>165.7</b>	<b>1.06</b>
<b>Sub-Total</b>	<b><u>930.91</u></b>	<b><u>38.79</u></b>
<b>New Future Recreation</b>	<b>853.38</b>	<b>9.62</b>
<b>(Lake Murray Sites)</b>		
<b>New Future Recreation</b>	<b>55.08</b>	<b>0.31</b>
<b>(Lower Saluda River)</b>		
<b>Total</b>	<b><u>1839.37</u></b>	<b><u>48.72</u></b>



# **Lake Murray State and Regional Parks**

- Billy Dreher Island State Park      348  
acres      12 miles
- Saluda Shoals Regional Park      240  
acres      1.3 miles
- Rocky Creek State Park      648  
acres      5 miles
- Bundrick Island Park      88 acres  
2.23 miles

**Total    1324 Acres    20.53 Miles**

# **SCE&G SALUDA RIVER** **PROPERTY**

SCENIC RIVER EASEMENT  
SCE&G PROPERTIES

# SCENIC RIVER

- SCE&G proposes to classify 14 tracts totaling 275.14 acres plus the 45.04 acres already in the Scenic River as recreation, bringing the total of these tracts to 320.18 acres along the Lower Saluda River

**Saluda River Property**

ID#	SCE&G Tract Name	Total Acreage
1	E.P. Corley	4.3
2	Kleckley	16.3
3	Kleckley	4
4	Corley	26.09
5	Gardendale	56
6	Gardendale	73.12
7	Drafts	7.5
8	Mathias	26.6
9	Meetze	36.36
10	Trapp	27.1
11	Richland Power Co.	25
12	M. Hook -(Island)	12
13	W. Hook	4.07
14	B. Hook	1.74
<b>Total Proposed</b>		<b>320.18</b>

<b>Existing Scenic River Easement Acreage =</b>	<b>45.04</b>
<b>Existing Scenic River Easement Shoreline Miles=</b>	<b>3.72</b>

**Saluda Public Recreation**

Name	Acres	Miles
Metts Landing	1	0
Saluda Shoals	160	8190
12 Mile Creek (Future)	52	1220
Gardendale	4.7	0
Candi Lane (Future)	3.08	1526
<b>Total Existing &amp; Future</b>	<b>220.69</b>	<b>2.08</b>

<b>Existing Scenic River Easement Acreage =</b>	<b>25.1</b>
<b>Existing Scenic River Easement Shoreline Miles=</b>	<b>2.08</b>

Total Proposed Protected Acres =	540.86
Total Scenic River Easement Mileage =	5.8

# SCE&G Lower Saluda River Property June 2008

**Recreation Saluda Shoals**

**Project Operations**

**1 P. Conley Tract**

**Recreation Metts Landing**

**2 Kleckley Tract**

**3 Kleckley Tract**

**4 Conley Tract**

**5 Kleckley Tract**

**6 Recreation Ganderdale**

**7 Ganderdale Tract**

**8 Mathias Tract**

**9 Montez Tract**

**10 Richard Power Company**

**11 M. Hook Tract**

**12 Recreation Ganderdale**

**13 Trap Tract**

**14 B. Hook Tract**

**Recreation 12 Mile Creek**

**Legend**

- SCE&G Non-Project Property
- 100ft Saluda River Easement
- Recreation
- SCE&G Project Property

**1 inch equals 750 feet**

Saluda River Property		
Tract	SCE&G Tract Name	Total Acreage
1	P. Conley	4.10
2	Recreation	16.10
3	Recreation	4.10
4	Conley	20.00
5	Ganderdale	10.10
6	Ganderdale	15.10
7	Mathias	10.10
8	Mathias	10.10
9	Montez	10.10
10	Trap	10.10
11	Recreation (Ganderdale)	10.10
12	Recreation (Ganderdale)	10.10
13	Recreation (Ganderdale)	10.10
14	Recreation (Ganderdale)	10.10
<b>Subtotal Project</b>		<b>100.00</b>
<b>Existing Saluda River Easement Acreage</b>		<b>100.00</b>
<b>Existing Tracts</b>		<b>100.00</b>
<b>Recreation Acreage</b>		<b>100.00</b>

Saluda River Property		
Tract	SCE&G Tract Name	Total Acreage
1	P. Conley	4.10
2	Recreation	16.10
3	Recreation	4.10
4	Conley	20.00
5	Ganderdale	10.10
6	Ganderdale	15.10
7	Mathias	10.10
8	Mathias	10.10
9	Montez	10.10
10	Trap	10.10
11	Recreation (Ganderdale)	10.10
12	Recreation (Ganderdale)	10.10
13	Recreation (Ganderdale)	10.10
14	Recreation (Ganderdale)	10.10
<b>Subtotal Project</b>		<b>100.00</b>
<b>Existing Saluda River Easement Acreage</b>		<b>100.00</b>
<b>Existing Tracts</b>		<b>100.00</b>
<b>Recreation Acreage</b>		<b>100.00</b>

Indefinite Property		
Use	EBIT/Total Asset	Total Average
1	0.11 (10%)	10%
2	0.09 (9%)	9%
3	0.08 (8%)	8%
4	0.07 (7%)	7%
5	0.06 (6%)	6%
6	0.05 (5%)	5%
7	0.04 (4%)	4%
8	0.03 (3%)	3%
9	0.02 (2%)	2%
10	0.01 (1%)	1%
11	0.00 (0%)	0%
12	0.00 (0%)	0%
13	0.00 (0%)	0%
14	0.00 (0%)	0%
15	0.00 (0%)	0%
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90	0.00 (0%)	0%
91	0.00 (0%)	0%
92	0.00 (0%)	0%
93	0.00 (0%)	0%
94	0.00 (0%)	0%
95	0.00 (0%)	0%
96	0.00 (0%)	0%
97	0.00 (0%)	0%
98	0.00 (0%)	0%
99	0.00 (0%)	0%
100	0.00 (0%)	0%

# NON-PROJECT TIMBER TRACTS

- 24 Timber tracts totaling 2754 acres located in the upper regions of Lake Murray
- Lease Tracts to SCDNR
- Properties could be in the SCDNR WMA

<b>ID#</b>	<b>SCE&amp;G Tract Name</b>	<b>Tract Acres</b>
4	Federal Land Bank	3
9	Lake	7
10	Martin-Wheeler	241
13	Belton-Stockman	87
17	Leaphart	30
18	Taylor	68
19	Lake	237
20	Nichols	45
21	Wertz	63
22	Sanders	21
23	M.A. Coleman	756
24	Kempson	150
25	W.F. Coleman	107
26	Wicker	68
27	Mills	80
29	Nichols - Longshore	17
31	Black	49
32	Shumpert	20
33	Etheridge	138
34	Brooks	57
35	Able	125
36	Hare	253
37	T.H. Poultry	90
38	Hare	42
	<b>Total</b>	<b>2754</b>



Proposed Leased  
Property to DNR  
June 2008  
Map 2 of 4

ID#	SCE&G Tract Name	Tract Acres
4	Federal Land Bank	3
9	Lake	7
10	Martin-Wheeler	241
13	Beltan-Stockman	87
17	Leaphart	30
18	Taylor	68
19	Lake	257
20	Nichols	45
21	Wertz	63
22	Sanders	21
23	M.A. Coleman	756
24	Kempson	150
25	W.F. Coleman	107
26	Wicker	68
27	Mills	80
29	Nichols - Longshore	17
31	Black	49
32	Shumpert	20
33	Etheridge	138
34	Brooks	57
35	Able	125
36	Hare	253
37	T.H. Poultry	90
38	Hare	42
Total		2754



**Legend**

- PBL
- Proposed Forest Management
- Proposed Natural Areas
- Proposed Recreation
- Proposed Leased Property
- Stream Buffer
- Perennial
- Intermittent

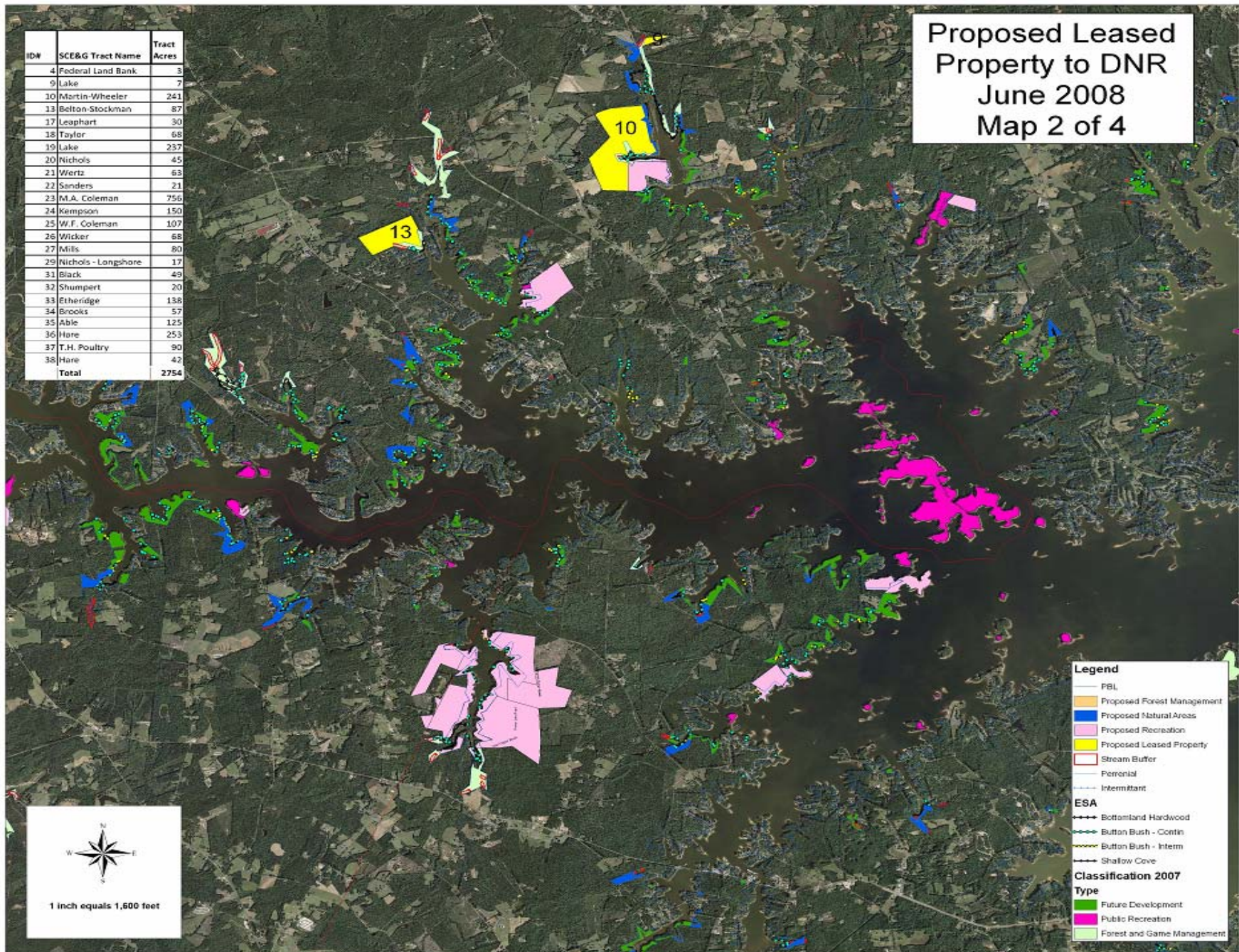
**ESA**

- Bottomland Hardwood
- Button Bush - Contin
- Button Bush - Interm
- Shallow Cove

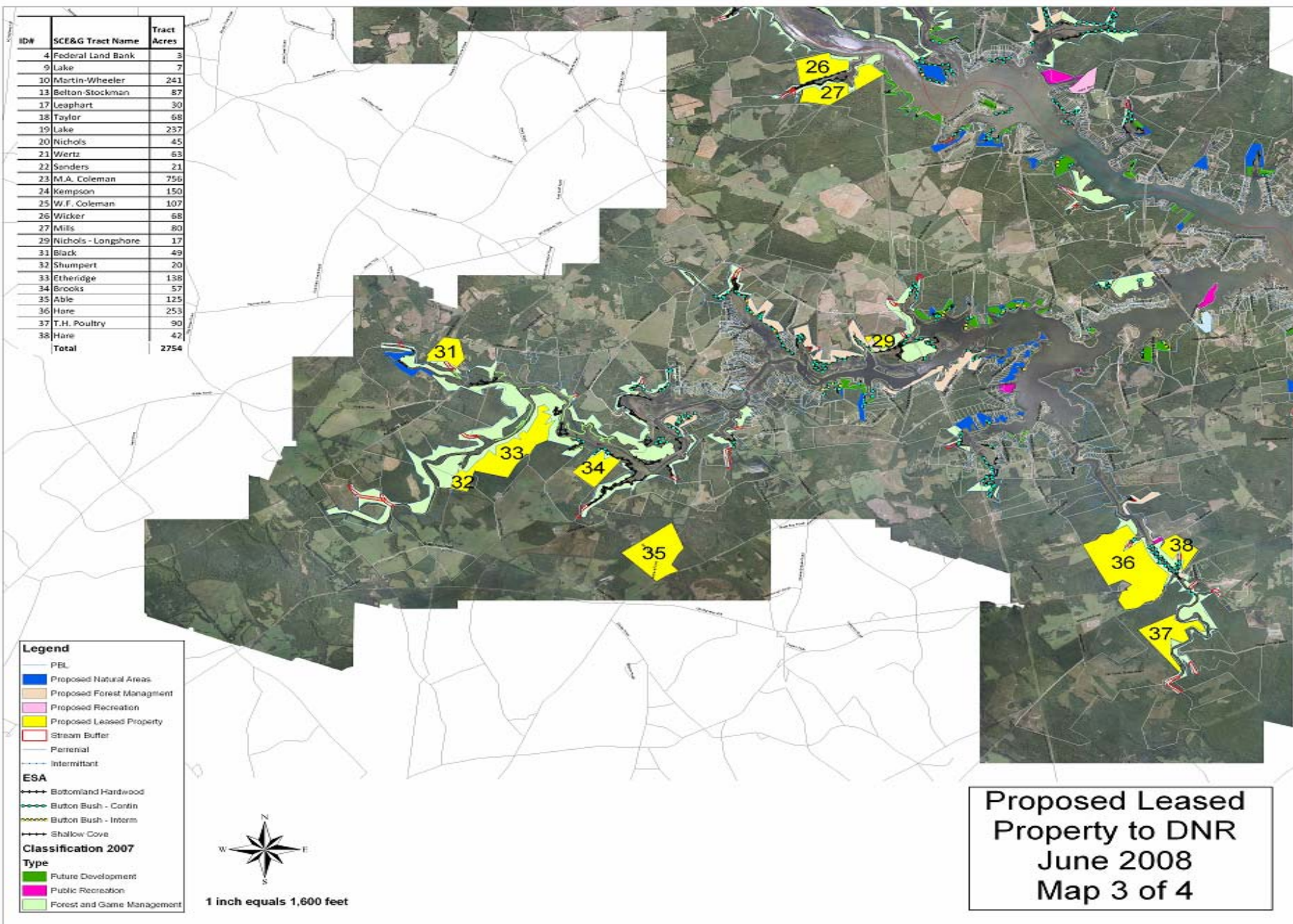
**Classification 2007**

**Type**

- Future Development
- Public Recreation
- Forest and Game Management



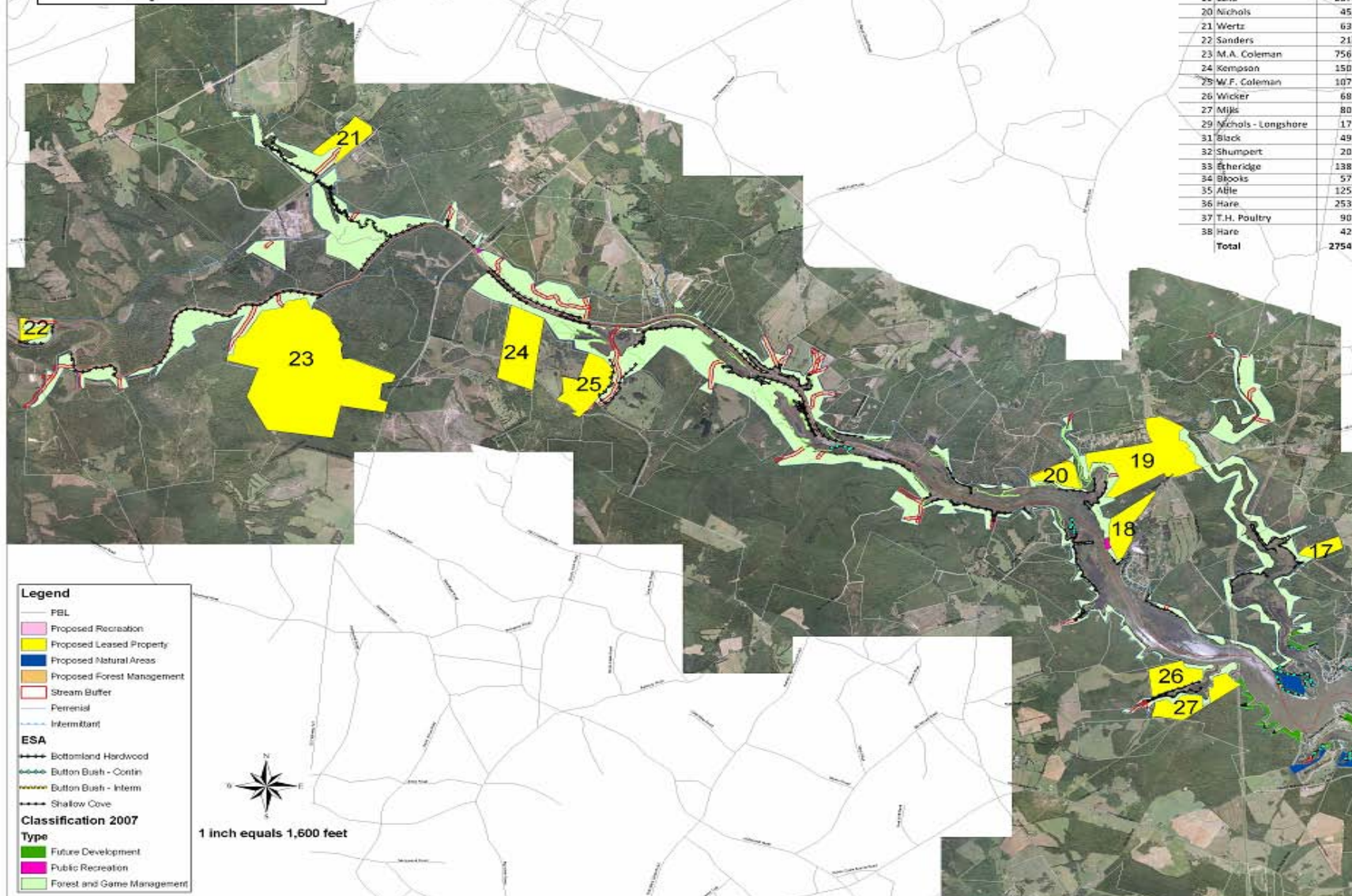






Proposed Leased  
Property to DNR  
June 2008  
Map 4 of 4

ID#	SCE&G Tract Name	Tract Acres
4	Federal Land Bank	3
9	Lake	7
10	Martin-Wheeler	241
13	Belton-Stockman	87
17	Leaphart	30
18	Taylor	68
19	Lake	237
20	Nichols	45
21	Wertz	63
22	Sanders	21
23	M.A. Coleman	756
24	Kempson	150
25	W.F. Coleman	107
26	Wicker	68
27	Mjks	80
29	Nichols - Longshore	17
31	Black	49
32	Shumpert	20
33	Etheridge	138
34	Books	57
35	Able	125
36	Hare	253
37	T.H. Poultry	90
38	Hare	42
Total		2754



# RE-BALANCING SUMMARY

<b>FUTURE DEVELOPMENT LANDS</b>	<b>ACRES BEFORE</b>	<b>ACRES AFTER</b>	<b>MILES BEFORE</b>	<b>MILES AFTER</b>
<b>Natural Areas</b>	<b>42.17</b>	<b>506.23</b>	<b>1.57</b>	<b>22.58</b>
<b>Forest Management</b>	<b>3570.23</b>	<b>3776.39</b>	<b>100.13</b>	<b>109.59</b>
<b>Recreation</b>	<b>765.47</b>	<b>955.17</b>	<b>37.78</b>	<b>47.04</b>
<b>Future Development</b>	<b>1818.10</b>	<b>958.18</b>	<b>90.84</b>	<b>51.11</b>

# RE-BALANCING SUMMARY

NON PROJECT LANDS	ACRES BEFORE	ACRES AFTER	MILES BEFORE	MILES AFTER
RECREATION	0	658.2		
LEASE TO SCDNR	0	2754		
Sub- Total	0	3412.2		
<b>LOWER SALUDA RIVER</b>				
RECREATION	195.58	470.72		
SCENIC RIVER	70.14	70.14	5.8	5.8
Sub Total	265.73	540.87		

# RE-BALANCING SUMMARY

## ACREAGE

	Natural Areas	Forest Management	Recreation	Lease to SCDNR
Future Development	506.23	3776.39	955.17	
Non Project Lands			658.2	2754
Lower Saluda River			540.86	
Sub- Totals	<u>506.23</u>	<u>3776.39</u>	<u>2154.23</u>	<u>2754</u>
Grand Total	To Be	Protected	From	Development
	Lake Murray	and the	Lower Saluda	River
		9,190.85		

# RE-BALANCING SUMMARY

## MILES

	Natural Areas	Recreation	Forest Management	Lease to SCDNR
Future Development	22.58	47.03	109.59	
Non Project Lands				
Lower Saluda River		5.8		
Sub-totals	22.58	52.83	109.59	
Grand Total	Of	Protected	Shoreline	Miles
		185 Miles		





WHAT HAVE WE HEARD  
FOR 2 ½ YEARS?

# Recommendations

- Increase Lot Size
- Multi-slip docks in lieu of individual docks
- Non disturbance buffer zone
- Establish a full 75' Buffer Zone
- Establish Natural Areas
- Restrict development within the PBL
- Protect additional Forest Management & Recreation Lands



## Recommendations Cont.

- Manage remaining Future Development Property under restrictive and protective plan
- Dock Policy for Forest Management Lands
- Support Hunting by participating in the SCDNR WMA program
- State Park on the Lexington Side of Lake Murray

## Recommendations Cont.

- Protect property on Lower Saluda River
- Provide additional recreational properties on Lake Murray and the lower Saluda River
- Update and improve existing Park Sites

# Management Plan

- Land Sales & Dock Permitting Policy

## Management Plan

- Applies to remaining SCE&G-owned Future Development property on Lake Murray
- Allows SCE&G to continue with Fringe Land Sales
- Reflective of agency and committee interests
- Promotes protection of the environmental and scenic values of the project

## Management Plan

- Plan would keep current 75-Foot setback requirement
- Allow sale of fringe land greater than 75 Feet to back property owner with deeded restrictions.
- Maintain environmentally protective deed restrictions for all purchased fringe land
- Non-development and vegetation management restrictions included in each deed
- Purchasers must acknowledge their understanding of deed restrictions before being granted permits for shoreline amenities such as docks and paths
- Permitting shoreline amenities will continue to be dependent on all other conditions specific to those amenities

## Management Plan

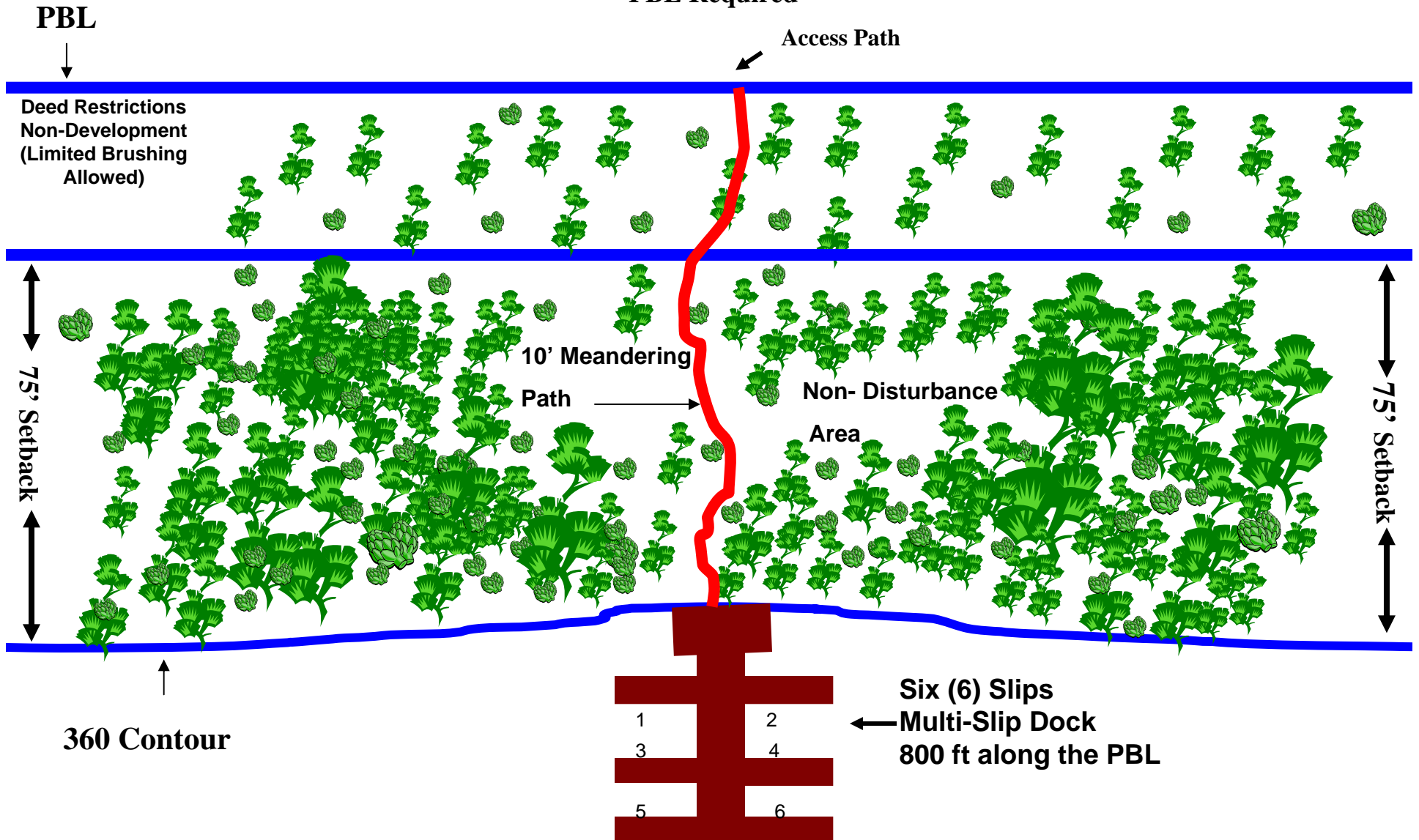
- Establish a uniform 75-Foot non-disturbance Buffer Zone
- Back property owners who have less than 75 feet in depth to the 360 contour would be required to deed SCE&G so much of their property to create a uniformly 75-Foot deep Buffer Zone
- After this condition is met, SCE&G will consider permitting a dock along the shoreline, if the property qualifies for a dock location and all other dock permitting requirements are met

## Multi-Slip Docks

- Will be required in lieu of individual docks in appropriate circumstances
- One and one half (1 ½) slips would be approved for each 200 feet of property along the PBL
- One (1) ten foot (10 ft) wide meandering path will be allowed through the Buffer Zone to access a multi-slip dock

Multi-slip  
Docks  
Exhibit 1

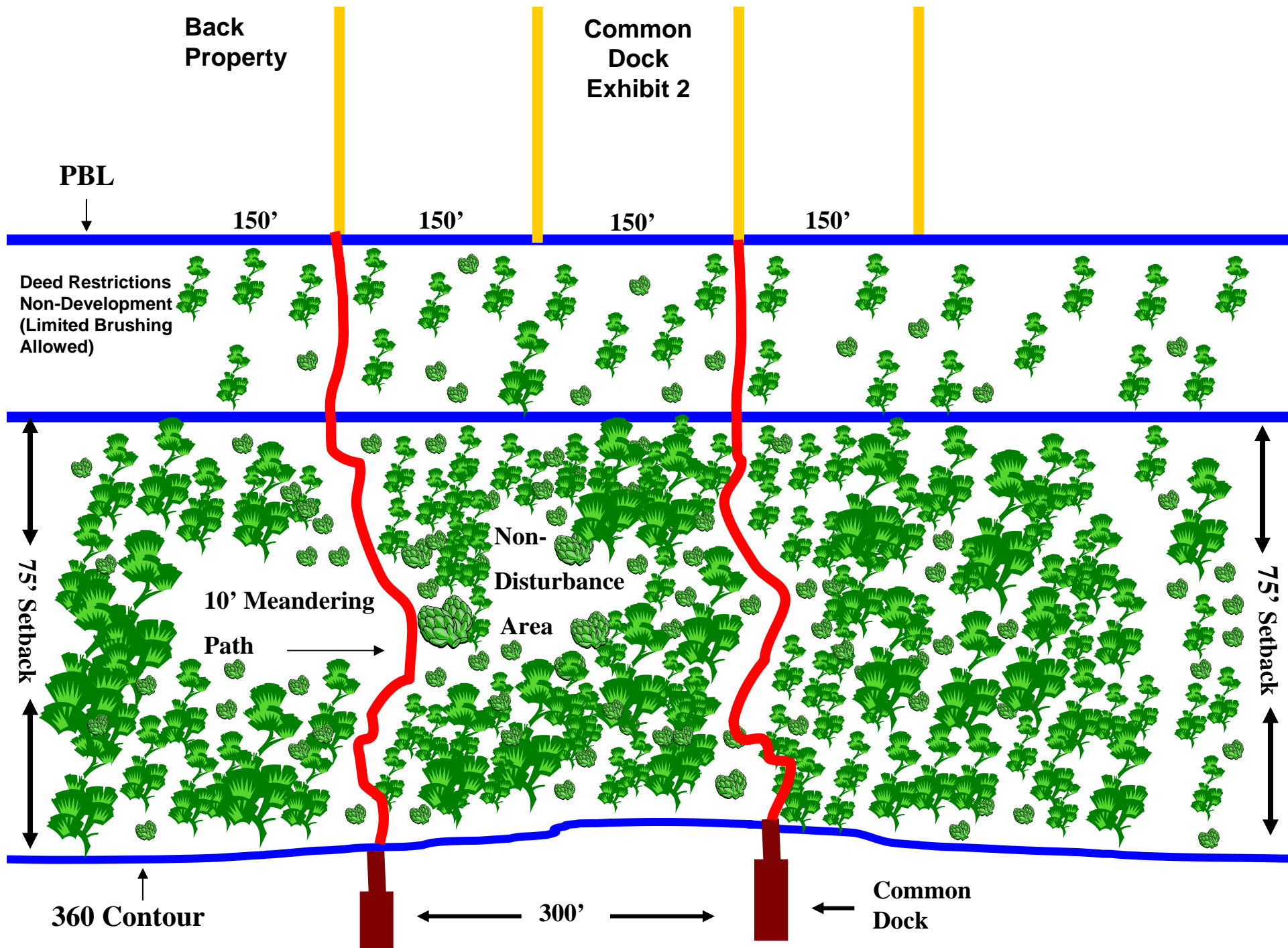
800 ft. of Property on the SCE&G  
PBL Required





## Common Dock

To qualify for a common dock to be shared by two single family dwellings, each lot must have a minimum width of 150 feet, measured on the Project Boundary Line

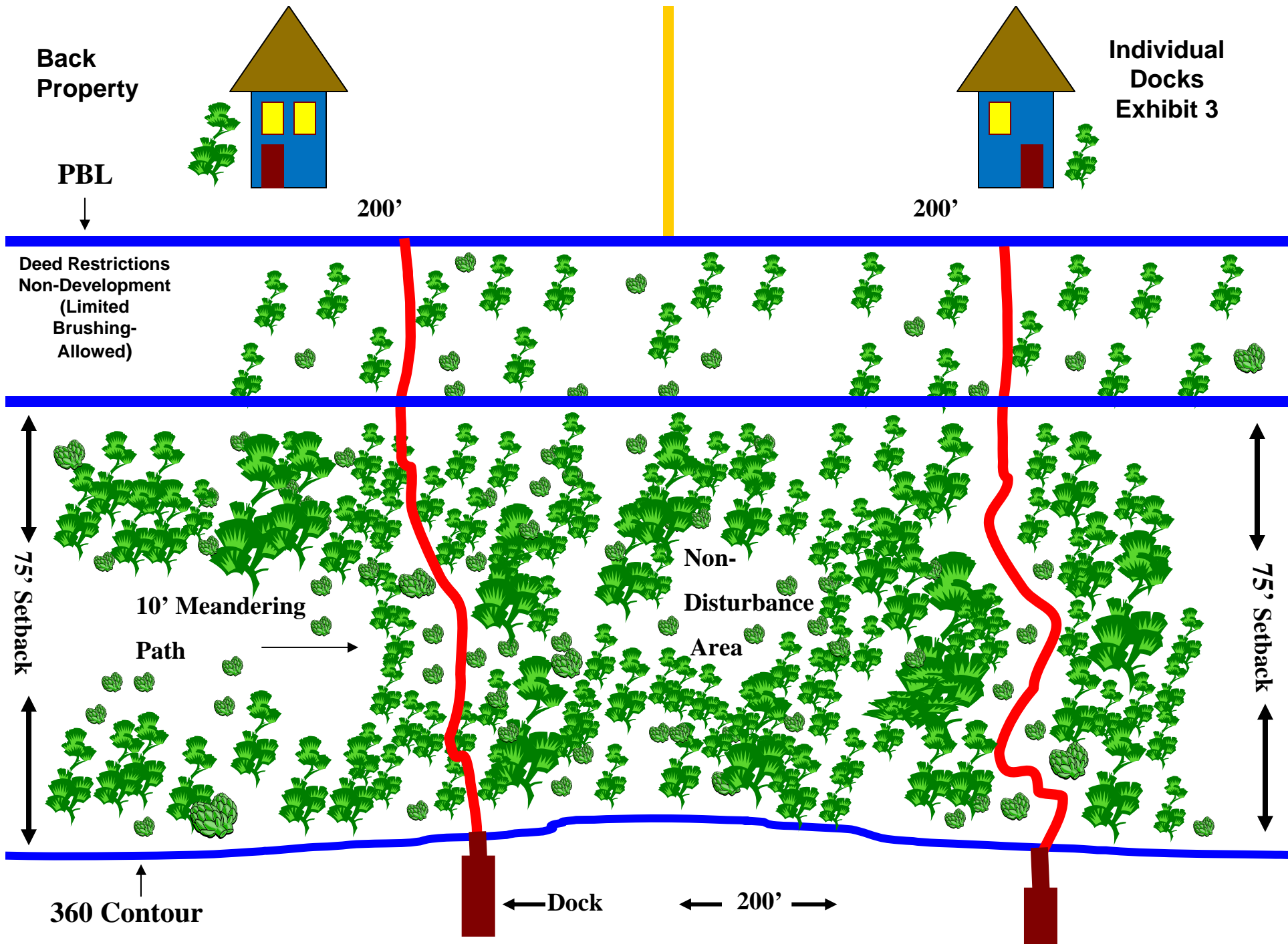


## Individual Docks

To qualify, a lot for a single family dwelling must have a minimum width of 200 feet, measured on the Project Boundary Line

Fringe land that has less than 400 feet, measured on the PBL, may qualify for individual docks

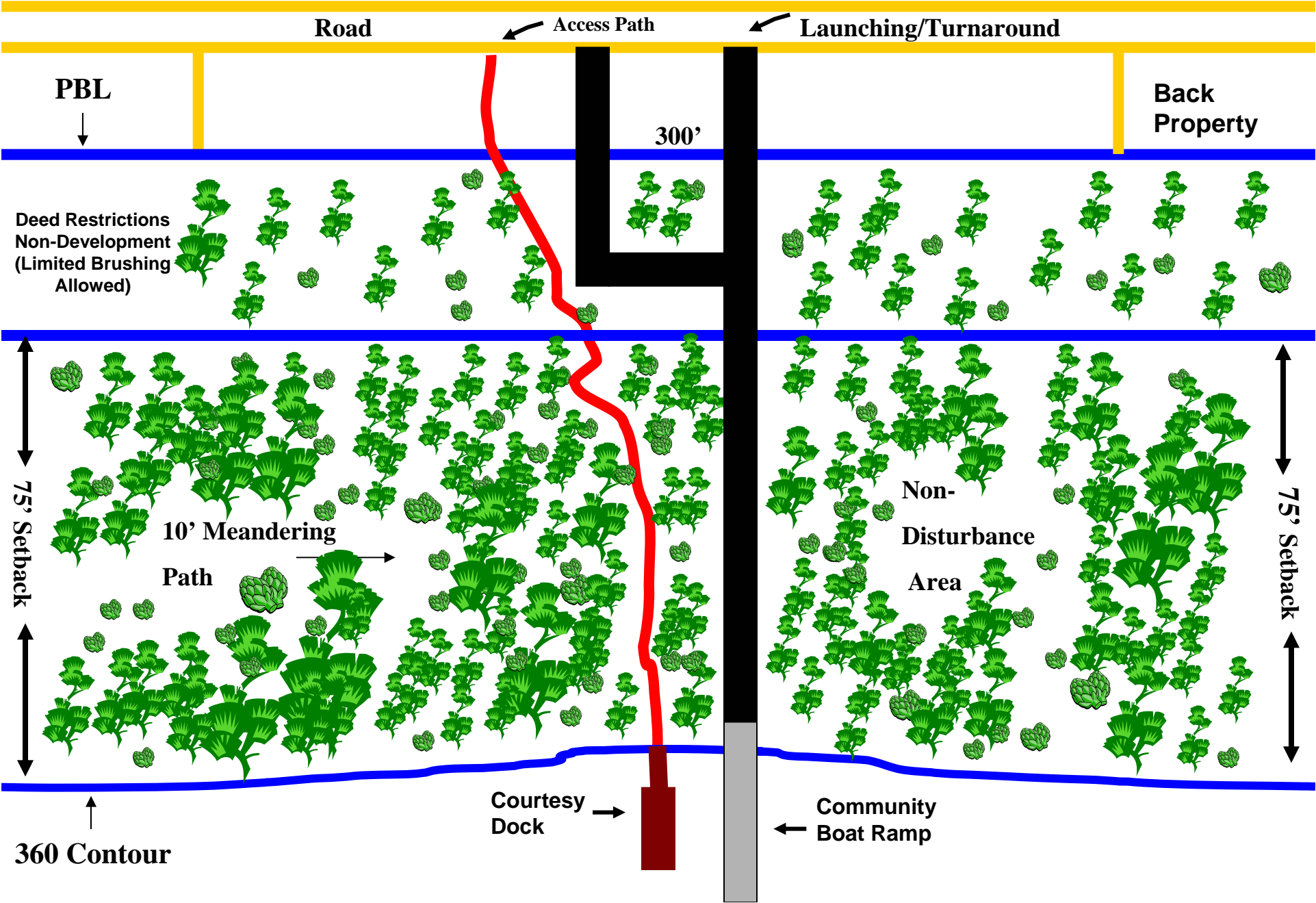
Fringe land that exceeds 400 feet will be required to participate in a multi-slip dock if all permitting requirements are met



## Community Boat Ramp and Courtesy Dock

- A common access lot must have a minimum of three-hundred foot (300 ft) width, measured on the Project Boundary Line
- Qualification for a Community Boat Ramp will be heavily influenced by evaluations of any necessitated impact to existing trees and other vegetation as well as the distance from the PBL to the 360 contour

Community Boat Ramp & Courtesy Dock  
Exhibit 4



## 75-Foot Buffer Zone Management

- Will be a non-disturbance area except for such clearing necessary and approved for installation and maintenance of approved shoreline amenities
- No clearing of trees, shrubs or vegetation will be allowed
- Will allow clearing for a single, ten foot (10 ft) wide meandering access path to a permitted dock from adjacent back property owner's land
- Path must not encourage erosion and must protect the aesthetics of the shoreline
- Trees larger than 8 inches at breast height may not be removed within path
- Lake Management representatives will work with property owners to lay out access paths

# Re-Balancing Project & Non-Project Lands

## FERC Project 516

Draft Proposal

June 10, 2008

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# **Project 516**

- **SCE&G PROPOSES to PROTECT  
FROM RESIDENTIAL AND  
COMMERCIAL DEVELOPMENT**

**9,189 ACRES**

**185 MILES**

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# Re-Balancing

- Current Project Lands
  - Future Development
  - Management Plan
- Recreation
  - Project & Non-Project
- Lower Saluda River Lands
- Non-Project Lands (Large Tracts)

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# Re-Balancing

## Project Lands

SCE&G Future Development

Where Did We Start?

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**SCE&G  
Management  
Prescriptions  
June 2008**

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## SCE&G Management Prescriptions June 2008

<u>Lake Murray</u>	<u>Acres</u>	<u>Miles</u>
75-Foot Setback	263.77	29.95
Causeway	4.16	1.23
Commercial Recreation	114.28	6.05
Natural Areas	42.17	1.57
Easement	7943.93	386.38
Easement w/75-Foot Setback	299.13	0
Forest Management	3570.23	100.13
Future Development —FDID 1-348	1818.10	90.84
Project Operations	1057.53	1.63
Public Recreation	<u>763.61</u>	<u>37.78</u>
	15,876.91	655.56

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# Total Number Of Tracts

- 347 Tracts (Tract 91 Did Not Exist)
- 48 Tracts were eliminated

(below the dam, causeways, data error, and tracts already sold)

- 299 Remaining Tracts
- 83 Tracts(a portion or all to Natural Areas)
- 15 Tracts (a portion or all to Recreation)
- 14 Tracts (a portion or all to Forest Mgt)

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# Re-Balancing of Classifications

	ACRES	MILES
Natural Areas	464.06	21.01
Forest Management	206.16	9.46
Recreation	189.70	9.26
Sub-Total	859.92	39.73
Future Development	958.18	51.11
Total	1818.10	90.84

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## SCE&G Management Prescriptions by Acres

	<u>Current</u>	<u>Proposed</u>
<u>Lake Murray</u>	<u>Acres</u>	<u>Acres</u>
75-Foot Setback	263.77	263.77
Causeway	4.16	4.16
Commercial Recreation	114.28	114.28
Natural Areas(Conservation Areas)	42.17	506.23
Easement	7943.93	7943.93
Easement w/75-Foot Setback	299.13	299.13
Forest Management	3570.23	3776.39
Future Development —FDID 1-348	1818.10	958.18
Project Operations	1057.53	1057.53
Public Recreation	<u>763.61</u>	<u>953.31</u>
	15,876.91	15,876.91

## SCE&G Management Prescriptions by Miles

	<u>Current</u>	<u>Proposed</u>
<u>Lake Murray</u>	<u>Miles</u>	<u>Miles</u>
75-Foot Setback	29.95	29.95
Causeway	1.23	1.23
Commercial Recreation	6.05	6.05
Natural Areas (Conservation Areas)	1.57	22.58
Easement	386.38	386.38
Easement w/75-Foot Setback	0	0
Forest Management	100.13	109.59
Future Development —FDID 1-348	90.84	51.11
Project Operations	1.63	1.63
Public Recreation	<u>37.78</u>	<u>47.03</u>
	655.56	655.56

# RECREATION

LAKE MURRAY & LOWER  
SALUDA RIVER

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# RECREATION

- EXISTING PUBLIC PARKS
- EXISTING FUTURE PARK SITES
- ISLANDS
- EXISTING LOWER SALUDA PARKS
- NEW FUTURE RECREATION SITES
  - LAKE MURRAY (Inside & Outside PBL)
  - LOWER SALUDA RIVER
- NON PROJECT TIMBER TRACTS

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## Existing Park Sites

<b><u>Site Name (Site Number)</u></b>	<b>Acres</b>	<b>Shoreline</b>
Billy Dreher State Park (1-11)	348	12Miles
Dam (1-8)	6.8	1388Ft
Higgins Bridge (1-13)	1.1	375Ft
Hilton (1-7)	4.4	1219Ft
Kempson Bridge (1-14)	2.93	600Ft
Lake Murray Estates (1-22)	5	910Ft
Macedonia Church (1-12)	5.3	2491Ft
Murray Shores (1-3)	1.6	1016Ft
Parksite (1-1)	17.9	2271Ft
River Bend (1-4 & 4-A)	11.6	2720Ft
Rocky Point Creek (1-6)	1.7	258Ft
Shull Island (1-2B)	0.36	115.5Ft
Shull Island / Larry Koon (1-2)	2.2	434Ft
Sunset 1-(5)	2.3	640Ft
<b>Total</b>	<b>411.19</b>	<b>14.8 Miles</b>

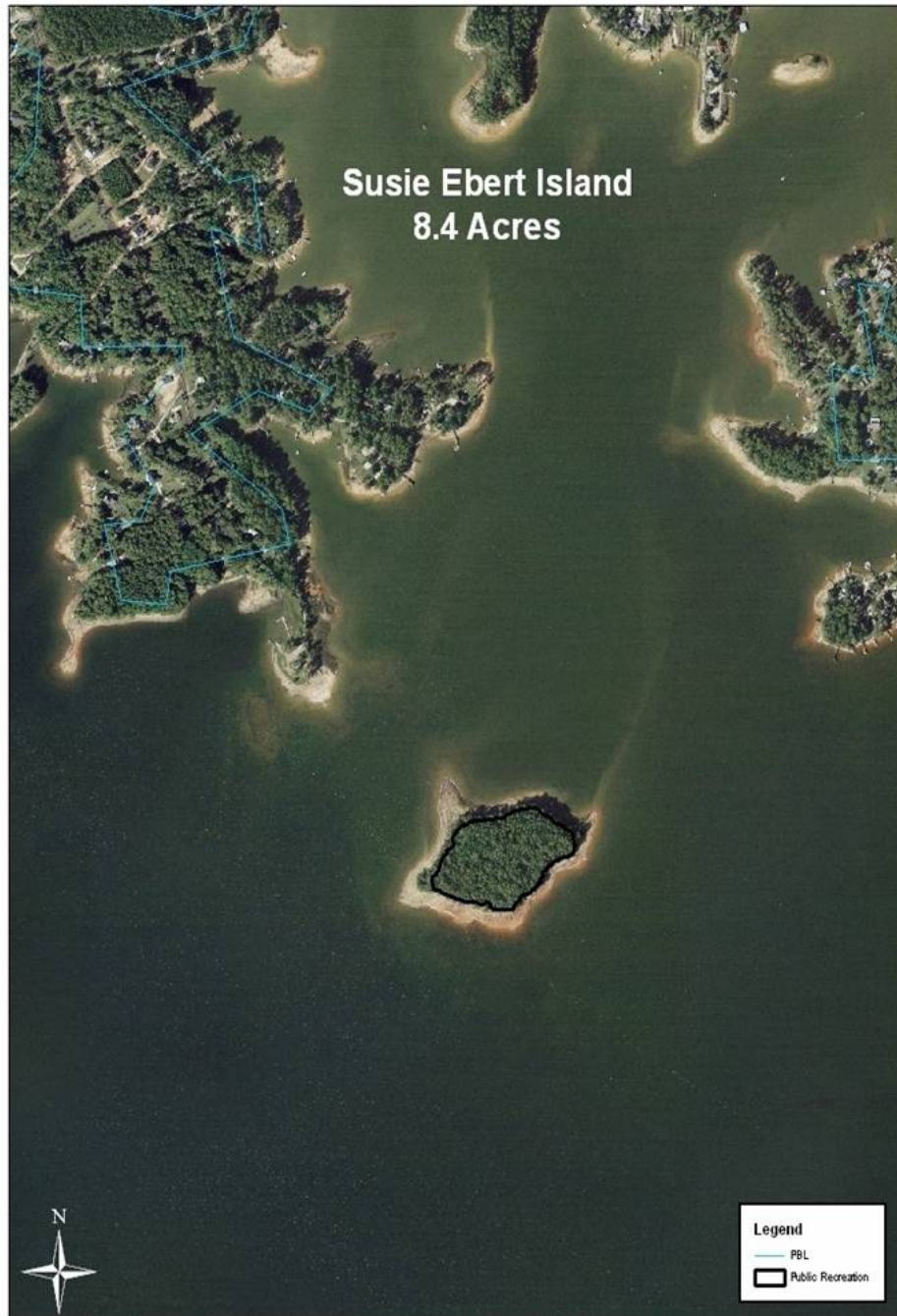
## Existing Future Sites

<b><u>Future Sites</u></b>	<b><u>Acres</u></b>	<b><u>Shoreline</u></b>
Shull Island (1-2A)	22.4	0
Simpson's Ferry (5-A)	11.58	3247Ft
Long Pine (6-A)	31.4	1.81 Miles
Hilton (1-7A)	27.86	1755Ft
Water Treatment Plant (16)	4.3	1429Ft
Stone Mountain (17)	26.47	1.94 Miles
Cloud's Creek (18)	3.04	3765Ft
Big Creek (19)	22.34	2613Ft
Little Saluda Point (20)	15.14	3765Ft
Bundrick Island (21)	87.89	2.23Miles
<b><u>Total</u></b>	<b>252.42</b>	<b>9.12 Miles</b>

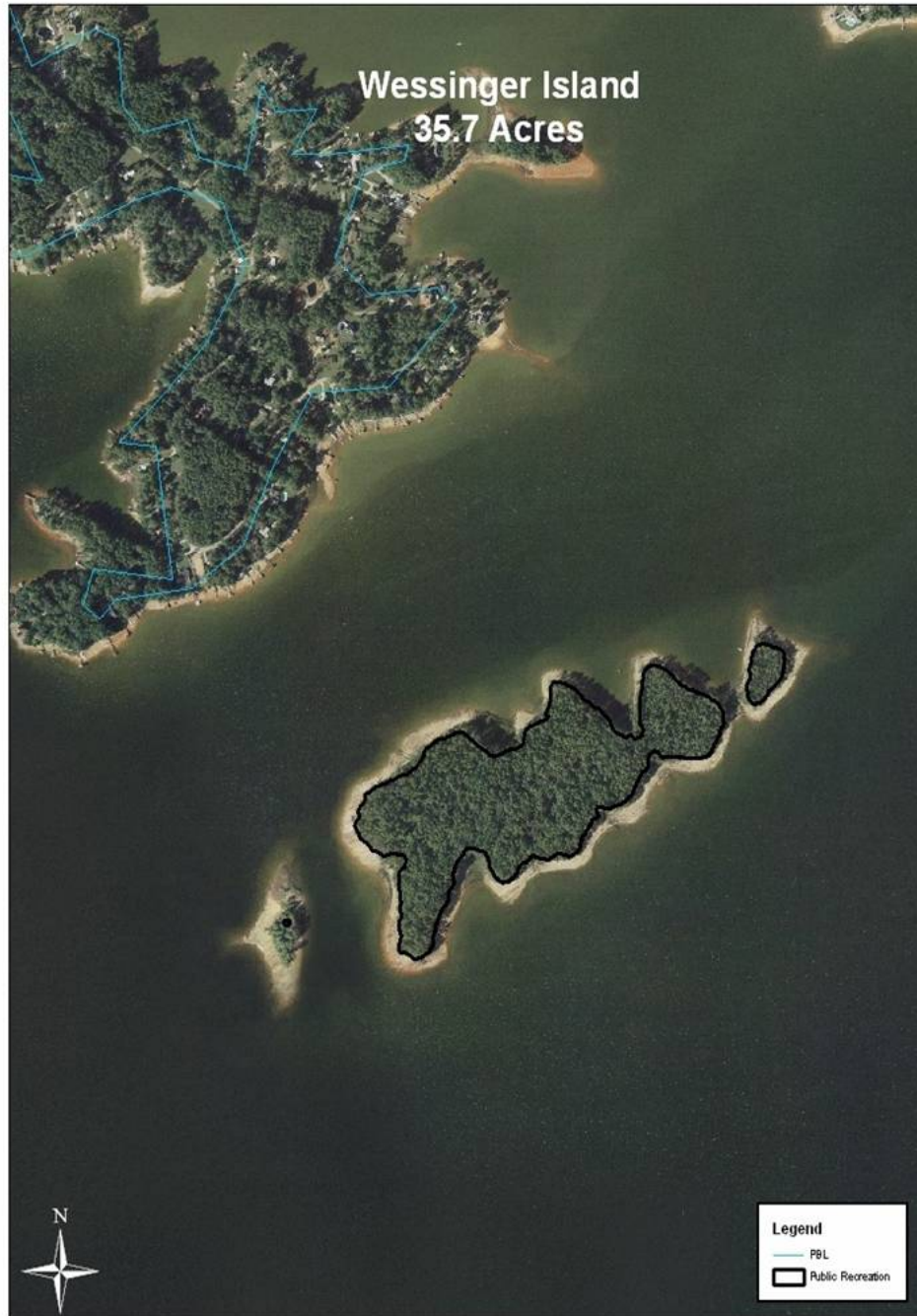
# Islands and Lower Saluda River Existing Recreation

Site Name (Site Number)	Acres	Shoreline
<b><u>Islands (62)</u></b>	<b>100</b>	<b>13.81Miles</b>
<b><u>Lower Saluda River</u></b>		
Hope Ferry - Metts Landing (1-10)	1	150Ft
Saluda River Canoe Portage (1-15)	4.6	210Ft
Saluda Shoals Park (1-9)	160	1.3Miles
<b>Total</b>	<b>165.6</b>	<b>1.36 Miles</b>





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<b><u>New Future Recreation Sites</u></b>	<b>Acres Outside PBL</b>	<b>Acres Inside PBL</b>	<b>Shoreline</b>
River Bend	0	5.87	787Ft
Sunset	22	9.58	3179Ft
Big Creek	15	0	0
Little Saluda River – Harmon's Bridge	0	2.83	432Ft
Shealy Road Access	12	15.62	1.5 Miles
Crayne's Bridge Park	38	10.24	3710Ft
Shealy Tract	3.2	36.8	1.5 Miles
Little Saluda Point	0	14.18	1147Ft
Rocky Creek	546	102	5 Miles
Old Corley Bridge Road Canoe Access	2	0	150Ft
Long Pine	20		
Candy Lane	0	3.08	400Ft
12 Mile Creek	0	52	1240Ft
<b>Total</b>	<b>658.20</b>	<b>252.20</b>	<b>10.09 Miles</b>

**TOTAL PROPOSED ACRES = 910.40**





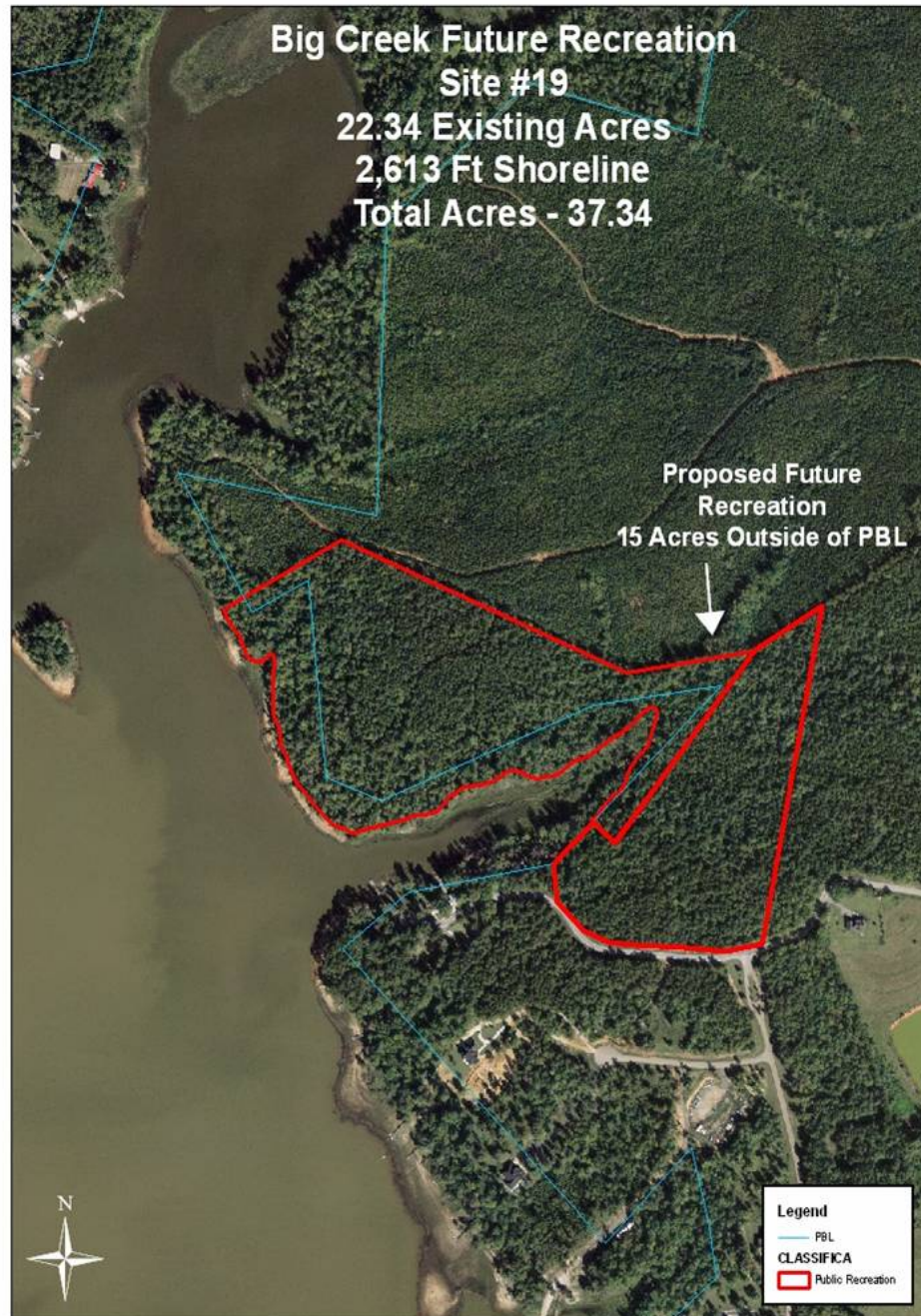
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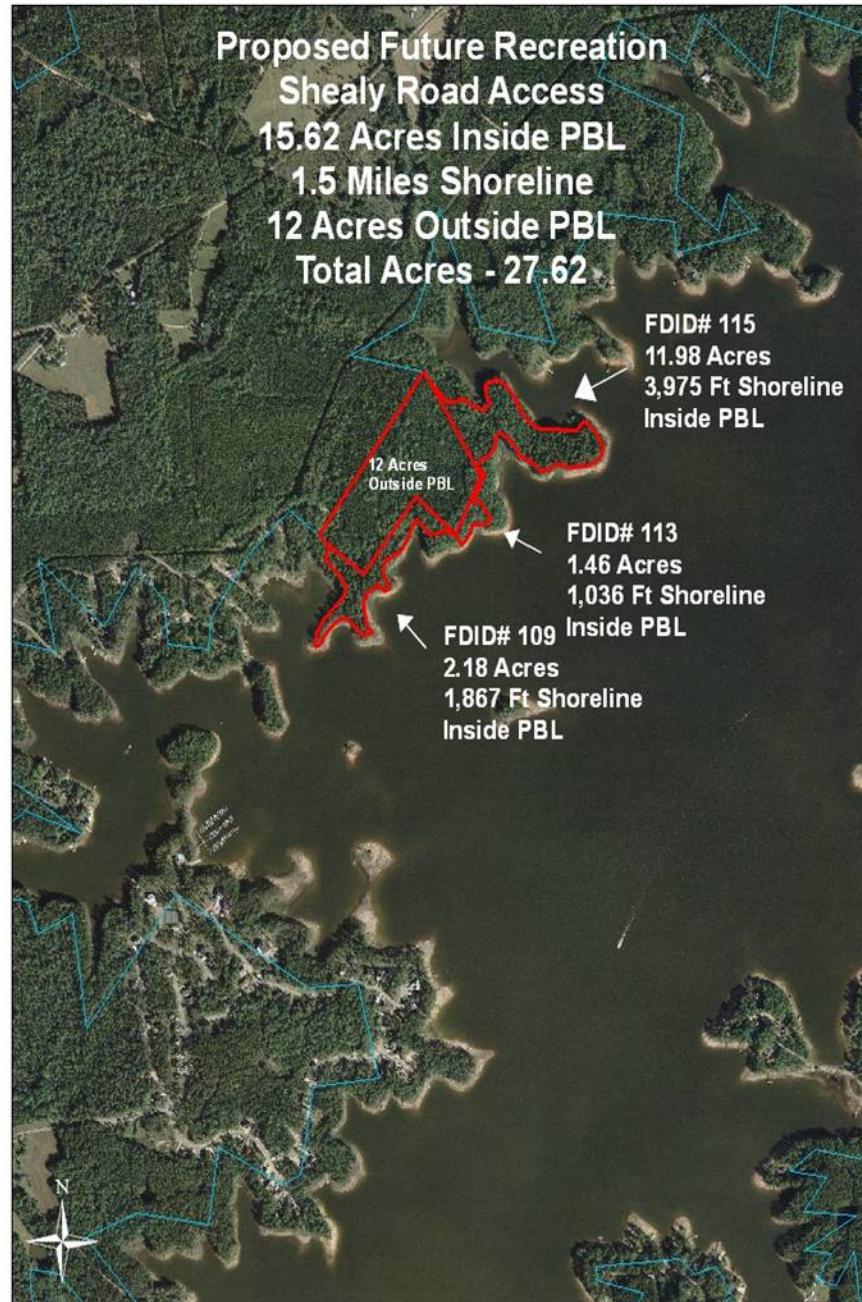


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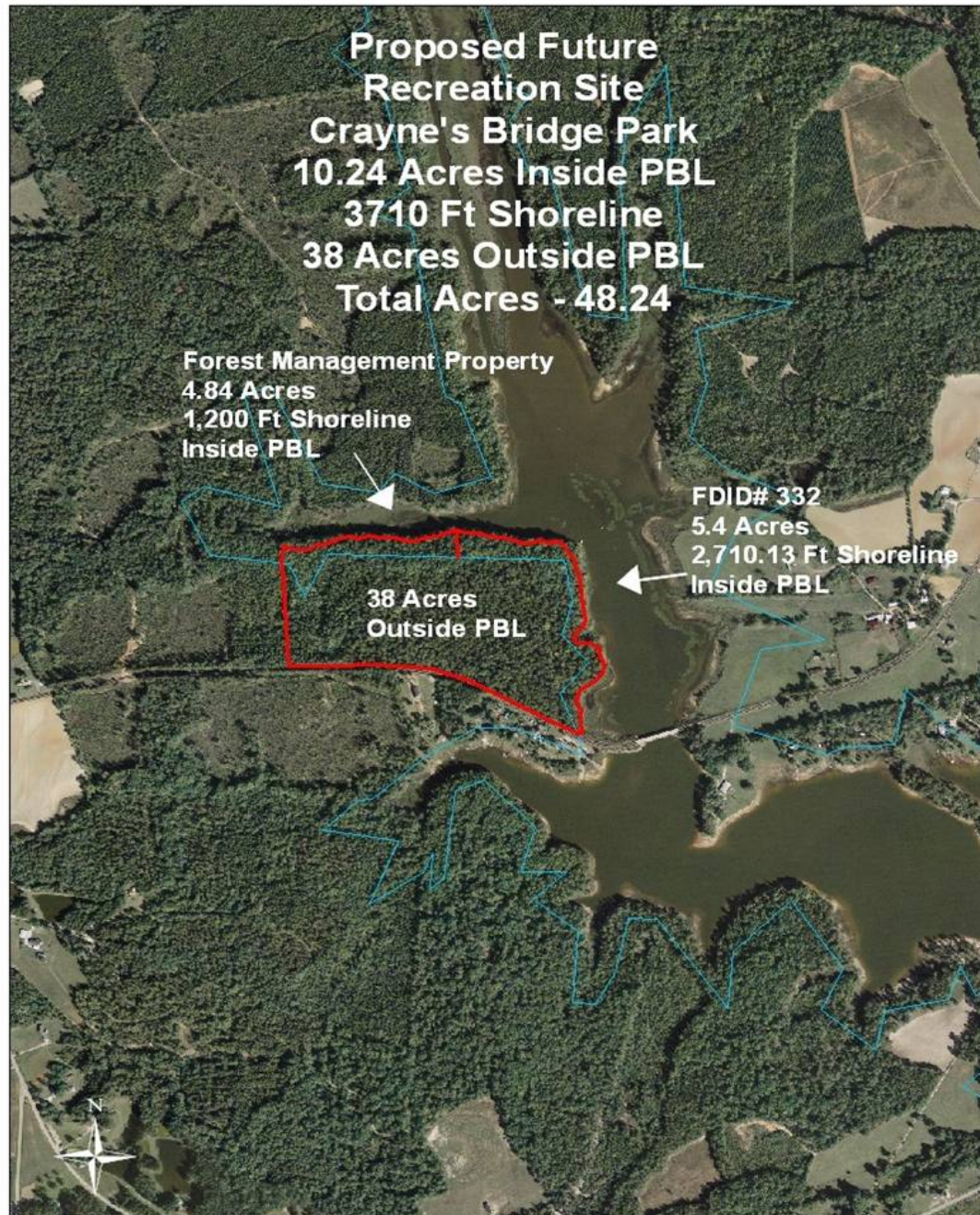
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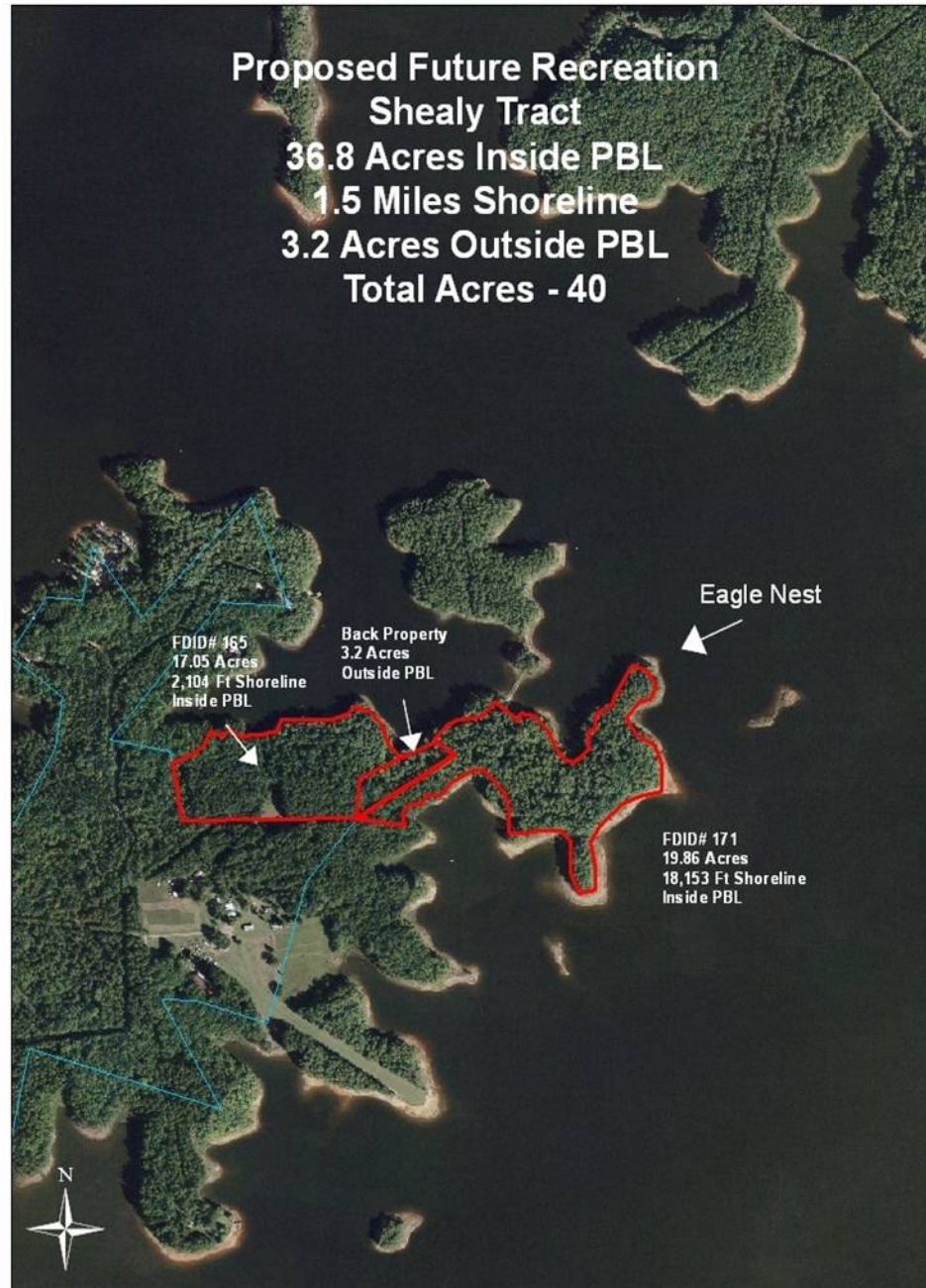
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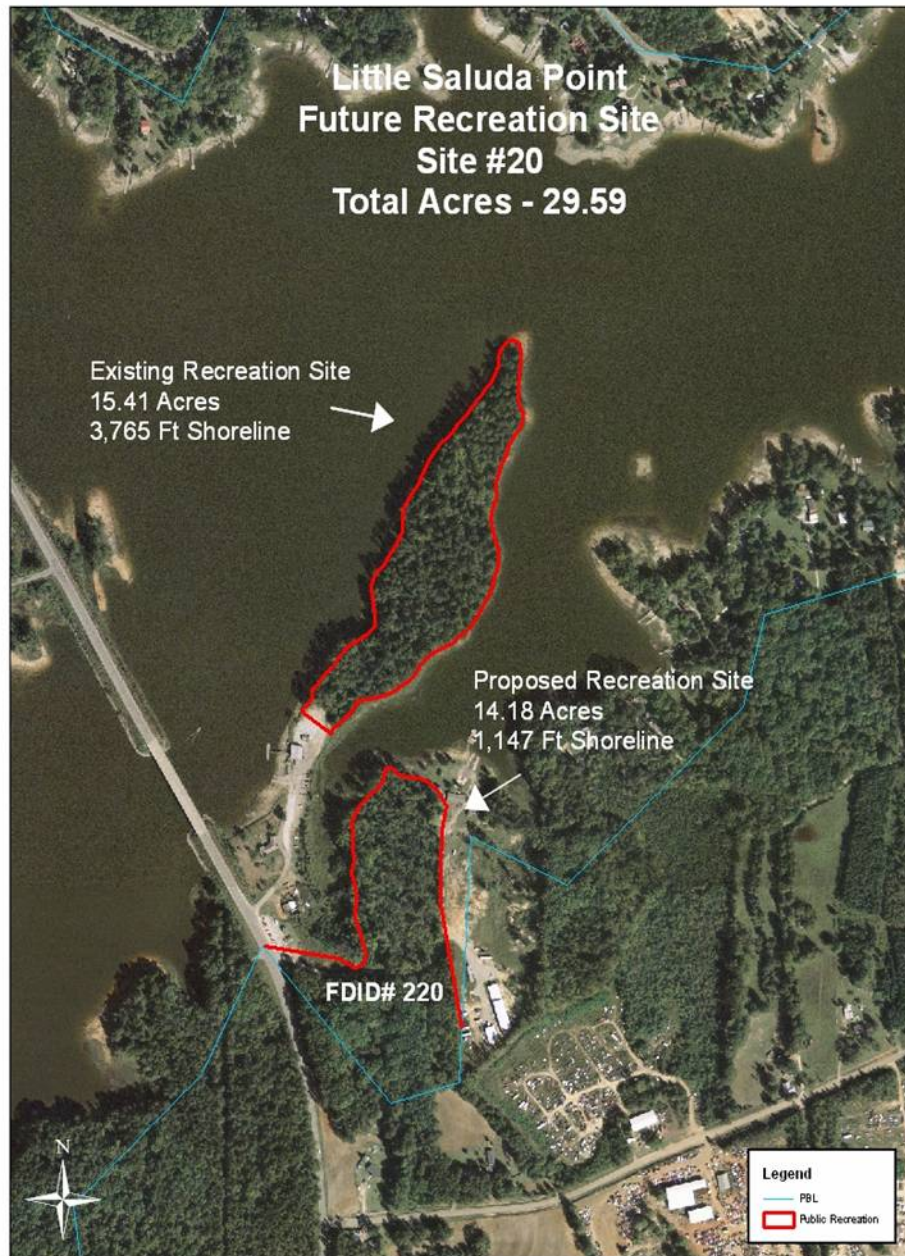


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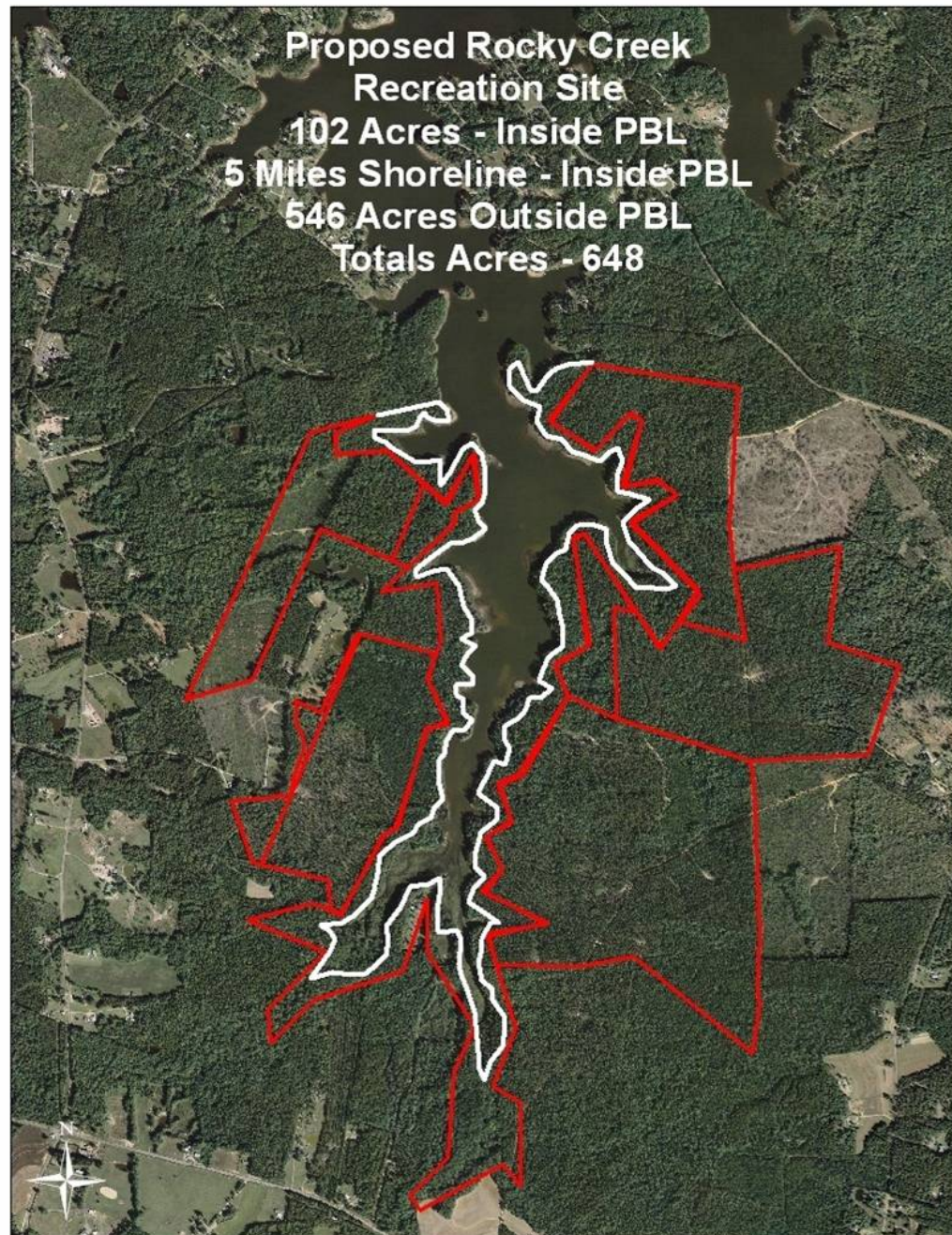


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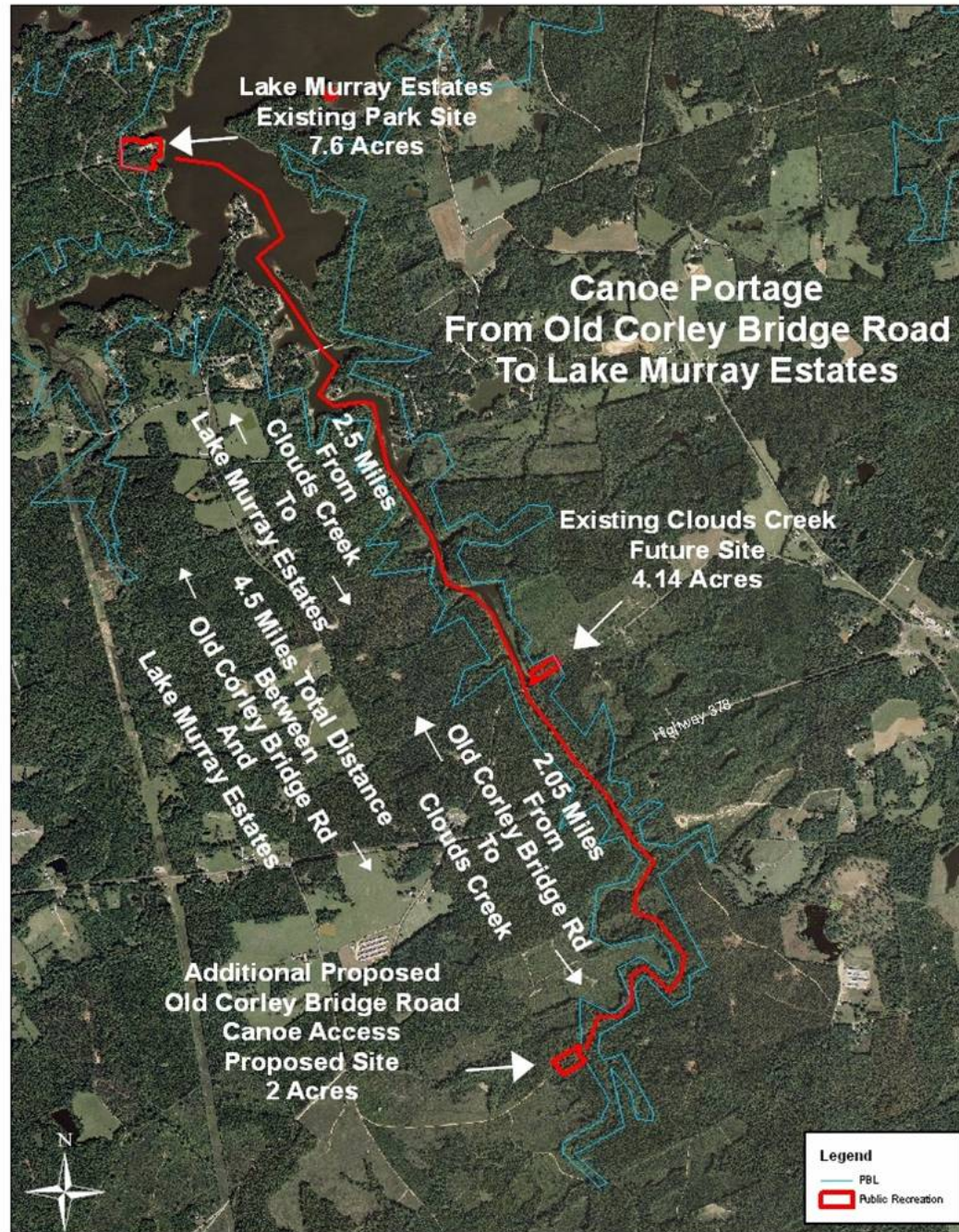
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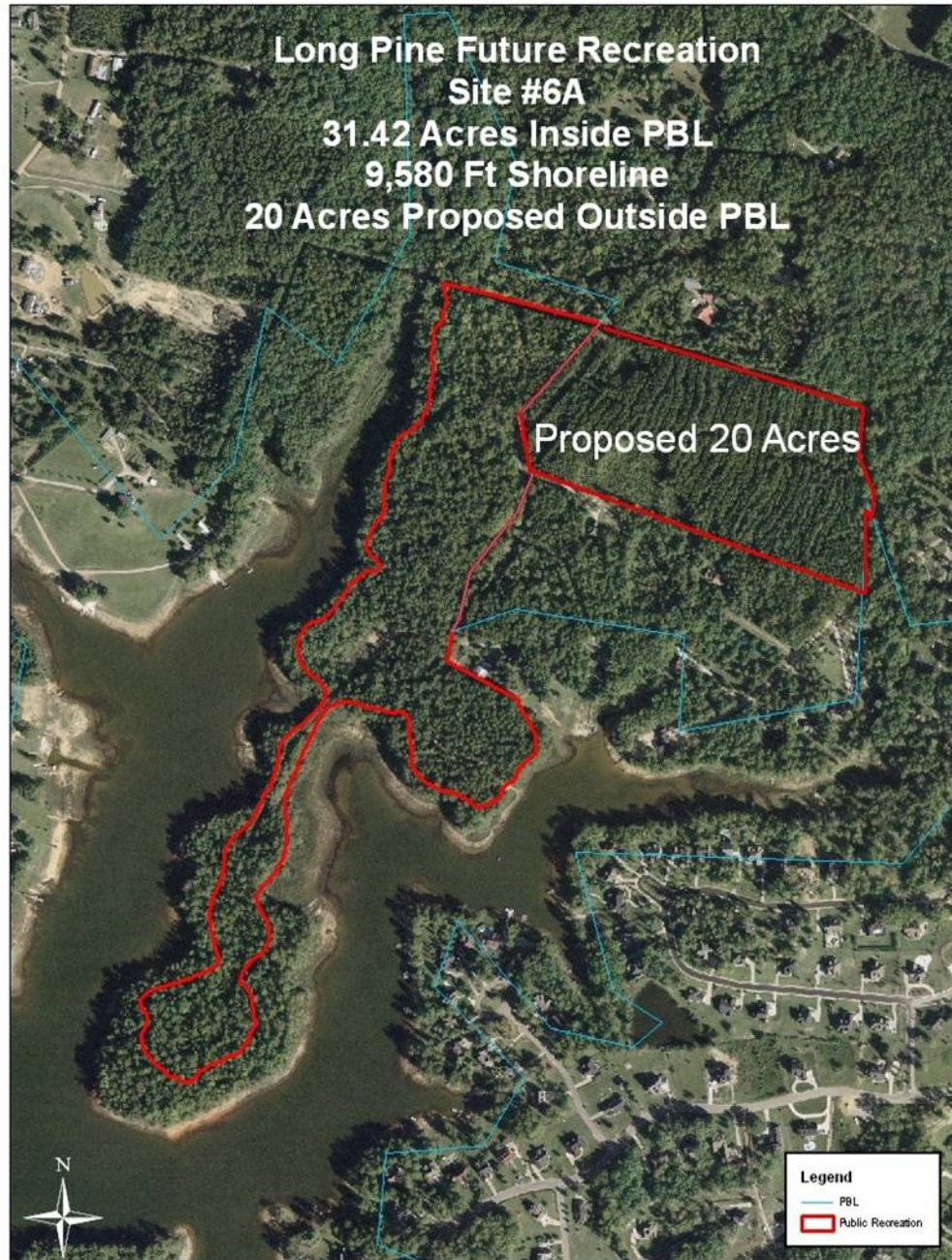
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# SUMMARY

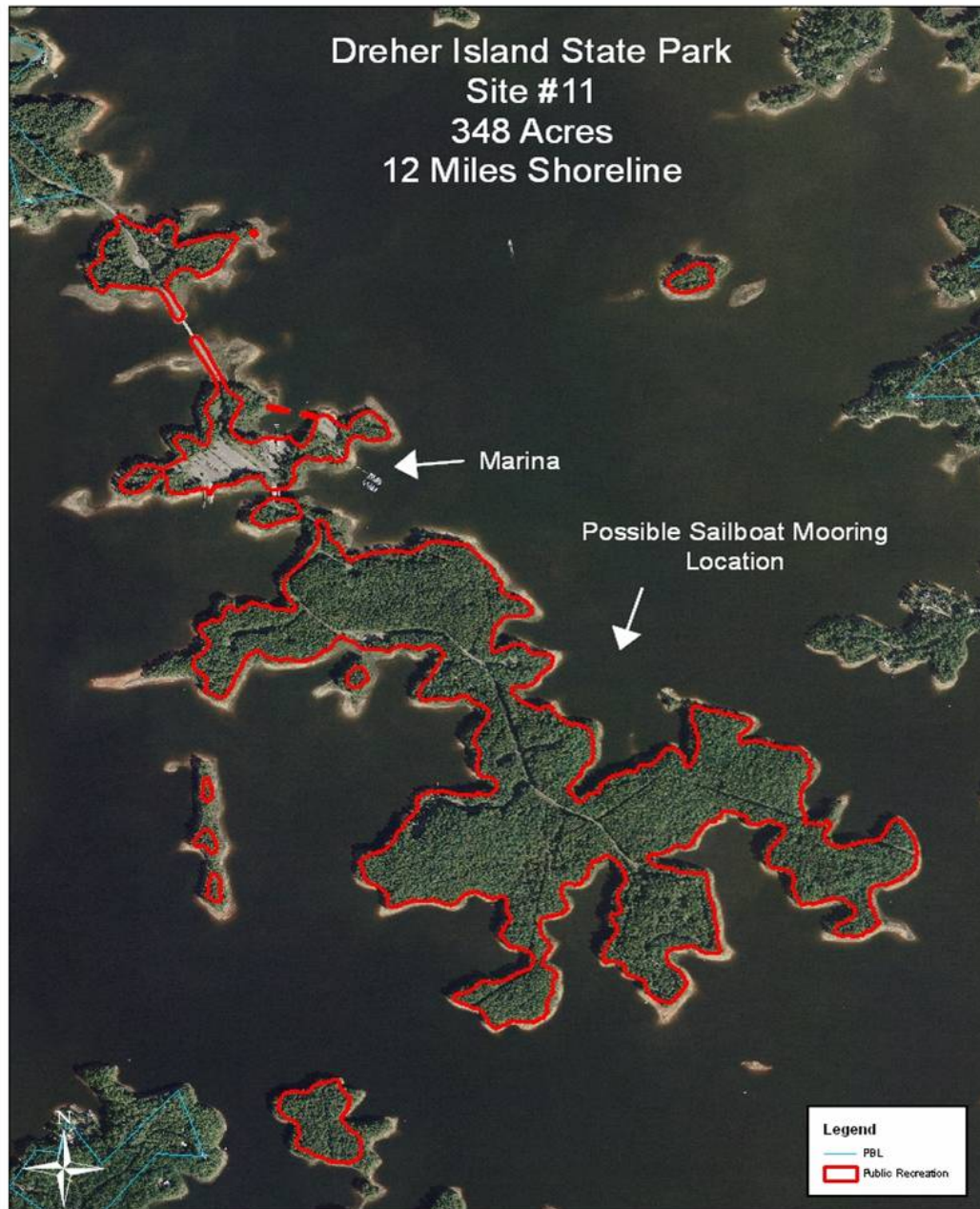
	Acres	Shoreline Miles
Existing Recreation Sites	411.19	14.7
(Includes Billy Dreher Island)		
Existing Future Sites	252.42	9.12
Islands	100	13.81
Lower Saluda Recreation Sites	165.6	1.06
<b>Sub-Total</b>	<b>929.21</b>	<b><u>38.69</u></b>
New Future Recreation	853.62	9.62
(Lake Murray Sites)		
New Future Recreation	55.08	0.31
(Lower Saluda River)		
<b>Total</b>	<b><u>1837.91</u></b>	<b><u>48.62</u></b>

# Lake Murray State and Regional Parks

- Billy Dreher Island State Park 348  
acres 12 miles
- Saluda Shoals Regional Park 240  
acres 1.3 miles
- Rocky Creek State Park 648  
acres 5 miles
- Bundrick Island Park 88 acres  
2.23 miles

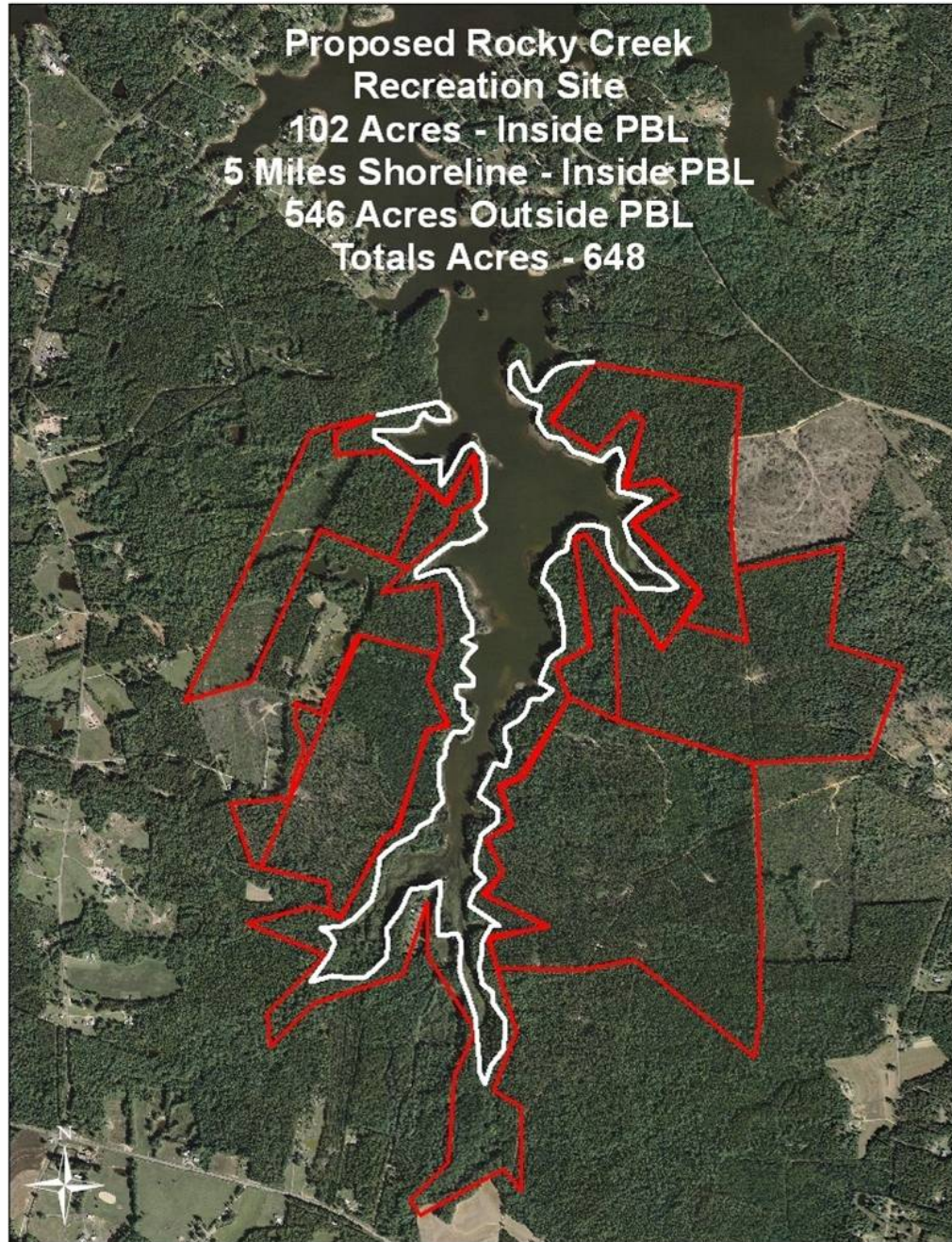
**Total    1324 Acres    20.53 Miles**

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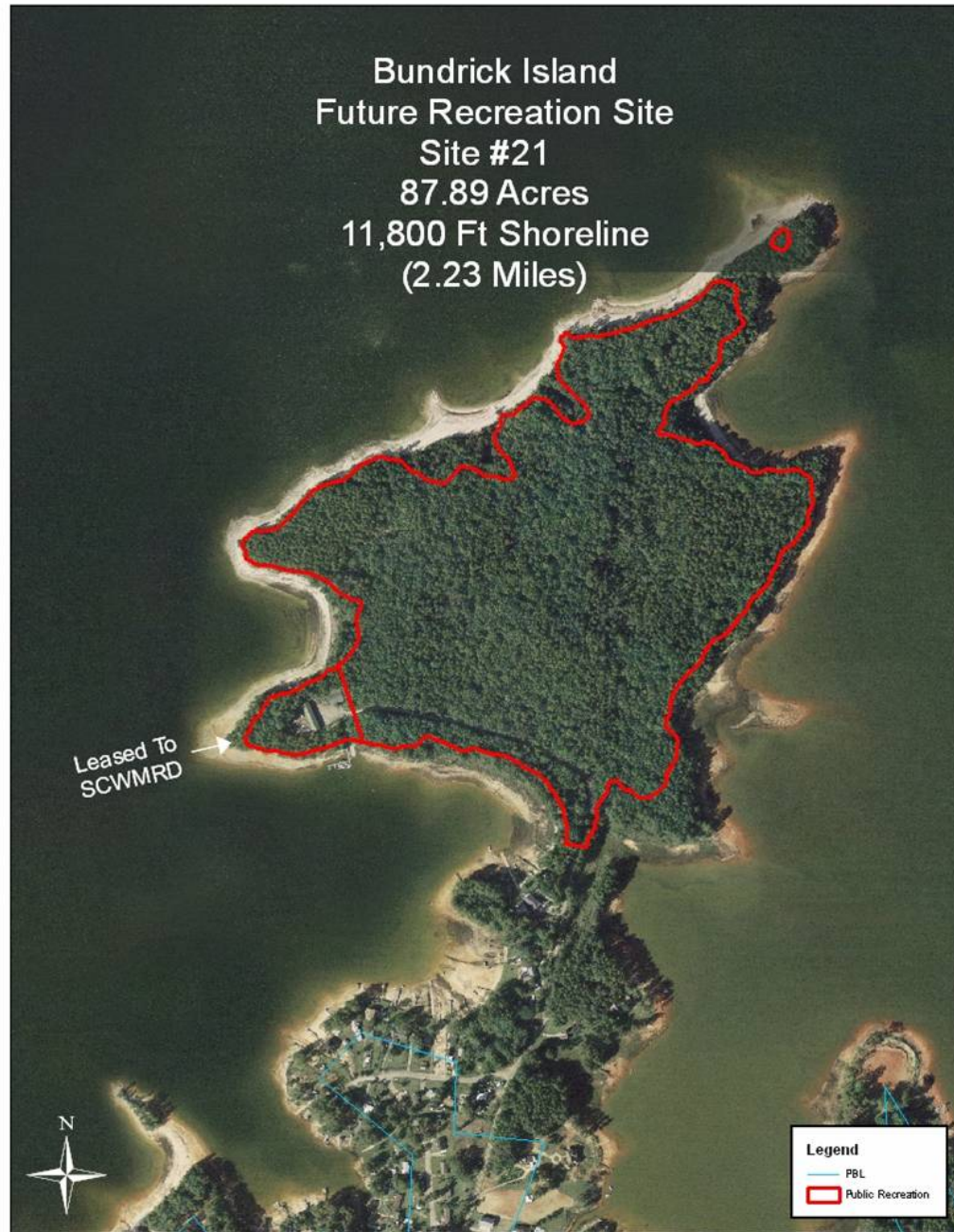
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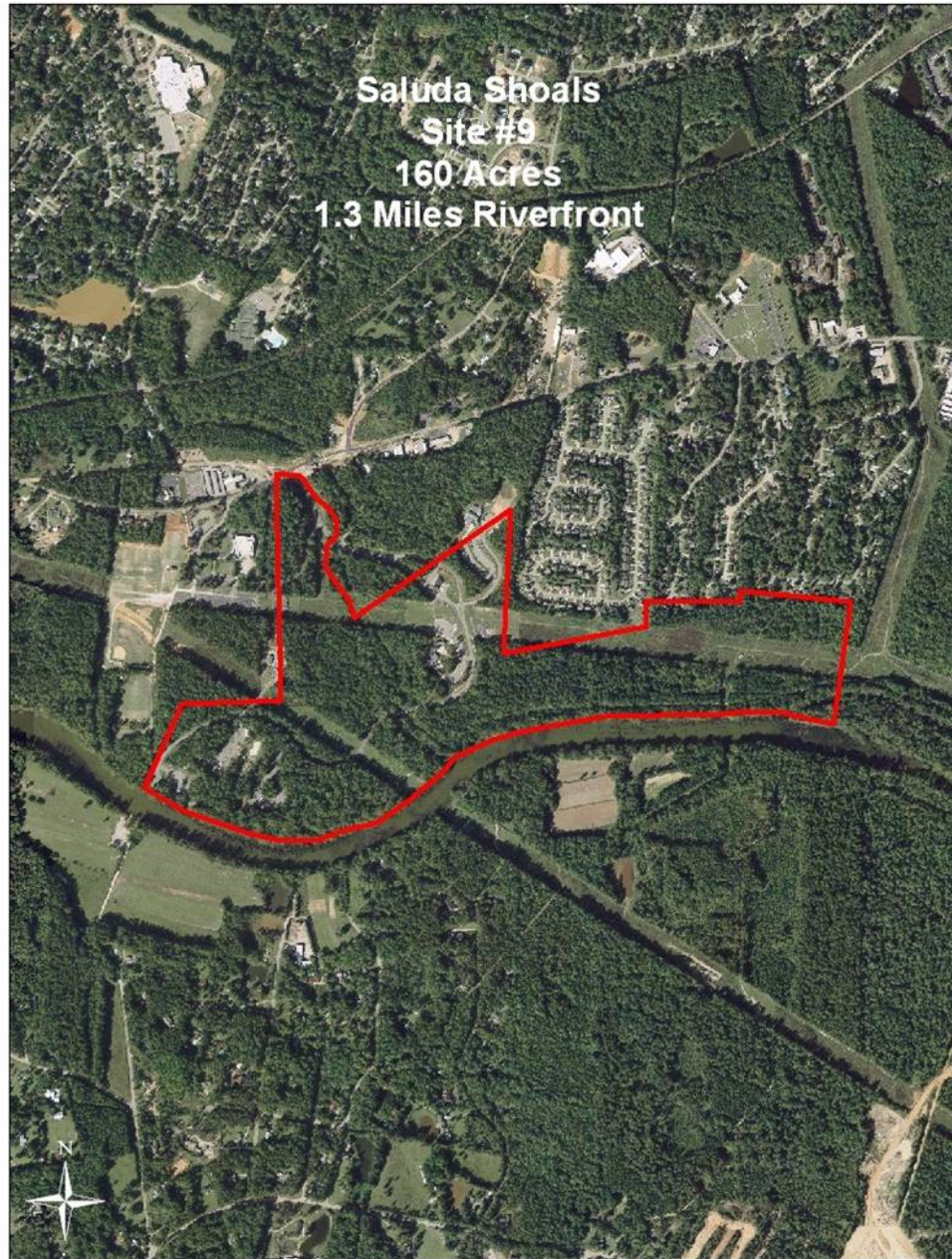
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**SCE&G SALUDA RIVER**  
**PROPERTY**

SCENIC RIVER EASEMENT  
SCE&G PROPERTIES

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# SCENIC RIVER

- SCE&G proposes to classify 14 tracts totaling 275.14 acres plus the 45.04 acres already in the Scenic River as recreation, bringing the grand total of these tracts to 320.18 acres along the Lower Saluda River

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**Saluda River Property**

ID#	SCE&G Tract Name	Total Acreage
1	E.P. Corley	4.3
2	Kleckley	16.3
3	Kleckley	4
4	Corley	26.09
5	Gardendale	56
6	Gardendale	73.12
7	Drafts	7.5
8	Mathias	26.6
9	Meetze	36.36
10	Trapp	27.1
11	Richland Power Co.	25
12	M. Hook -(Island)	12
13	W. Hook	4.07
14	B. Hook	1.74
<b>Total Proposed</b>		<b>320.18</b>

<b>Existing Scenic River Easement Acreage =</b>	<b>45.04</b>
<b>Existing Scenic River Easement Shoreline Miles=</b>	<b>3.72</b>

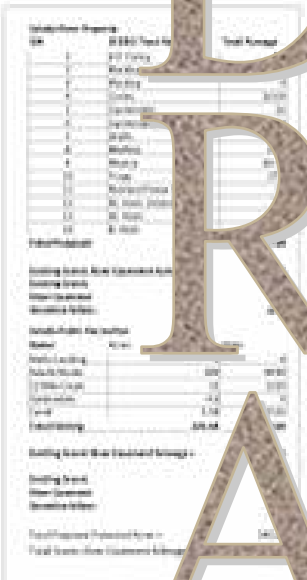
**Saluda Public Recreation**

Name	Acres	Miles
Metts Landing	1	0
Saluda Shoals	160	8190
12 Mile Creek (Future)	52	1220
Gardendale	4.6	0
Candi Lane (Future)	3.08	1526
<b>Total Existing &amp; Future</b>	<b>220.68</b>	<b>2.08</b>

<b>Existing Scenic River Easement Acreage =</b>	<b>25.1</b>
<b>Existing Scenic River Easement Shoreline Miles=</b>	<b>2.08</b>

Total Proposed Protected Acres =	540.86
Total Scenic River Easement Mileage =	5.8

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# NON-PROJECT TIMBER TRACTS

- 24 Timber tracts totaling 2754 acres located in the upper regions of Lake Murray
- Lease Tracts to SCDNR
- Properties could be in the SCDNR WMA

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<b>ID#</b>	<b>SCE&amp;G Tract Name</b>	<b>Tract Acres</b>
4	Federal Land Bank	3
9	Lake	7
10	Martin-Wheeler	241
13	Belton-Stockman	87
17	Leaphart	30
18	Taylor	68
19	Lake	237
20	Nichols	45
21	Wertz	63
22	Sanders	21
23	M.A. Coleman	756
24	Kempson	150
25	W.F. Coleman	107
26	Wicker	68
27	Mills	80
29	Nichols - Longshore	17
31	Black	49
32	Shumpert	20
33	Etheridge	138
34	Brooks	57
35	Able	125
36	Hare	253
37	T.H. Poultry	90
38	Hare	42
	<b>Total</b>	<b>2754</b>

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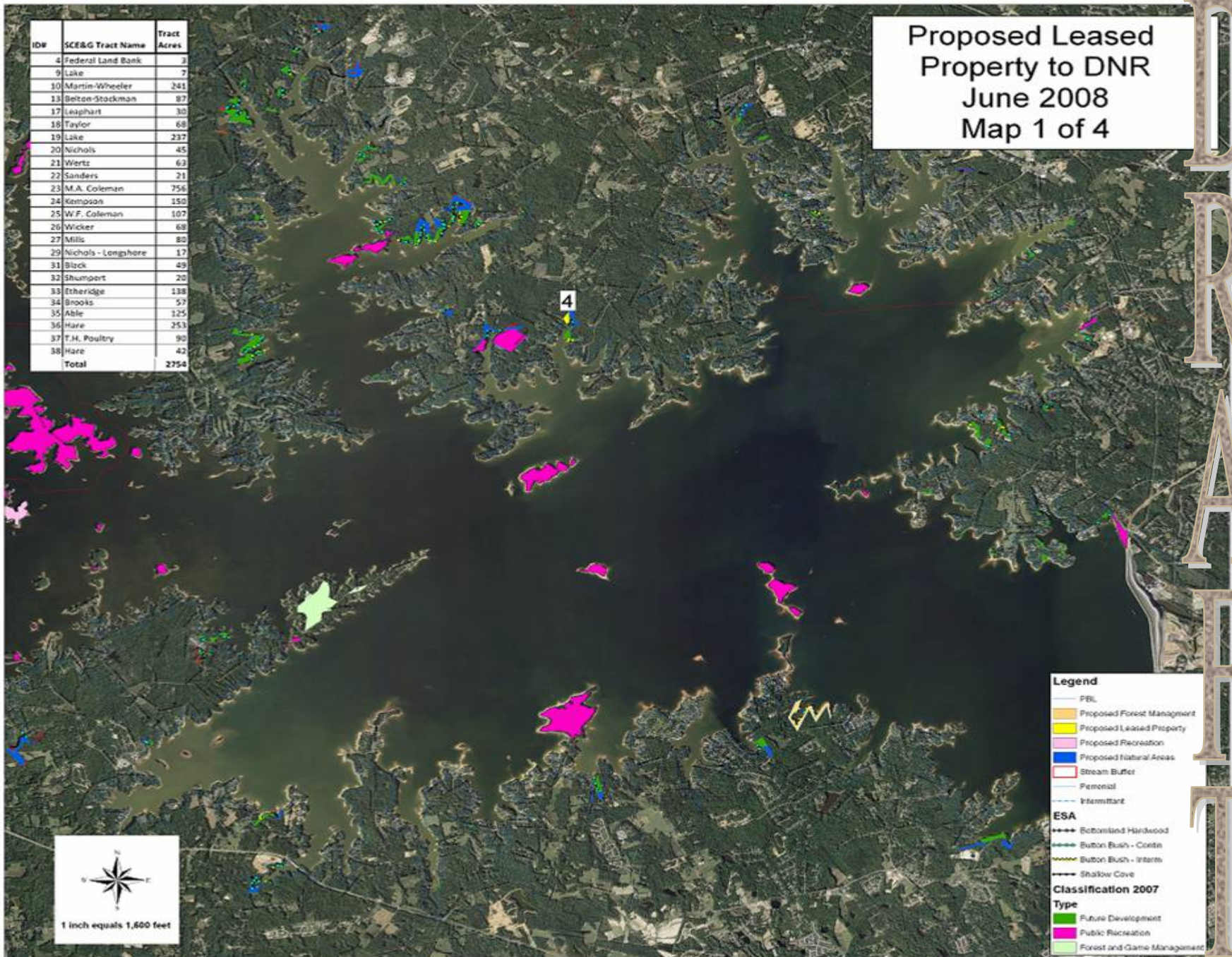
Proposed Leased  
Property to DNR  
June 2008  
Map 1 of 4

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ID#	SCE&G Tract Name	Tract Acres
4	Federal Land Bank	3
9	Lake	7
10	Martin-Wheeler	241
13	Belton-Stockman	87
17	Leaphart	30
18	Taylor	68
19	Lake	237
20	Nichols	45
21	Wertz	63
22	Sanders	21
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33	Etheridge	138
34	Brooks	57
35	Able	125
36	Hare	253
37	T.H. Poultry	90
38	Hare	42
	<b>Total</b>	<b>2754</b>



- Legend**
- FBL
  - Proposed Forest Management
  - Proposed Leased Property
  - Proposed Recreation
  - Proposed Natural Areas
  - Stream Buffer
  - Perennial
  - Intermittent
- ESA**
- Bottomland Hardwood
  - Button Bush - Contn
  - Button Bush - Interm
  - Shallow Cove
- Classification 2007**
- Type**
- Future Development
  - Public Recreation
  - Forest and Game Management

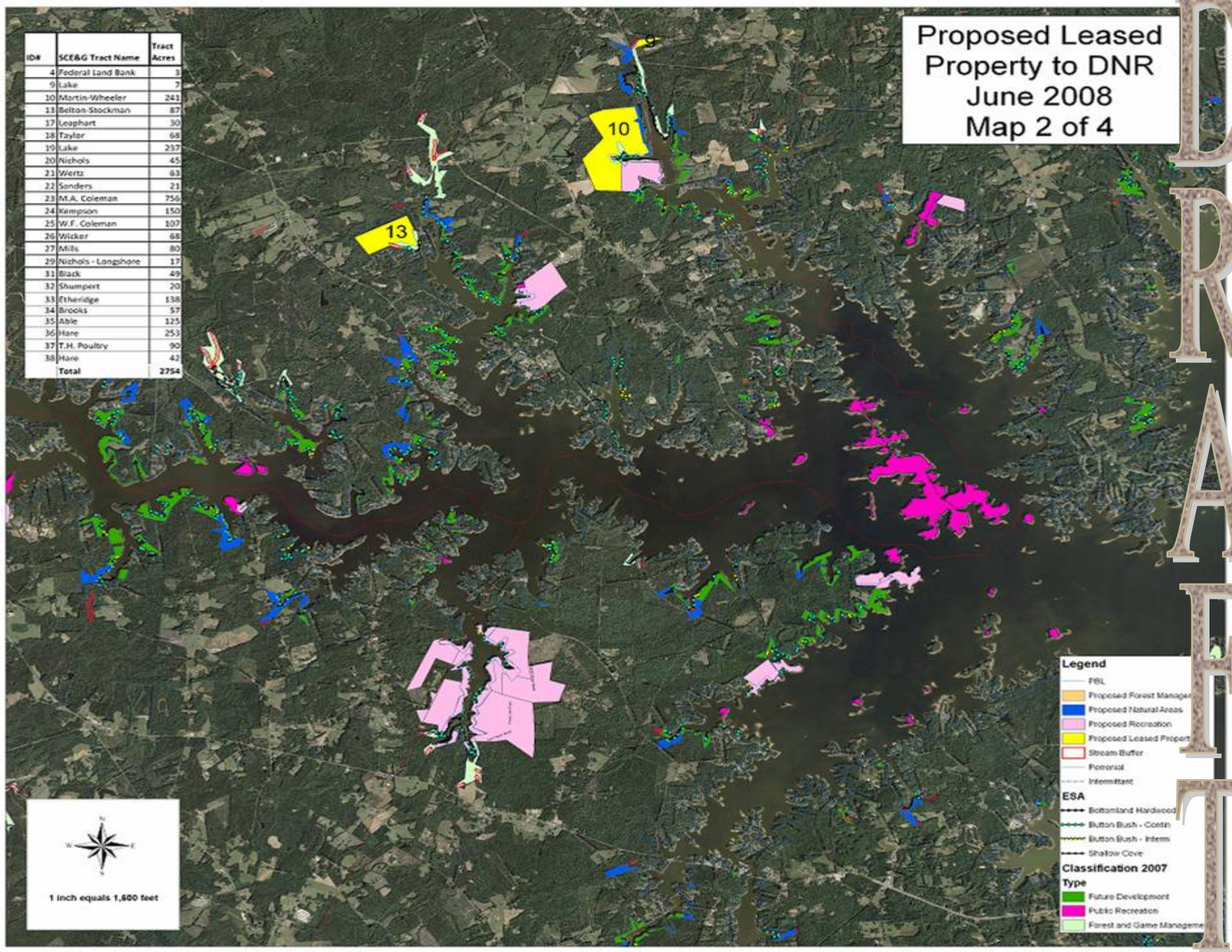




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Proposed Leased  
Property to DNR  
June 2008  
Map 2 of 4

ID#	SCE&G Tract Name	Tract Acres
4	Federal Land Bank	3
9	Lake	7
10	Martin-Wheeler	241
13	Belton-Stockman	87
17	Leaphart	30
18	Taylor	68
19	Lake	237
20	Nichols	45
21	Wertz	83
22	Sanders	23
23	M.A. Coleman	756
24	Kempson	150
25	W.F. Coleman	107
26	Wicker	68
27	Mills	80
29	Nichols - Longshore	17
31	Black	49
32	Shumpert	20
33	Etheridge	138
34	Brooks	57
35	Able	125
36	Hare	253
37	T.H. Poultry	90
38	Hare	42
Total		2754



- Legend**
- F&L
  - Proposed Forest Manager
  - Proposed Natural Areas
  - Proposed Recreation
  - Proposed Leased Property
  - Stream Buffer
  - Potential
  - Intermittent
- ESA**
- Bottomland Hardwood
  - Button Bush - Contn
  - Button Bush - Interm
  - Shallow Cove
- Classification 2007**
- Type**
- Future Development
  - Public Recreation
  - Forest and Game Management

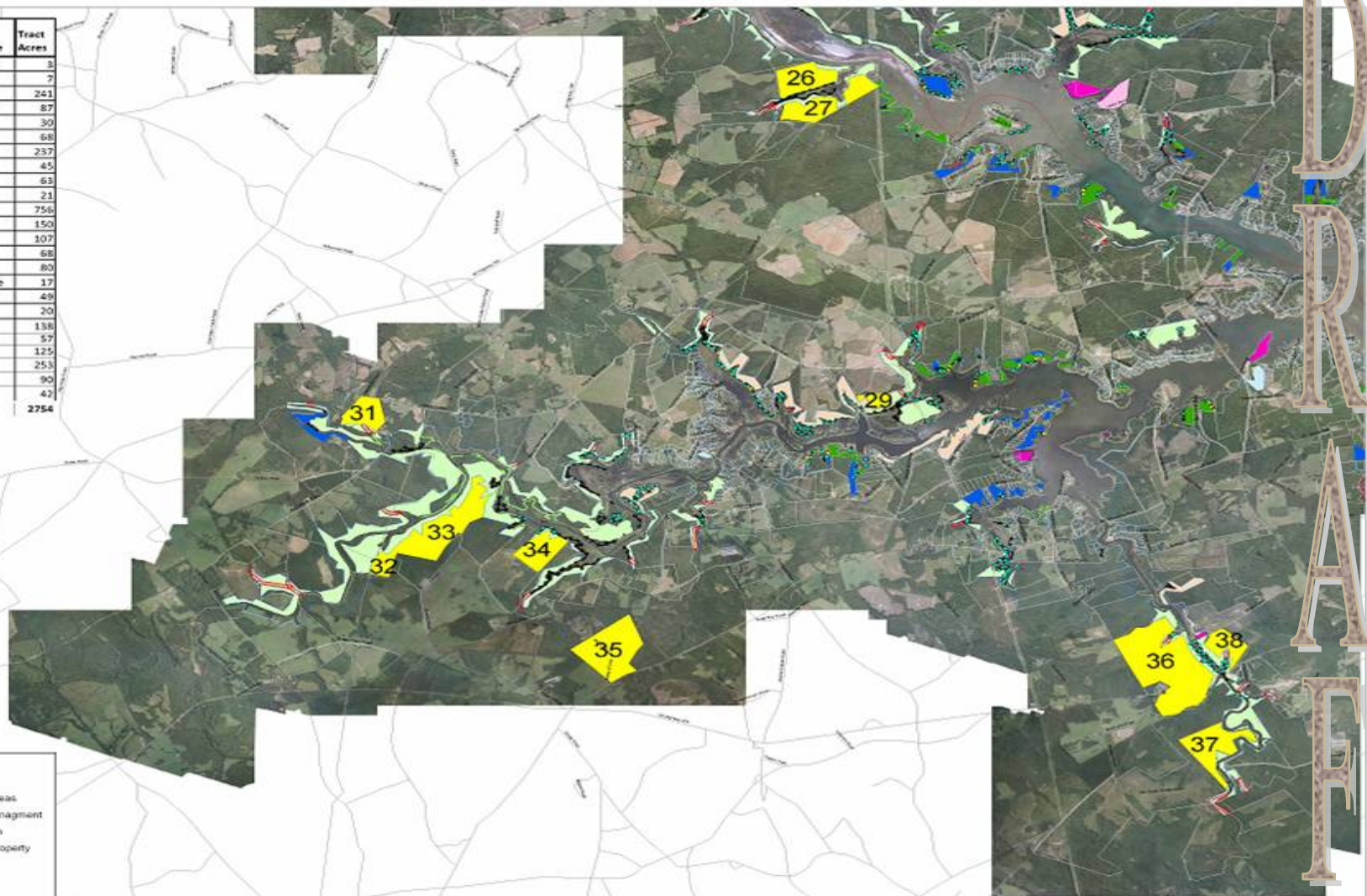


ID#	SCE&G Tract Name	Tract Acres
4	Federal Land Bank	3
9	Lake	7
10	Martin-Wheeler	241
13	Belton-Stockman	87
17	Leaphart	30
18	Taylor	68
19	Lake	237
20	Nichols	45
21	Wertz	63
22	Sanders	21
23	M.A. Coleman	756
24	Kempson	150
25	W.F. Coleman	107
26	Wicker	68
27	Mills	80
29	Nichols - Longshore	17
31	Black	48
32	Shumpert	20
33	Etheridge	138
34	Brooks	57
35	Able	125
36	Hare	253
37	T.H. Poultry	90
38	Hare	47
<b>Total</b>		<b>2754</b>

Legend	
PBL	
	Proposed Natural Areas
	Proposed Forest Management
	Proposed Recreation
	Proposed Leased Property
	Stream Buffer
	Perennial
	Intermittent
ESA	
	Bottomland Hardwood
	Button Bush - Contin
	Button Bush - Interm
	Shallow Cove
Classification 2007	
Type	
	Future Development
	Public Recreation
	Forest and Game Management



1 inch equals 1,600 feet



Proposed Leased  
Property to DNR  
June 2008  
Map 3 of 4

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**Proposed Leased  
Property to DNR  
June 2008  
Map 4 of 4**

ID#	SC&G Tract Name	Tract Acres
4	Federal Land Bank	3
9	Lake	7
10	Martin-Wheeler	241
13	Belton-Stockman	87
17	Leaphart	30
18	Taylor	68
19	Lake	237
20	Nichols	45
21	Wertz	63
22	Sanders	21
23	M.A. Coleman	756
24	Kempson	150
25	W.F. Coleman	107
26	Wicker	68
27	Mills	80
29	Nichols - Longshore	17
31	Block	49
32	Shumpert	20
33	Etheridge	138
34	Boooks	57
35	Able	125
36	Hare	253
37	T.H. Poultry	90
38	Hare	42
<b>Total</b>		<b>2754</b>

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**Legend**

- FBL
- Proposed Recreation
- Proposed Leased Property
- Proposed Natural Areas
- Proposed Forest Management
- Stream Buffer
- Perennial
- Intermittent

**ESA**

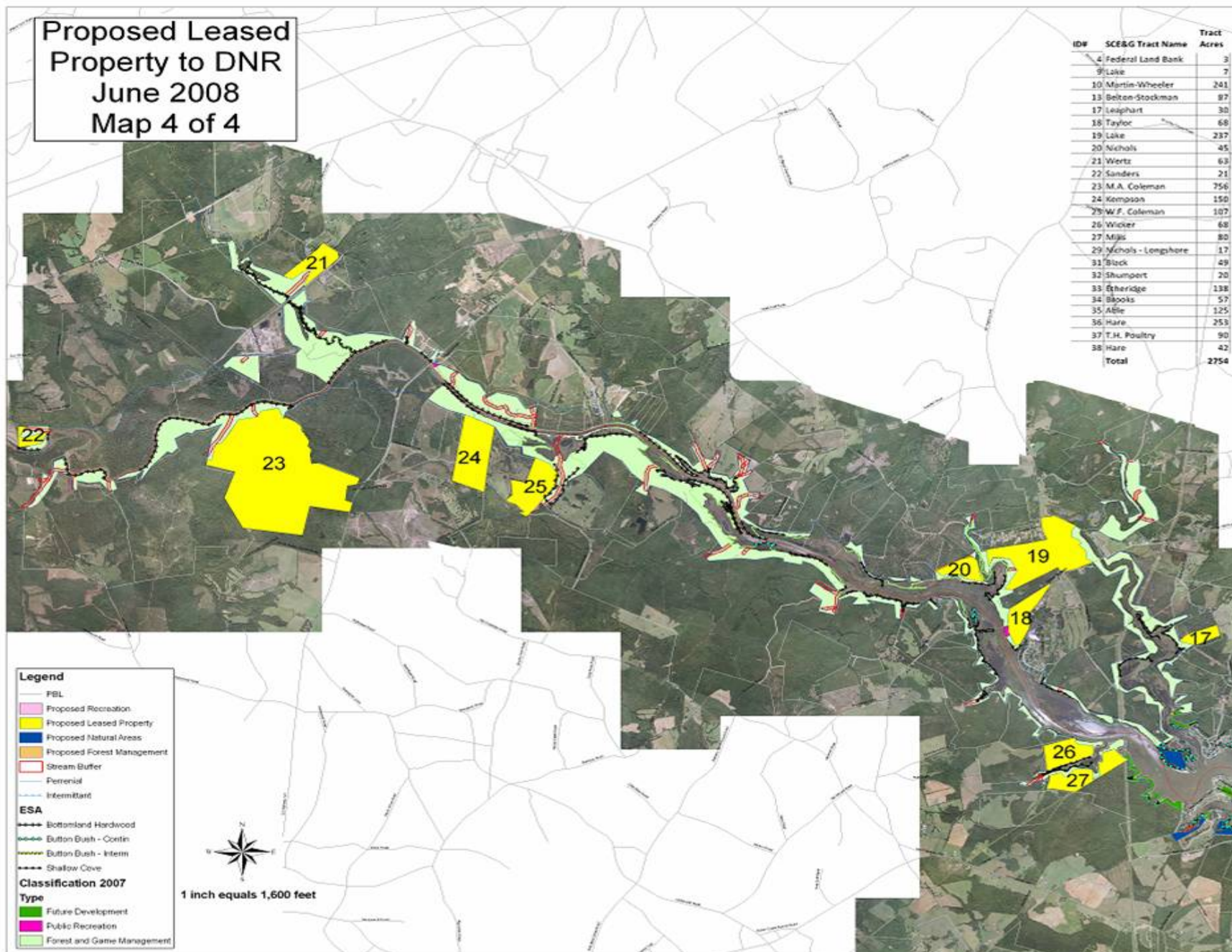
- Bottomland Hardwood
- Button Bush - Corrin
- Button Bush - Interm
- Shallow Cove

**Classification 2007**

**Type**

- Future Development
- Public Recreation
- Forest and Game Management

1 inch equals 1,600 feet





# RE-BALANCING SUMMARY

<b>FUTURE DEVELOPMENT LANDS</b>	<b>ACRES BEFORE</b>	<b>ACRES AFTER</b>	<b>MILES BEFORE</b>	<b>MILES AFTER</b>
<b>Natural Areas</b>	<b>42.17</b>	<b>506.23</b>	<b>1.57</b>	<b>22.58</b>
<b>Forest Management</b>	<b>3570.23</b>	<b>3776.39</b>	<b>100.13</b>	<b>109.59</b>
<b>Recreation</b>	<b>763.61</b>	<b>953.31</b>	<b>37.78</b>	<b>47.04</b>
<b>Future Development</b>	<b>1818.10</b>	<b>958.18</b>	<b>90.84</b>	<b>51.11</b>

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# RE-BALANCING SUMMARY

NON PROJECT LANDS	ACRES BEFORE	ACRES AFTER	MILES BEFORE	MILES AFTER
RECREATION	0	658.2		
LEASE TO SCDNR	0	2754		
Sub- Total	0	3412.2		
<b>LOWER SALUDA RIVER</b>				
RECREATION	195.58	470.72		
SCENIC RIVER	70.14	70.14	5.8	5.8
Sub Total	265.72	540.86		

DRAFT

# RE-BALANCING SUMMARY

## ACREAGE

	Natural Areas	Forest Management	Recreation	Lease to SCDNR
Future Development	506.23	3776.39	953.31	
Non Project Lands			658.2	2754
Lower Saluda River			540.86	
Sub- Totals	<u>506.23</u>	<u>3776.39</u>	<u>2152.37</u>	<u>2754</u>
Grand Total	To Be	Protected	From	Development
	Lake Murray	and the	Lower Saluda	River
		9,188.99		

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# RE-BALANCING SUMMARY MILES

	Natural Areas	Recreation	Forest Management	Lease to SCDNR
Future Development	22.58	47.03	109.59	
Non Project Lands				
Lower Saluda River		5.8		
Sub-totals	22.58	52.83	109.59	
Grand Total	Of	Protected	Shoreline	Miles
		185 Miles		

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A stylized, low-poly illustration of a village scene. In the background, there are several houses with brown roofs and white walls, nestled among green trees. A river flows through the foreground, reflecting the sky and the surrounding landscape. The overall style is geometric and modern, with a muted color palette of greens, browns, and blues.

WHAT HAVE WE HEARD  
FOR 2 ½ YEARS?

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# Recommendations

- Increase Lot Size
- Multi-slip docks in lieu of individual docks
- Non disturbance buffer zone
- Establish a full 75' Buffer Zone
- Establish Natural Areas
- Restrict development within the PBL
- Protect additional Forest Management & Recreation Lands

DRAFT



## Recommendations Cont.

- Manage remaining Future Development Property under restrictive and protective plan
- Dock Policy for Forest Management Lands
- Support Hunting by participating in the SCDNR WMA program
- State Park on the Lexington Side of Lake Murray

DRAFT

## Recommendations Cont.

- Protect property on Lower Saluda River
- Provide additional recreational properties on Lake Murray and the lower Saluda River
- Update and improve existing Park Sites

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# Management Plan

- Land Sales & Dock Permitting Policy

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## Management Plan

- Applies to remaining SCE&G-owned Future Development property on Lake Murray
- Allows SCE&G to continue with Fringe Land Sales
- Reflective of agency and committee interests
- Promotes protection of the environmental and scenic values of the project

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## Management Plan

- Plan would keep current 75-Foot setback requirement
- Allow sale of fringe land greater than 75 Feet to back property owner with deeded restrictions.
- Maintain environmentally protective deed restrictions for all purchased fringe land
- Non-development and vegetation management restrictions included in each deed
- Purchasers must acknowledge their understanding of deed restrictions before being granted permits for shoreline amenities such as docks and paths
- Permitting shoreline amenities will continue to be dependent on all other conditions specific to those amenities

DRAFT

## Management Plan

- Establish a uniform 75-Foot non-disturbance Buffer Zone
- Back property owners who have less than 75 feet in depth to the 360 contour would be required to deed SCE&G so much of their property to create a uniformly 75-Foot deep Buffer Zone
- After this condition is met, SCE&G will consider permitting a dock along the shoreline, if the property qualifies for a dock location and all other dock permitting requirements are met

DRAFT

## Management Plan Goals

- Goal is to balance the desire for continued fringe land sales while protecting the recreational, environmental and scenic values of the remaining SCE&G future development shoreline
- Plan also encourages less development density by requiring larger lots and multi-slip docks
- Reduces the number docks and increases the distance between docks
- Remaining fringe land up to the original PBL would be kept free from permanent structures and a uniform 75-Foot Buffer Zone would be established for all future property sales

DRAFT

## Land Sales and Fringe Land Restrictions

- Only owners of back property adjoining SCE&G fringe land may purchase the available fringe land
- Deed restrictions would not allow development below the PBL and require special vegetation protection and maintenance conditions on purchased property
- No buildings or structures will be allowed on purchased property and only limited brushing would be allowed between the PBL and 75' setback

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## Land Sales and Fringe Land Restrictions

- Penalty fee system and loss of dock privileges will be implemented to enforce restrictions
- Application for a dock would be allowed only after the purchase of the fringe land
- All qualifying conditions for dock permits, in addition to the setback and ownership conditions must be met

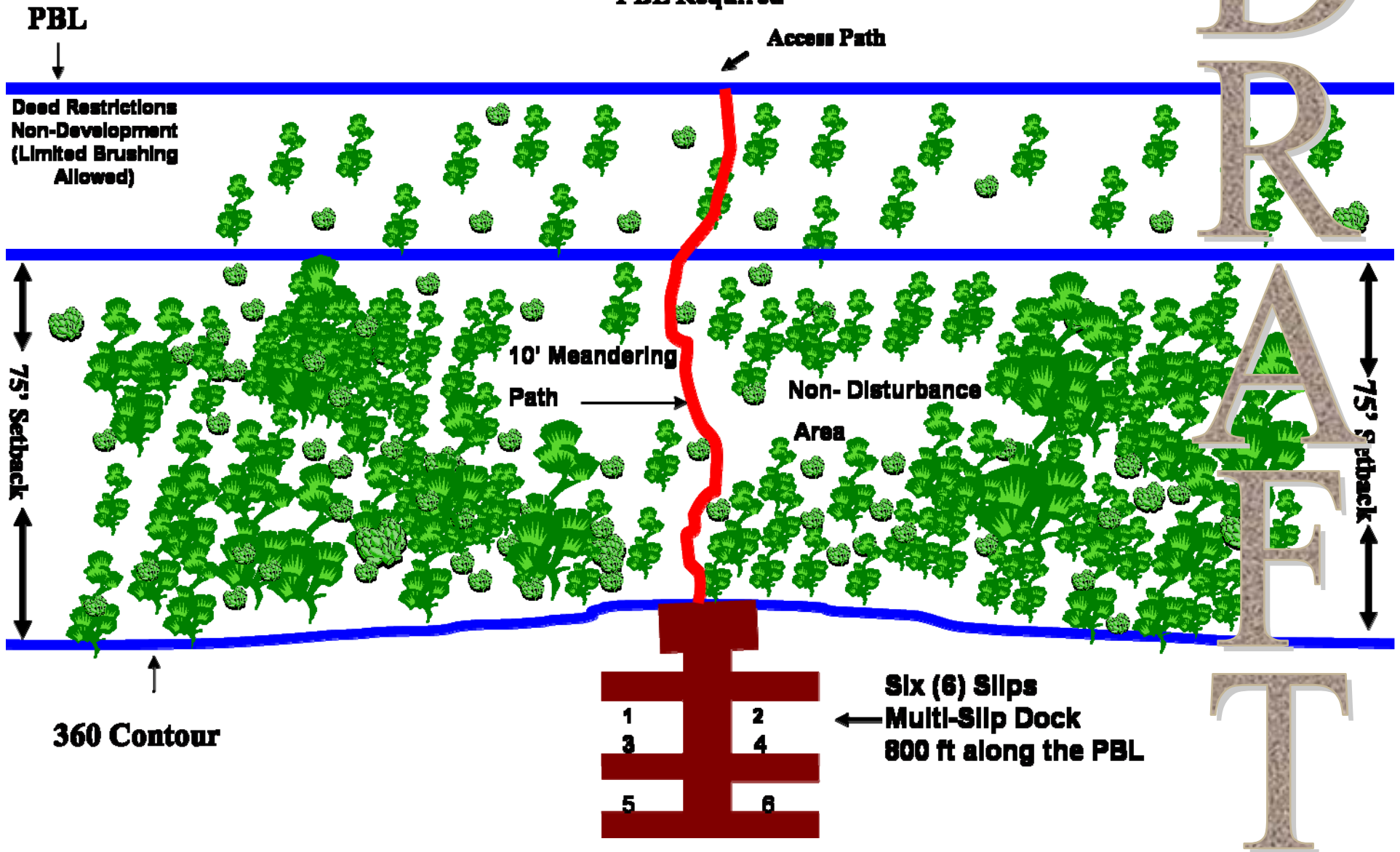
DRAFT

## Multi-Slip Docks

- Will be required in lieu of individual docks in appropriate circumstances
- One and one half (1 ½) slips would be approved for each 200 feet of property along the PBL
  - With a continuous distance along the PBL of two-thousand feet (2000 ft.), a facility with a total of fifteen (15) slips could be approved with all other shoreline condition requirements met
- A minimum of four hundred feet (400 ft), measured at the Project Boundary Line, is required
- A minimum distance of five-hundred feet (500 ft) across a cove measured from the 360 contour to the 360 contour required
- One (1) ten foot (10 ft) wide meandering path will be allowed through the Buffer Zone to access a multi-slip dock

# Multi-slip Docks Exhibit 1

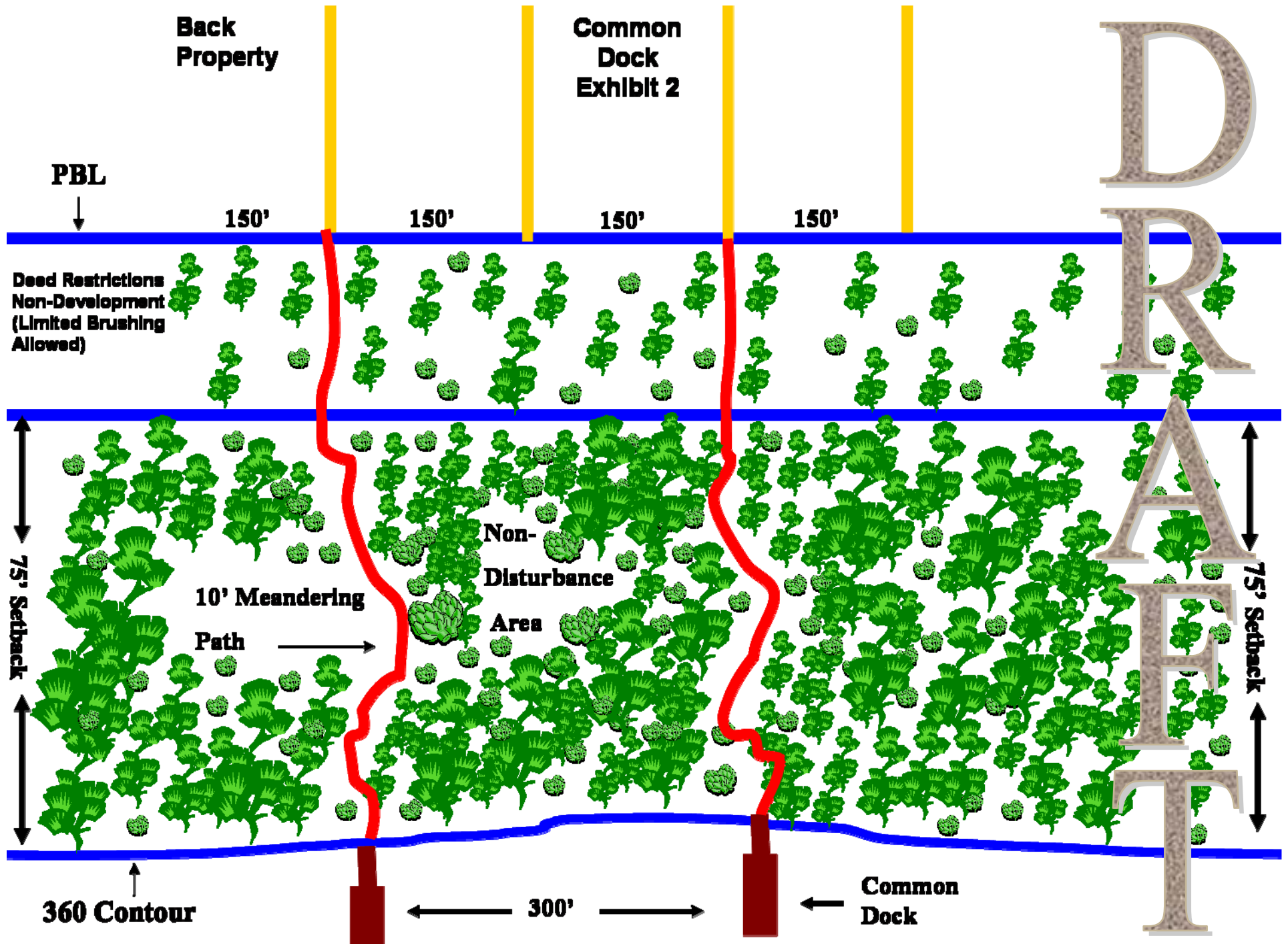
## 800 ft. of Property on the SCE&G PBL Required



## Common Dock

To qualify for a common dock to be shared by two single family dwellings, each lot must have a minimum width of 150 feet, measured on the Project Boundary Line

DRAFT





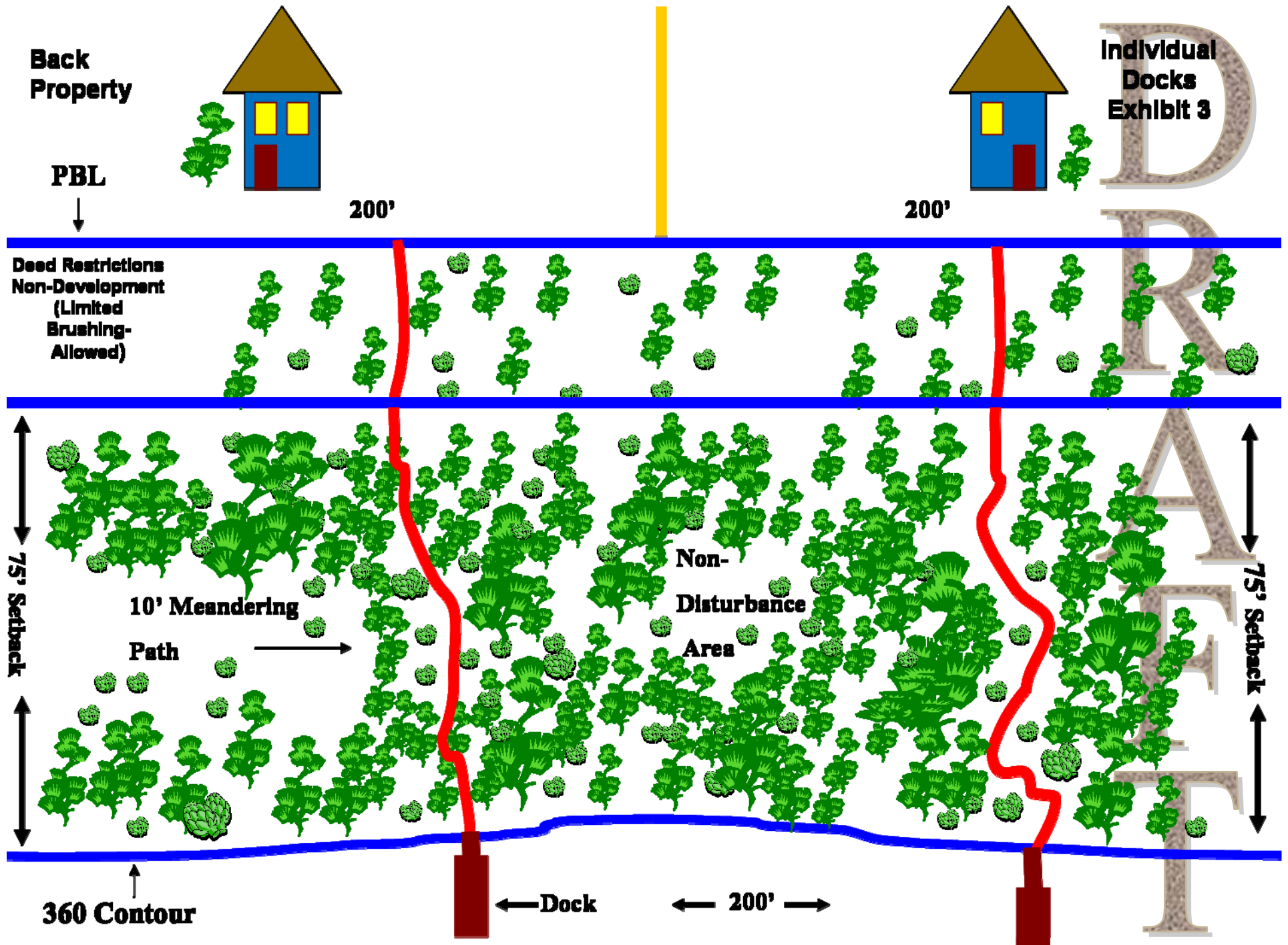
## Individual Docks

To qualify, a lot for a single family dwelling must have a minimum width of 200 feet, measured on the Project Boundary Line

Fringeland that has less than 400 feet, measured on the PBL, may qualify for individual docks

Fringeland that exceeds 400 feet will be required to participate in a multi-slip dock if all permitting requirements are met

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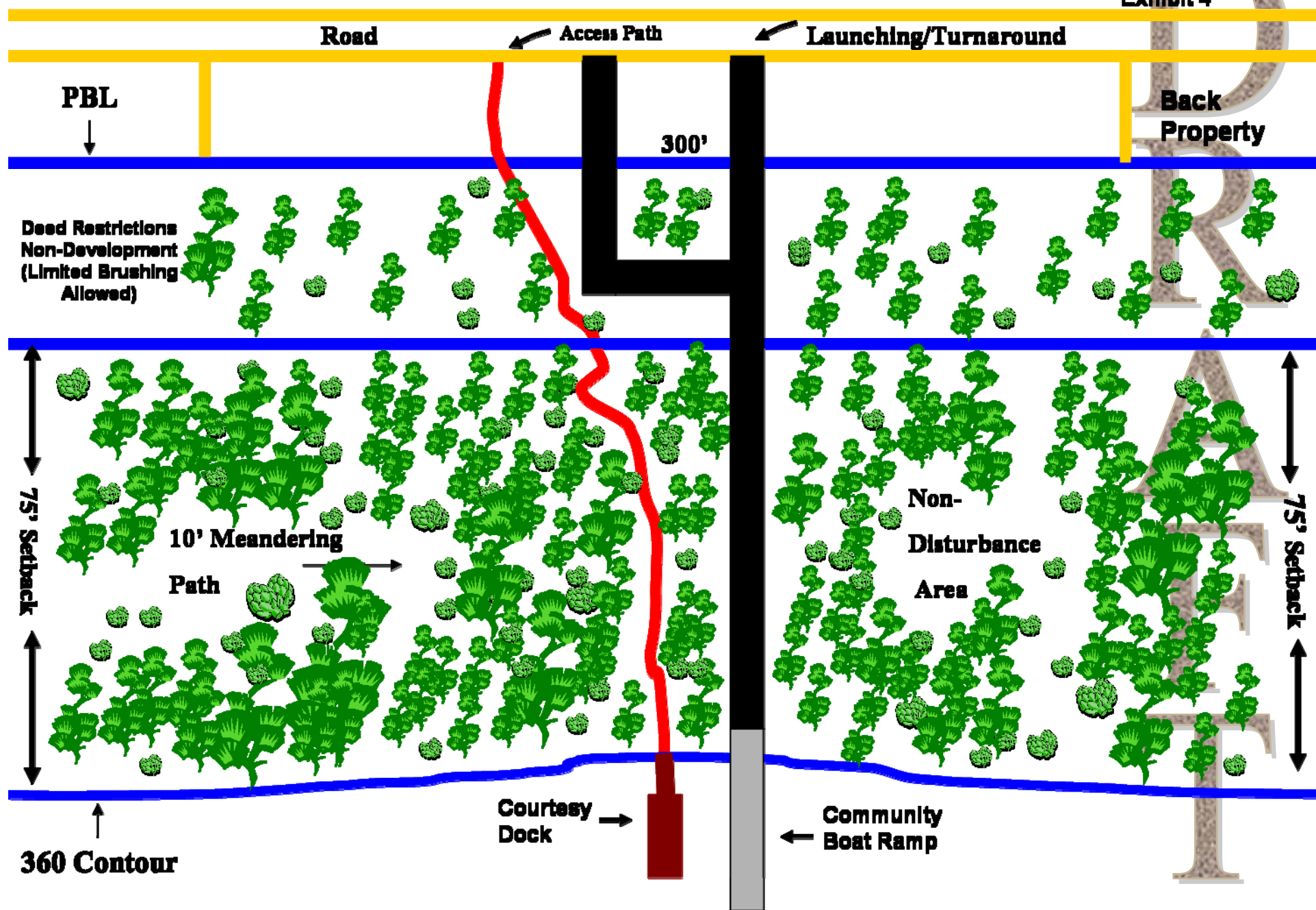


## Community Boat Ramp and Courtesy Dock

- A common access lot must have a minimum of three-hundred foot (300 ft) width, measured on the Project Boundary Line
- Qualification for a Community Boat Ramp will be heavily influenced by evaluations of any necessitated impact to existing trees and other vegetation as well as the distance from the PBL to the 360 contour

DRAFT

**Community Boat Ramp &  
Courtesy Dock  
Exhibit 4**



## 75-Foot Buffer Zone Management

- Buffer zone supports wildlife corridors and natural areas, protects water quality, reduces erosion, protects fish and wildlife habitat, and provides a visual separation of off-water development
- Current FERC license requires a 75-Foot Buffer on project property. In areas where the PBL is less than 75 feet from the 360 contour, the current plan provides no mechanism to leverage the dock permitting program to add property to create a full 75-Foot Buffer area. This plan would change that.
- If a back property owner chooses not to deed SCE&G sufficient land to create a full 75-Foot Buffer area, SCE&G will not permit a dock.



## 75-Foot Buffer Zone Management

- Will be a non-disturbance area except for such clearing necessary and approved for installation and maintenance of approved shoreline amenities
- No clearing of trees, shrubs or vegetation will be allowed
- Will allow clearing for a single, ten foot (10 ft) wide meandering access path to a permitted dock from adjacent back property owner's land
- Path must not encourage erosion and must protect the aesthetics of the shoreline
- Trees larger than 8 inches at breast height may not be removed within path
- Lake Management representatives will work with property owners to lay out access paths

DRAFT

## Natural Areas/ESA

- Includes only those areas identified and classified as natural areas and Environmentally Sensitive Areas (ESA's) and are required by FERC order to be protected
- No dock permits or fringe land sales to adjoining natural areas but ESA /PBL footage could be included in the participation of a multi-slip, common, or individual docks
- Areas where Intermittent ESA's have been identified may accommodate limited docks, but only with approval from SCDNR and USFWS

DRAFT

Map 1 of 4

<u>track #</u>	<u>current class</u>	<u>new class</u>	<u>acreage</u>	<u>feet</u>	<u>environ score</u>
19	FD	FOR	2	1157.9	45
20	FD	FOR	0	33.69	45
23	FD	FOR	0.2	192.96	45
34	FD	FOR	19.77	4132.65	45
283	FD	NA	8.66	2987.35	39
285	NA	FD	1.93	665	31
26	FD	FOR	22.69	6049.68	45

# SCE&G Proposal vs. Counter Proposal

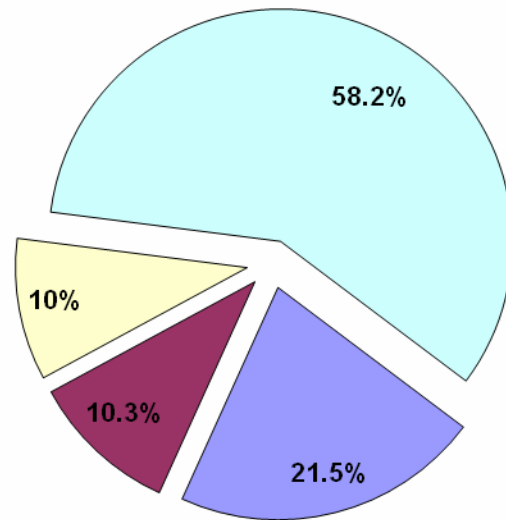
## 75' Buffer Factor

Classification	Acres		Acres minus 75'		Acres in 75' buffer		Miles	
	SCE&G	Counter	SCE&G	Counter	SCE&G	Counter	SCE&G	Counter
Natural Areas	440.68	777.11	262.05	432.39	178.63	344.72	19.65	37.92
Forest Man	206.16	258.02	120.25	146.2	85.91	111.82	9.45	12.05
Recreation	185.44	185.44	83.09	83.09	102.35	102.35	9.06	9.06
Sub-total	832.28	1220.57	485.37	683.93	346.91	536.64	38.16	59.03
Future Dev	1001.88	613.59	517.79	319.23	484.09	294.36	53.25	32.38
<b>Total</b>	<b>1834.16</b>		<b>1003.16</b>		<b>830.99</b>		<b>91.41</b>	

\* Based on uniform 75' buffer, actual acreage will be slightly smaller in buffer and larger in remaining.

Chart Title

## SCE&G Proposal

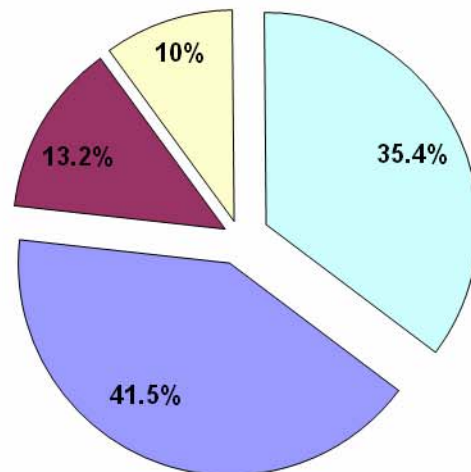


- Natural Areas (19.65 miles)
- Forest Management (9.45)
- Recreation (9.06 mile)
- Future Development (53.25 miles)

## Miles Based on 2008 Numbers

Chart Title

## Counter Proposal

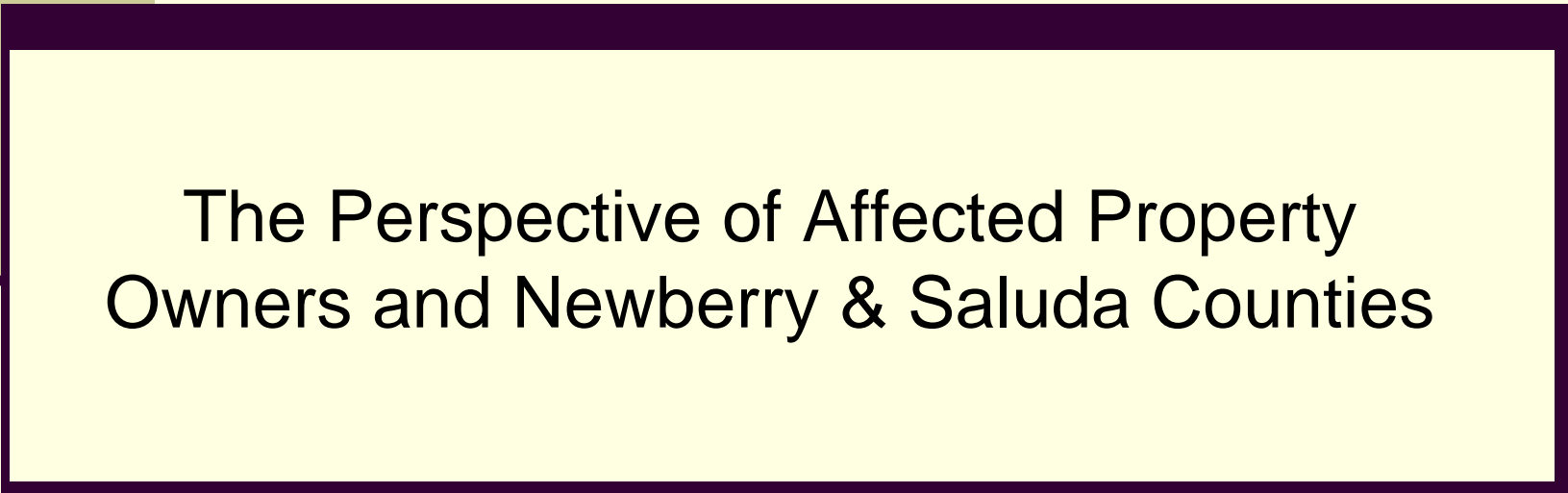



- Natural Areas (37.92 miles)
- Forest Management (12.05 miles)
- Recreation (9.06 miles)
- Future Development (32.38 miles)





# Framework for Shoreline Rebalancing



The Perspective of Affected Property  
Owners and Newberry & Saluda Counties

# Shoreline Management Rebalancing Essentials

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- Plan must be FAIR to all Parties
- Implementation must be uniform in application
- Plan must protect the Lake & Shore Line
- Plan must extend past the PBL to be effective
- Plan must garner enhanced public compliance to be successful
- Plan must protect Property values

# New Shoreline Management Plan

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- Protect all remaining undeveloped shoreline
- Implement a uniform 75 ft buffer
- Eliminate private docks
- All property owners receive “boating access” via multi-slip docks & common boat ramp
- 1.5 slips per 100 ft on PBL

# Results

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- Minimize shoreline impact
- Maximize wildlife habitat
- Maximize natural scenic beauty
- Improve public access to public waters
- Maximum increase in protected acreage
- Improved property values benefiting back property owners and counties

# How will the Plan be Implemented?

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- Deeded Land exchange between back property owner and SCE&G to create a uniform buffer
- Following exchange, Land behind the buffer may be sold to back property owner
- Purchase of fringe land not mandatory for multi-slip
- Set asides by back property owner to ensure that there is “no net loss of preserved acreage”



# Newberry County Impact

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- 38 miles classified as Game & Forrest Management
  - $38\text{miles} \times 5280\text{ft/mile} \times \$1200/\text{ft} \times .06 \text{ assessment} \times 399 \text{ mills} = \$5.76\text{M}$
  - 1338 additional homes valued @\$150,000 ea
  - $1338 \text{ homes} \times \$150,000 \times .06 \times 399 \text{ mills} = \underline{\$4.8\text{M}}$

■		Total
	\$10.5 M	

- Conservatively over a \$300 Million source of revenue over the next 30 years

# Saluda County Impact

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- 60 miles classified as Game & Forrest management

- 60miles x 5280 ft/mile x \$1000/ft x .06 assesment x 300 mills = \$5.7M

- 2112 homes valued @ \$150,000 ea

- 2112 homes x \$150,000 x .06 x 300 mills = \$5.7M



Total      \$11.4M

- Conservatively over a \$330 Million source of revenue over the next 30 years

# Impact on Back Property Owners

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- Stabilization of property values at median levels
- Preservation incentives available
- Effective penalties for noncompliance
- Encourages low density development

# Questions ?

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Proposed Management  
Plan for

SCE&G Future  
Development Property

December 2007



# BASELINE

- 1984 License
  - Classifications
    - Future Development
    - Forest and Game Management
    - Easement
    - Project Works
    - Recreation (Current and Future)
  - “Protective/Restrictive” Classifications
    - Forest and game management
      - No sales
      - No docks
      - No ramps
      - Best management practices forestry operations only
    - Recreation
      - Limited to public recreation access only
      - No sales
    - Project Works

# BASELINE, Cont'd

- Future Development Property
  - Available for sale (routine sales)
    - No more than 5 acres for any one use
    - No more than 50 acres/year
      - Most sold in any one year: 30.04 acres
      - Total sold since 1984: 294.13 acres
      - Average annual sales since 1984: 12.78 acres
  - Buffer requirement: 75 feet back from 360' contour
    - Limited brushing and clearing
      - »  $\leq 3''$  in diameter @ 4' height
      - » No permanent structures
  - Docks
    - Single family residential
    - Multi-user docks
    - Common docks
    - Community access
      - » Ramp
      - » Courtesy dock
    - Commercial Marinas/docks

# New FERC-Mandated Restrictions

- FERC Order re: dated \_06-23-2004
  - 75 foot, general non-disturbance setback
    - Meandering path
    - Docks
    - 25 foot and 50 foot setbacks for ESA and non ESA
    - Protection of backs of coves
  - Environmentally Sensitive Areas
    - Vegetative cover based: willows and button bushes
    - Depth based: shallow coves and flats
    - Protected species
  - Limitation on docks
    - Continuous ESAs – no docks
    - Intermittent ESA's – location-limited
  - Application to Easement property

# RE-BALANCING

- Only property within the Project Boundary Line of Project 516 is affected.
  - SCE&G is not a governmental authority and cannot make zoning decisions.
  - County development policies and plans should be the prerogative and responsibility of county government, not a regulated public utility.
  - Shoreline management policies and programs must be directed at shoreline activities within the reasonable control of SCE&G as property owner and licensee.
- Toothpaste cannot be forced back into the tube – the lake shoreline already is fragmented. It cannot be “un-fragmented.”

# HOW TO RE-BALANCE

- Craft shoreline management prescriptions to encourage all back property (i.e. non Project Property) development-related shoreline impacts to be grouped so as to leave as much undisturbed shoreline as possible.
- Encourage establishment of setbacks where none exist.
- Encourage increased depth of setback where less than 75 feet depth lies between the PBL and the 360' contour.
- Enforce setback restrictions, shoreline management prescriptions, vegetative protection, maintenance, and re-establishment requirements.



# Existing Dock Permitting Policy for Future Development Property

- **Individual Docks**
- To qualify a lot for a single family dwelling must have a minimum width of 100ft measured on the 75ft Buffer Zone
- **Common Docks**
- To qualify for a common dock to be shared by two single family dwelling, each lot must have a minimum width of 50ft, measured on the 75ft Buffer Zone

## **Community Boat ramp and Courtesy Dock**

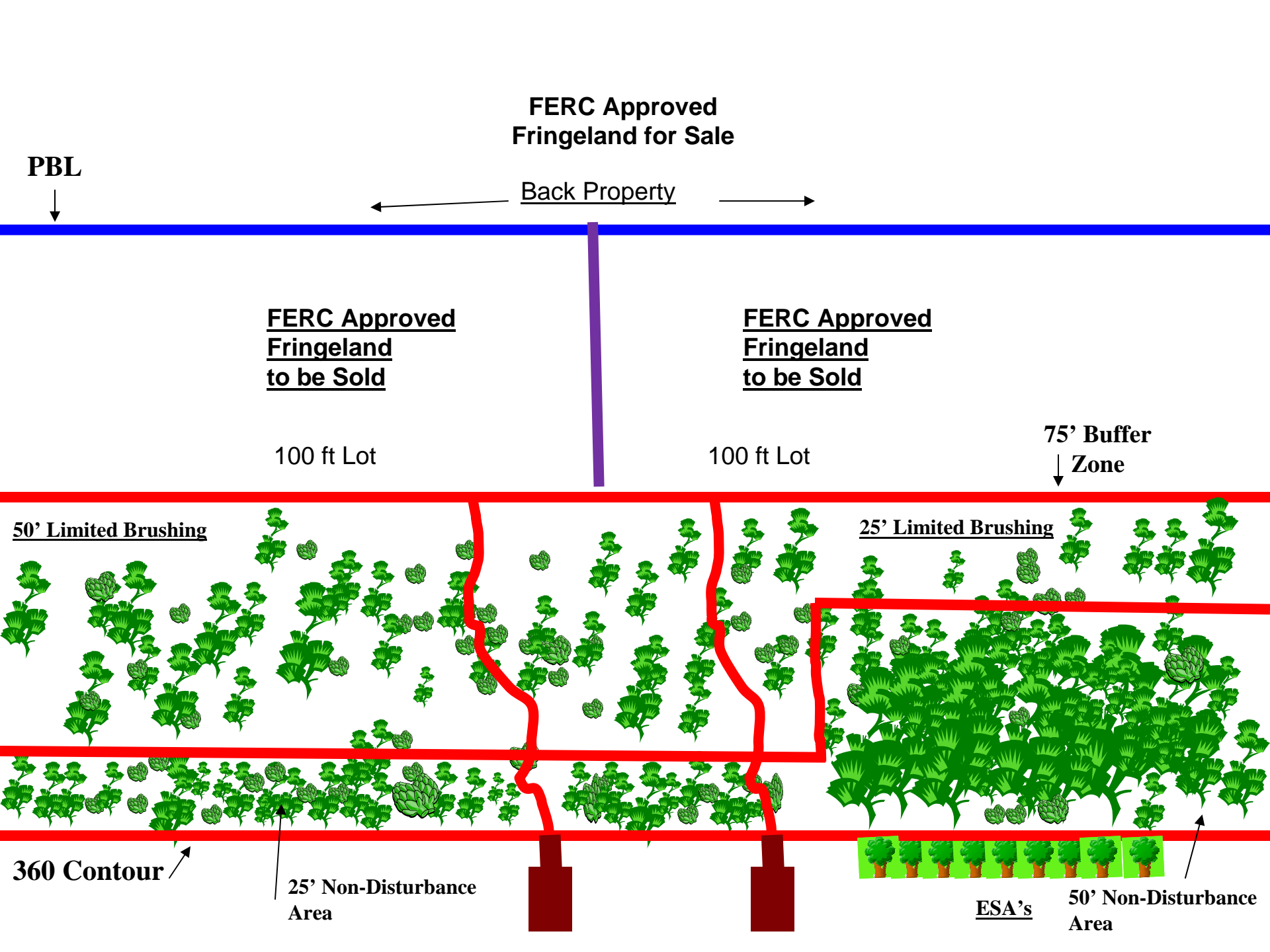
A community common access lot must have a minimum of 100ft width measured on the 75ft Buffer Zone with a minimum setback of 100ft for the nearest existing property line.

From the end of the proposed courtesy dock there must be a minimum of 150ft across the cove to the 360 contour.

## **Multi Slip Dock Policy**

Requires County, State and Federal approval.

Setbacks and distance requirements same as easement property.



## **SCE&G Management Prescriptions December 2007**

<b><u>Lake Murray</u></b>	<b><u>Miles</u></b>	<b><u>Acres</u></b>
<b>75-Foot Setback</b>	<b>29.49</b>	<b>261.58</b>
<b>Causeway</b>	<b>1.23</b>	<b>4.16</b>
<b>Commercial Recreation</b>	<b>6.05</b>	<b>114.28</b>
<b>Conservation Areas</b>	<b>1.38</b>	<b>33.30</b>
<b>Easement</b>	<b>386.38</b>	<b>7943.93</b>
<b>Easement w/75-Foot Setback</b>	<b>0</b>	<b>294.13</b>
<b>Forest Management</b>	<b>100.13</b>	<b>3570.23</b>
<b>Future Development —FDID 1-348</b>	<b>91.49</b>	<b>1834.16</b>
<b>Project Operations</b>	<b>1.63</b>	<b>1057.53</b>
<b>Public Recreation</b>	<b><u>32.60</u></b>	<b><u>723.89</u></b>
	<b>650.38</b>	<b>15,837.19</b>

## Proposed Management Plan

- Applies to remaining SCE&G-owned Future Development property on Lake Murray
- Plan proposed by the SCE&G Land and Lake Dept.
- Allows SCE&G to continue with some Fringe Land Sales
- Promotes protection of the environmental and scenic values of the project



# Proposed Management Plan

- Plan would keep current 75-Foot buffer
- Allow sale of fringe land above the 75-Foot buffer to back property owner
- Permitting shoreline amenities will continue to be dependent on all other conditions specific to the approved SMP

## Buffer Zone Enhancements

- New Plan will establish a uniform 75-Foot non-disturbance Buffer Zone
- Back property owners who have less than 75 feet in depth to the 360 contour would be required to deed SCE&G so much of their property to create a uniformly 75-Foot Buffer Zone
- After this condition is met, SCE&G will permit a dock along the shoreline, if the property qualifies for all other dock permitting requirements

## Goals of Proposed Management Plan

- Goal is to balance the desire for continued fringe land sales for revenue generation while protecting the recreational, environmental and scenic values of the remaining SCE&G future development shoreline
- Plan also encourages less development density by requiring larger lots with more shoreline footage to qualify for docks
- Reduces the number of docks and increases the distance between docks

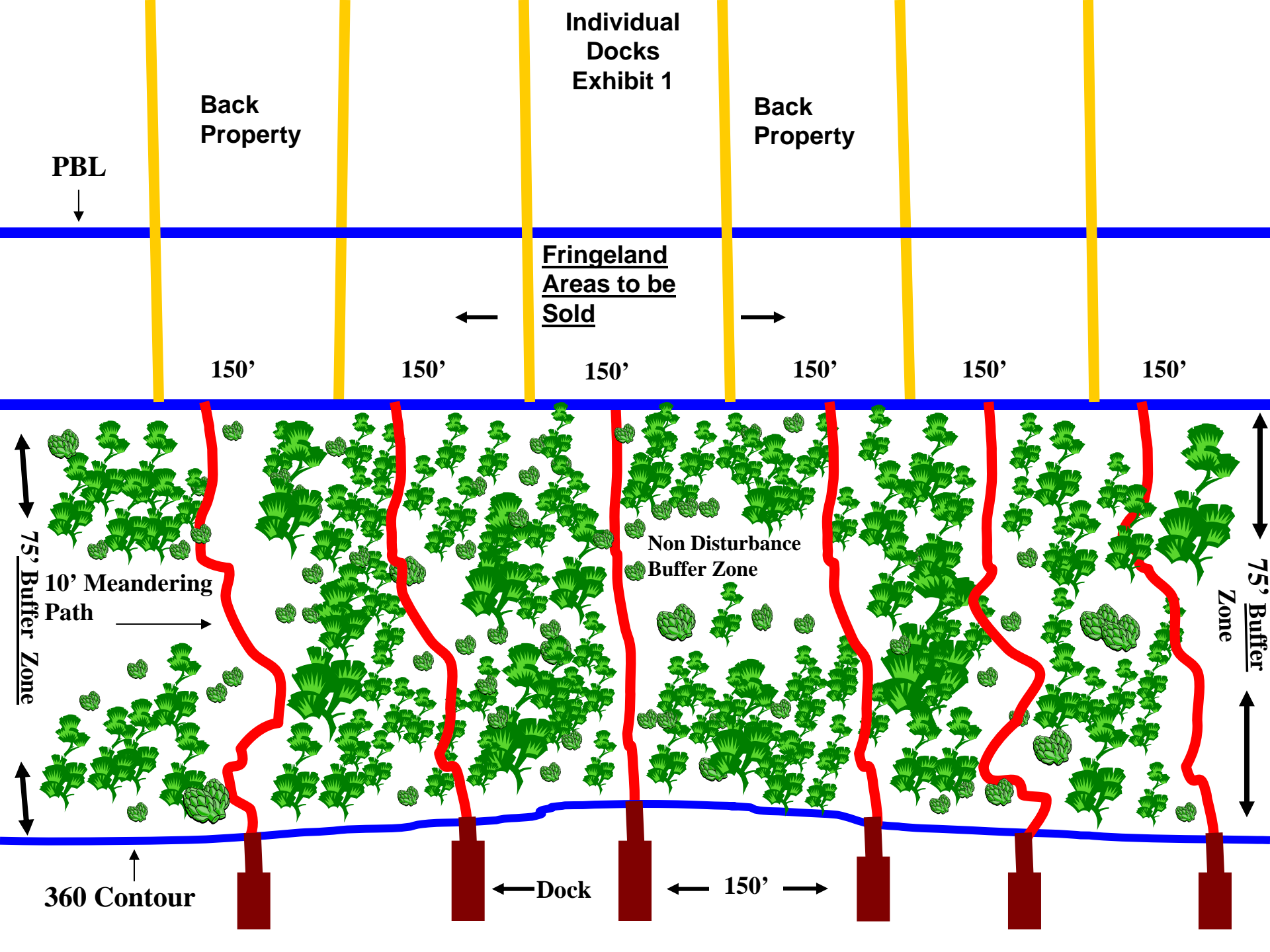
# Land Sales and Fringe Land Restrictions

- Only owners of back property adjoining SCE&G fringe land may purchase the available fringe land
- Application for a dock would be allowed only after the purchase of the fringe land
- All qualifying conditions for dock permits, in addition to the setback and ownership conditions must be met

## Dock Requirements

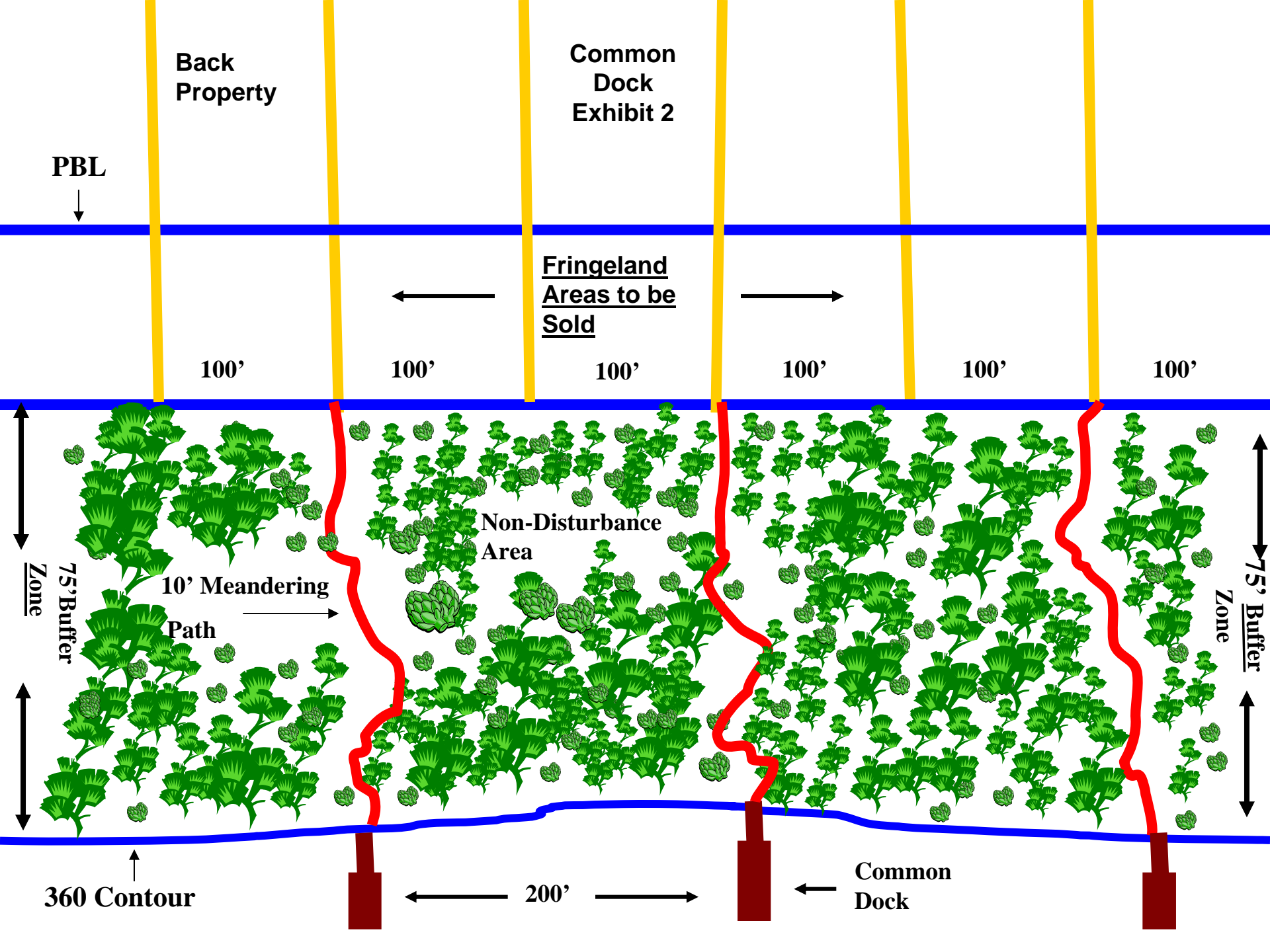
Individual Docks – To qualify, a lot for a single family dwelling must have a minimum width of 150 feet, measured on the 75ft Buffer Zone Line





## Dock Requirements

**Common Docks** – To qualify for a common dock to be shared by two single family dwellings, each lot must have a minimum width of 100 feet, measured on the 75ft Buffer Zone Line



## Multi-Slip Docks

- May be permitted in lieu of individual or common docks
- A minimum of one-thousand feet (1000 ft) of continuous shoreline, measured at the 75ft Buffer Zone Line, is required
- A minimum distance of five-hundred feet (500 ft) across a cove measured from the 360 contour to the 360 contour required
- One and one half (1 ½) slips would be approved for each 150 feet of property along the 75ft Buffer Zone Line
- With a continuous shoreline of one-thousand feet (1000 ft.), a facility with a total of ten(10) slips could be approved with all other shoreline condition requirements met
- A minimum distance of five-hundred feet (500 ft) across a cove measured from the 360 contour to the 360 contour required
- One (1) ten foot (10 ft) wide meandering path will be allowed through the Buffer Zone to access a multi-slip dock

**Multi-slip Docks  
Exhibit 3**

**1000 ft. of Property on the SCE&G**

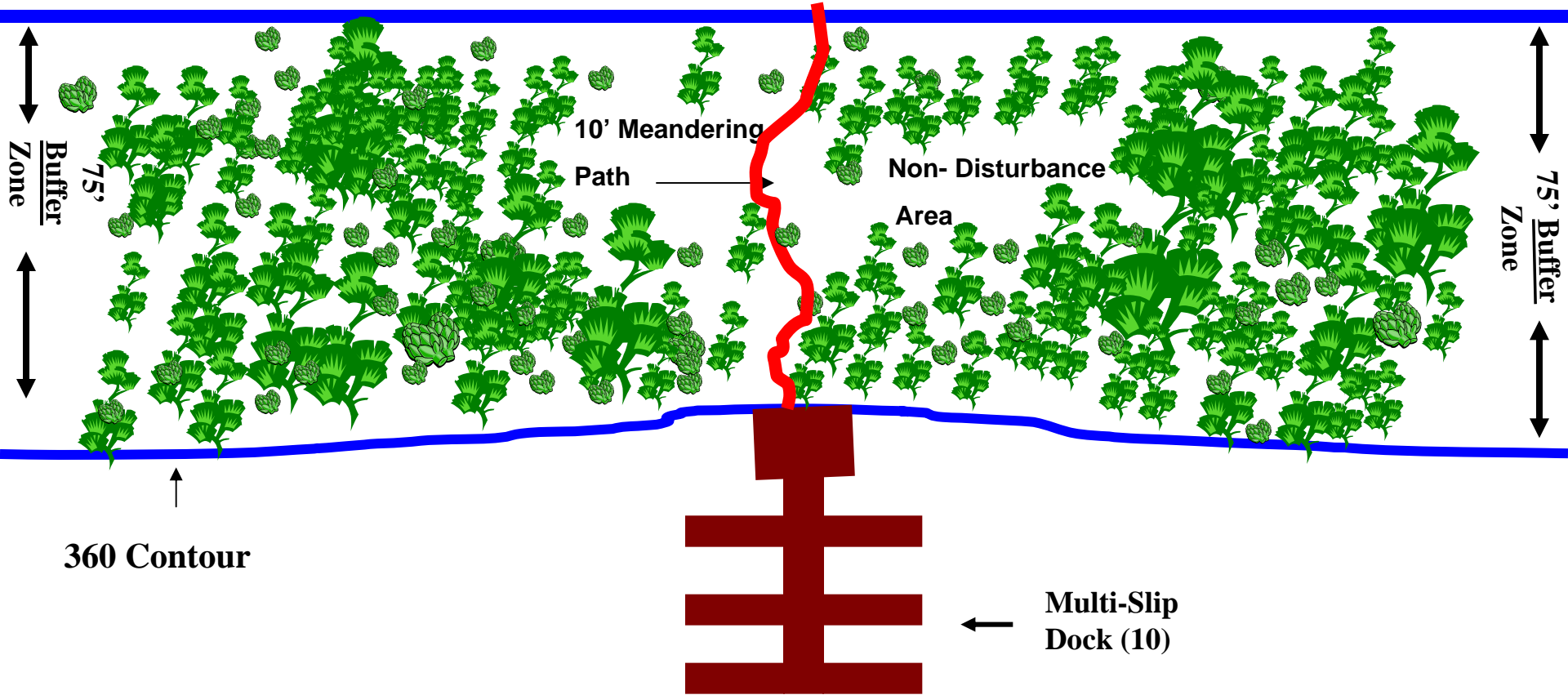
**75' Buffer Zone Line**

**PBL**

**Access Path**

**Fringeland Area  
to be Sold**

**1000 Ft**

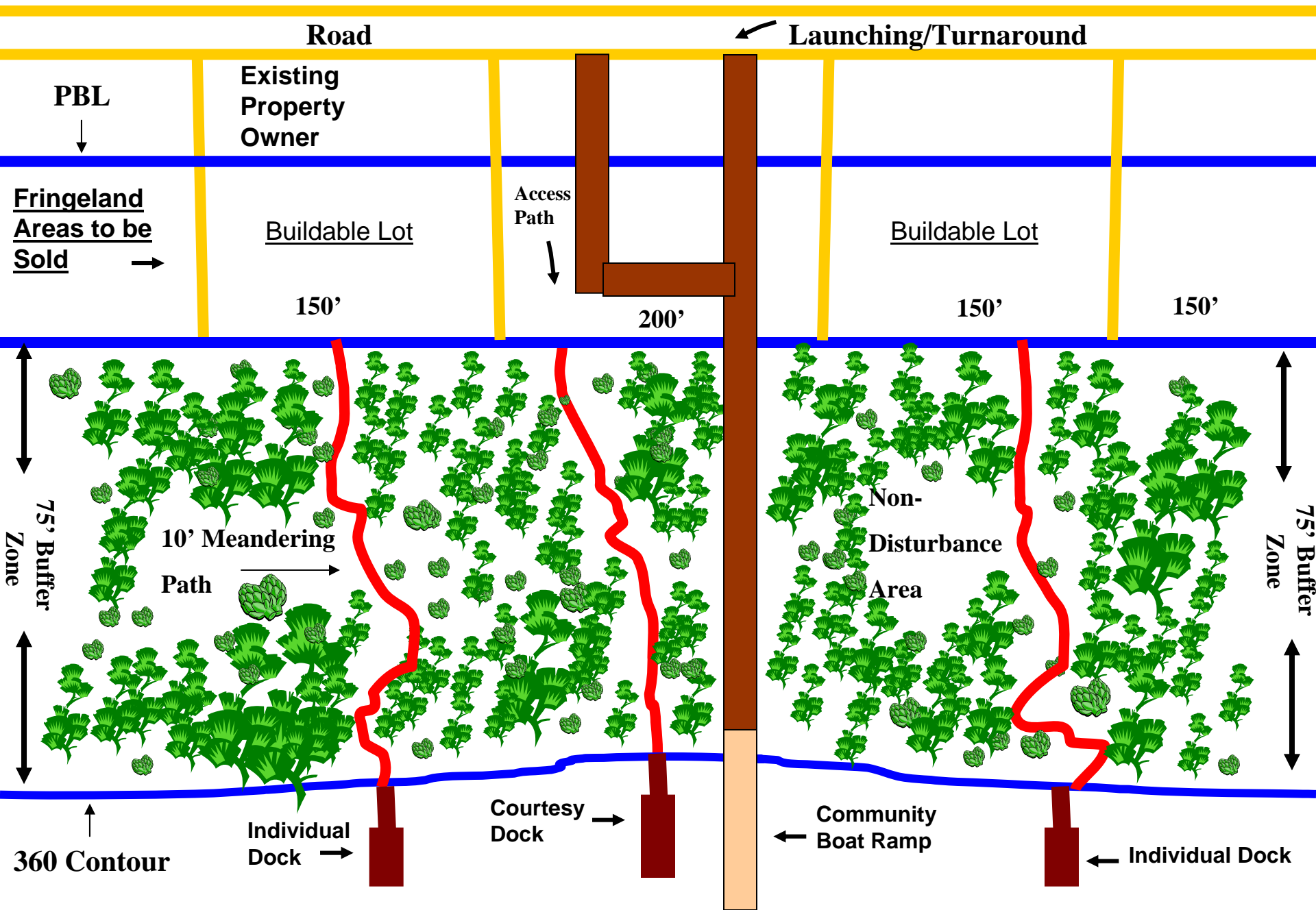


# Community Boat Ramp and Courtesy Dock

- A common access lot must have a minimum of two-hundred foot (200 ft) width, measured on the 75ft Buffer Zone Line. Also it must be 150' from the current adjacent property owner on both sides
- Qualification for a common boat ramp will be heavily influenced by evaluations of any necessitated impact to existing trees and other vegetation within the buffer zone
- Parking and turn around space must be above the 75' Buffer Zone Line
- No additional criteria



# Community Boat Ramp & Courtesy Dock Exhibit 4



## 75-Foot Buffer Zone Management

- Buffer zone supports wildlife corridors and natural areas, protects water quality, reduces erosion, protects fish and wildlife habitat, and provides a visual separation of off-water development
- Current FERC license requires a 75-Foot Buffer on project property. In areas where the PBL is less than 75 feet from the 360 contour, the current plan provides no mechanism to leverage the dock permitting program to add property to create a full 75-Foot Buffer area. This proposed plan would change that.
- If a back property owner chooses not to deed SCE&G sufficient land to create a full 75-Foot Buffer area, SCE&G will not permit a dock or sell any of the fringeland.

## 75-Foot Buffer Zone Management

- Will be a non-disturbance area except for such clearing necessary and approved for installation and maintenance of approved shoreline amenities
- No clearing of trees, shrubs or vegetation will be allowed
- Will allow clearing for a single, ten foot (10 ft) wide meandering access path
- Path must not encourage erosion
- Trees larger than 10 inches at breast height may not be removed within path
- Lake Management representatives will work with property owners to lay out access paths

## Natural Areas

- Fringe land will not be sold
  - Dock permits will not be issued
  - Includes only those areas identified and classified as natural areas and Environmentally Sensitive Areas (ESA's)

## Recreation

Potential recreation sites will be identified and future recreation sites will be evaluated as part of the relicensing process. The Recreation Technical Working Committee will review the Recreation Assessment Study Report and make recommendations to the Land and Lake Resource Conservation Committee on Future Development lands needed for public recreation

**What Did You Do?**



# Total Number Of Tracts

- 347 Tracts (Tract 91 Did Not Exist)
- 47 Tracts were eliminated

(below the dam, causeways, data error, and tracts already sold)

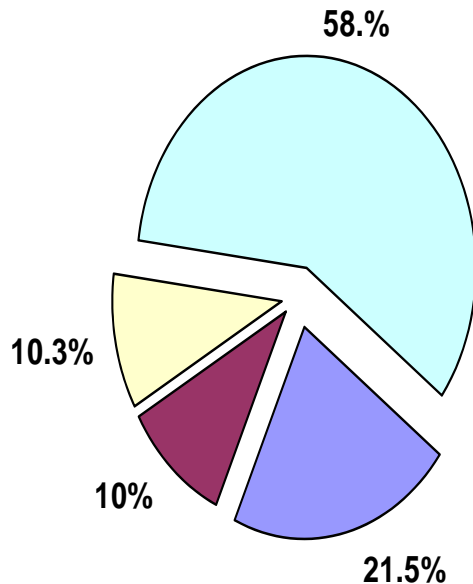
- 300 Remaining Tracts
- 76 Tracts(a portion or all to Natural Areas)
- 15 Tracts (a portion or all to Recreation)
- 16 Tracts (a portion or all to Forest Mgt)

# Some Level of Protection

	ACRES	MILES
Natural Areas	440.68	19.65
Forest Management	206.16	9.45
Recreation	185.44	9.14
Sub-Total	832.28	38.24
Uniform 75' Buffer Zone	477.86	53.25
Total	1310.14	91.49

# Future Development Tracts

## Miles of Shoreline

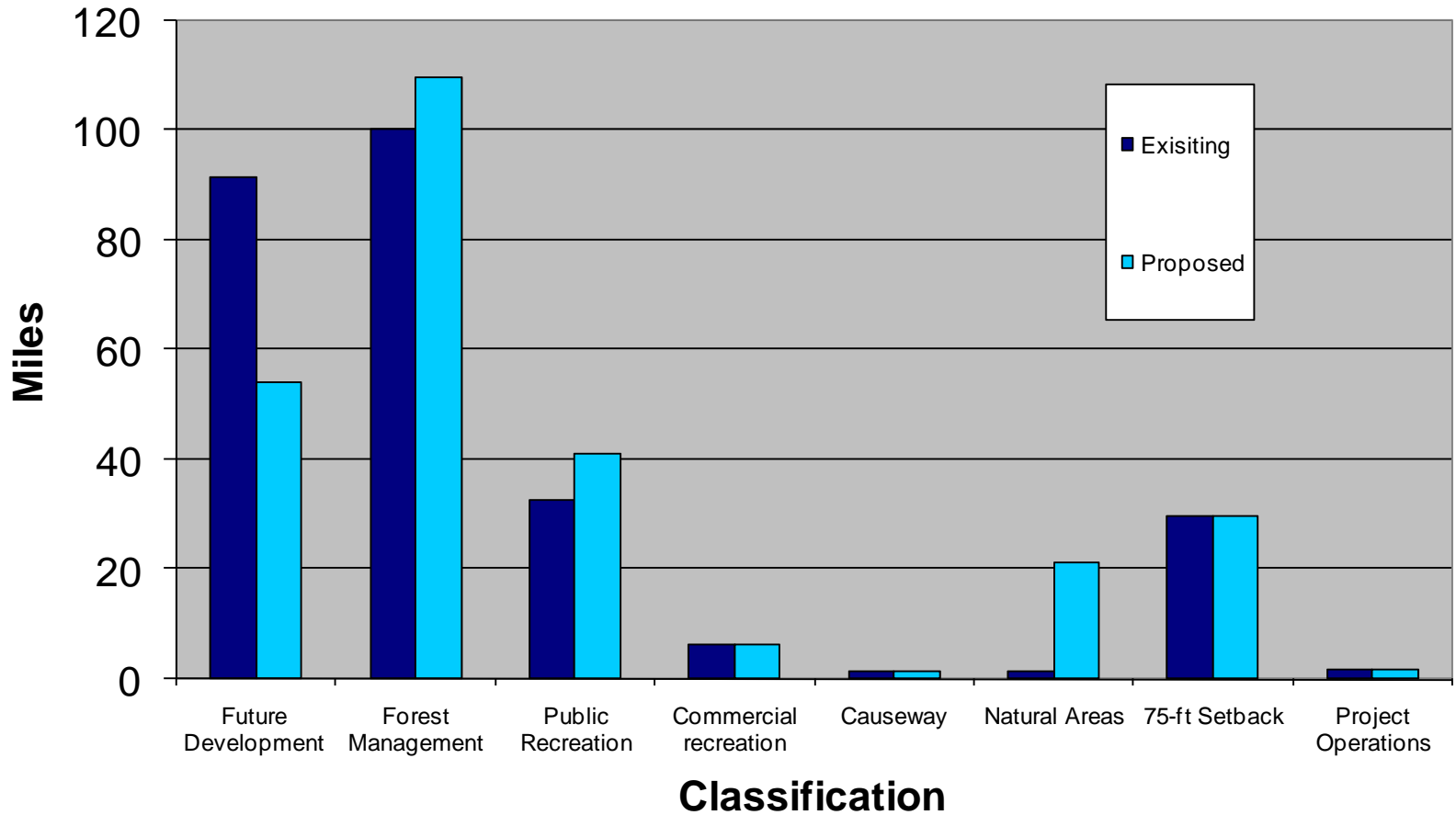


- Proposed Natural Areas (76 tracts 19.65 miles)
- Proposed Reception (15 tracts 9.14 miles)
- Proposed Forest Management (16 tracts 9.45 miles)
- Proposed Future Development (53.25 miles)

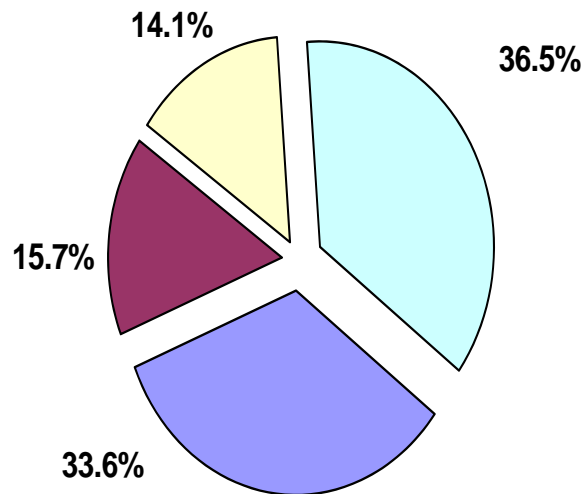
Total Shoreline Miles = 91.49 miles

Proposed 12-13-2007

## Redistribution of Shoreline Miles after Rebalancing of Future Development Lands



# Future Development Protected Acreage

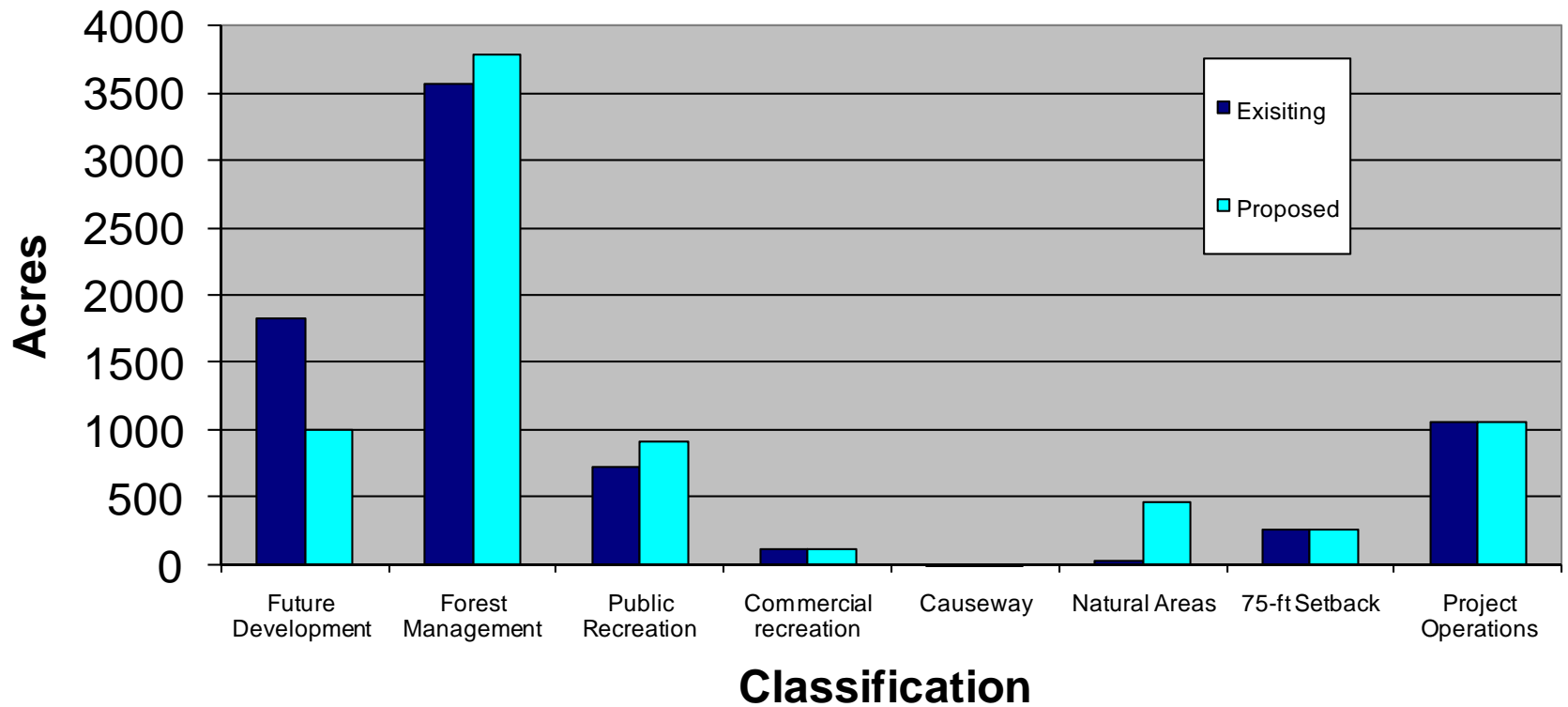


- Natural Areas (76 Tracts 440.68 acres)
- Forest Management (16 Tracts 206.16 acres)
- Recreation (15 Tracts 185.44 acres)
- Uniform 75 ft protected buffer zone (477.86 acres)

Total Acreage = 1834.16 acres

Total Acreage For Protection = 1310.14

## Changes in Acreages after Rebalancing Future Development Lands





## SCE&G Management Prescriptions December 2007

	<u>Current</u>	<u>Proposed</u>
<u>Lake Murray</u>	<u>Miles</u>	<u>Miles</u>
75-Foot Setback	29.49	29.49
Causeway	1.23	1.23
Commercial Recreation	6.05	6.05
Natural Areas (Conservation Areas)	1.38	21.03
Easement	386.38	386.38
Easement w/75-Foot Setback	0	0
Forest Management	100.13	109.58
Future Development —FDID 1-348	91.49	53.25
Project Operations	1.63	1.63
Public Recreation	<u>32.60</u>	<u>41.74</u>
	650.38	650.38

## SCE&G Management Prescriptions December 2007

	<u>Current</u>	<u>Proposed</u>
<u>Lake Murray</u>	<u>Acres</u>	<u>Acres</u>
75-Foot Setback	261.58	261.58
Causeway	4.16	4.16
Commercial Recreation	114.28	114.28
Natural Areas(Conservation Areas)	33.30	473.98
Easement	7943.93	7943.93
Easement w/75-Foot Setback	294.13	294.13
Forest Management	3570.23	3776.39
Future Development —FDID 1-348	1834.16	1001.88
Project Operations	1057.53	1057.53
Public Recreation	<u>723.89</u>	<u>909.33</u>
	15,837.19	15,837.19

# Summary

	ACRES	MILES
Natural Areas	440.68	19.65
Forest Management	206.16	9.45
Recreation	185.44	9.14
Sub-Total	832.28	38.24
Future Development	1001.88	53.25
Total	1834.16	91.49

## **Dock Policy on Forest Management Lands**

- The Land & Lake TWC will evaluate and determine if a dock permitting policy will be implemented.
- As of January 1, 2007 there are 88 private property owners that adjoin the current SCE&G Forest Management Lands that could be considered for some type of dock access.

# Commerce Association of Lake Murray

# *Commerce Association of Lake Murray*

The Commerce Association of Lake Murray is committed to providing a voice for the business community serving Lake Murray and in doing so, we shall seek to, promote and protect; natural resources education for safe and responsible boating, maintain and expand economic viability of facilities and services, and act as a liaison between public regulators and legislators, so Lake Murray may be enjoyed by all for generations to come.



# ***GUIDE LINES***

## ***COMMERCIAL MARINAS***

### ***LAKE MURRAY, SOUTH CAROLINA***

- ➡ **No Commercial Marina facility may encroach or extend more than one-third the distance across any cove area or waterway.**
- ➡ **The proposed Commercial Marina should be located within the confines of the imaginary projected property lines as they extend lakeward.**

- ➡ **Commercial Marinas must locate the outside edge of the docks closest to the adjoining property line at least one and a half boat lengths of the largest boat accommodated on the dock facing this property line.**
- ➡ **Excavations for Commercial Marina facilities to improve public access may be considered on a case-by-case basis with consultation of appropriate State and Federal resource agencies and regulatory authorities.**
- ➡ **Commercial Marina facilities must be responsible for water quality during construction and marina operations and must maintain a water testing plan.**

- ➡ **Commercial Marina facilities with greater than ten (10) watercraft or that accommodate watercraft with marine sanitation facilities will be required to install, operate, and maintain sewer pump-out disposal system that is available for public use.**
- ➡ **Commercial Marina facilities must provide public restrooms.**
- ➡ **Commercial Marina facilities are encouraged to provide public fishing access areas.**

- ➡ **Commercial Marina facilities must comply with all local county, state and federal regulations.**
- ➡ **Commercial Marina Applicants must sign and complete the Commercial Marina Application Agreement before SCE&G will process a permit request.**



A photograph of a sunset over a body of water. The sky is filled with soft, colorful clouds in shades of orange, pink, and blue. The sun is low on the horizon, casting a warm glow. Silhouetted trees and branches are visible in the foreground and along the shoreline. Several boats are docked in the water, their forms reflected in the calm surface. The overall mood is peaceful and contemplative.

Questions?



# Lake Murray Rebalancing

November 8, 2007

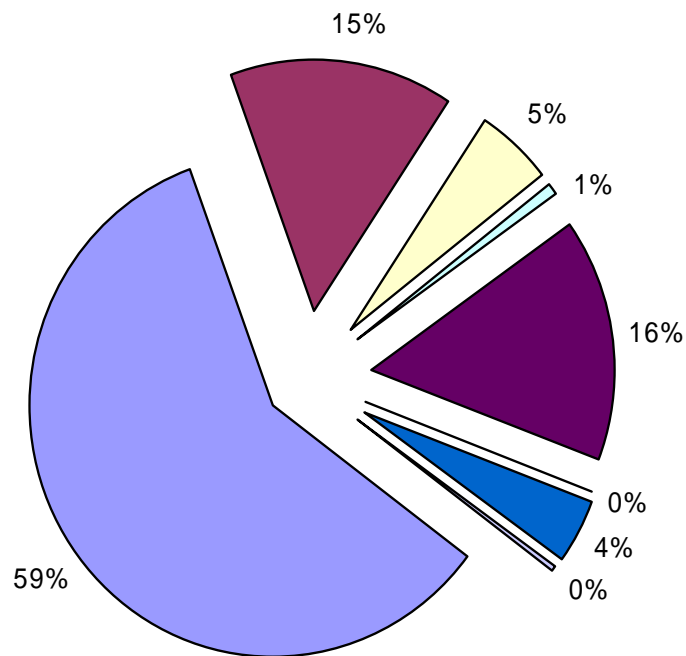


By Ron Ahle

L&LM TWC



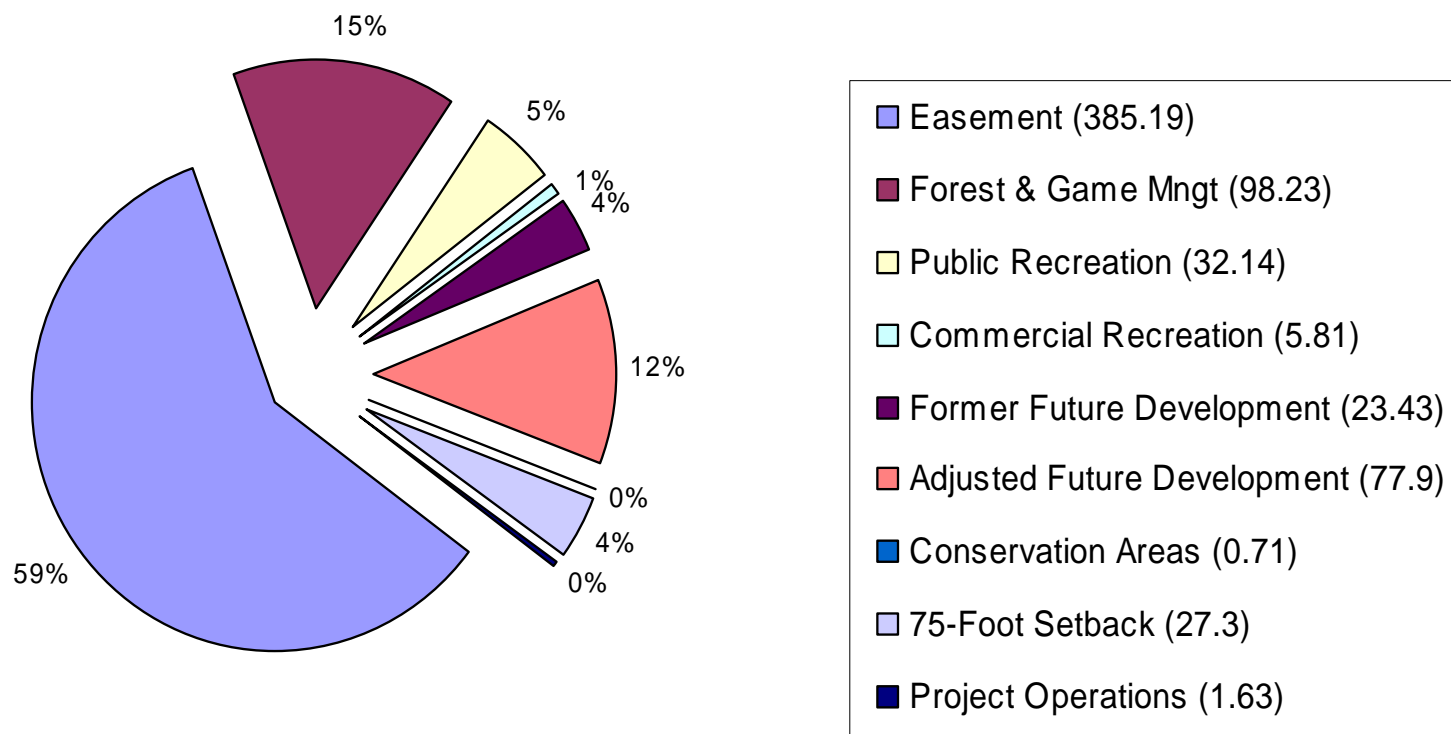
# Shoreline Classification 2006



Total Shoreline = 652.34 miles

- Easement (385.19)
- Forest & Game Mngt (98.23)
- Public Recreation (32.14)
- Commercial Recreation (5.81)
- Future Development (101.33)
- Conservation Areas (0.71)
- 75-Foot Setback (27.3)
- Project Operations (1.63)

# Shoreline Classification 2007



Total Shoreline = 652.34 miles

SCE&G 2006 (Future Development adjusted according to 2007 L&LM study)

\* “Former Future Development” includes lands that were sold, approved for sale, or omitted.

# Treatment of Future Development Tracts

- 344 total computer assigned tracks (348 were presented but several of the tracts were overlaps resulting in reducing the number to 344)
- 50 tracts omitted due to ownership issues and location
- 96 tracts were not scored due to low resource value and time constraints
- 7 tracts were scored even though they were approved for sale or lease
- 191 tracks were scored, 79 tracts were placed into 29 groups and scored collectively. The final result was 141 scores.

# Resource Value Factors

## **Fish spawning and nursery habitat**

The relative abundance of this type habitat will be used to evaluate this criterion. Fish spawning and nursery habitat is commonly associated with elevation 354' and higher.

## **Length of shoreline**

The logic for this criterion is the longer the shoreline the higher the natural resource value.

## **Mean width of fringeland**

The logic for this criterion is the wider the fringeland the higher the natural resource value. Consideration will be given to habitat quality from the 358 elevation to the 360 elevation.

## **Waterfowl hunting opportunity**

This factor evaluates the amount and quality of near shore waterfowl habitat and the shooting restrictions pertinent to each County. If most or all of the fringeland shoreline is available for hunting and suitable habitat exists, a best ranking is given.

## **Regional importance**

This factor evaluates the fringeland resource value based on regional land uses. For example, a small tract surrounded by development would have a low rating while a small track connecting two conservation areas would have a high rating.

## **Land Use**

Land use, from a natural resource perspective, is reflected in the amount of “natural habitat” present on a given fringeland tract. The scoring criterion for this factor is based on the more natural cover the better.

# Resource Value Factors

## **Recreational values**

This factor looks at fringeland from a public recreation perspective with an emphasis on low impact recreation such as hiking, birding, fishing and picnicking. Considerations in evaluating this factor include land-based accessibility; shore fishing opportunities, proximity to other recreational areas, trail linkage and length, and wildlife viewing potential.

## **Adjacency**

This factor looks at adjacent land use with the idea that building upon adjacent natural areas is more desirable and establishing natural areas adjacent to other lands uses is less desirable.

## **Environmentally sensitive areas including conservation areas**

This factor evaluates the amount of environmentally sensitive areas and conservation areas associated with future development fringeland. The relative abundance of this type habitat will be used to evaluate this criterion.

## **Unique habitats and Threatened and Endangered Species**

This factor evaluates the amount of habitat for threatened and endangered species and recognizes known occurrences. If the tract has suitable habitat with known occurrences, it is given the highest ranking.

## **Terrestrial Wildlife**

Acreage of a tract relates directly to resource value for terrestrial wildlife. Therefore, tract size will be the criteria to measure significance for terrestrial wildlife

# Scoring Criteria

- **Fish spawning & nursery habitat**
  - < 10% ----- poor (1)
  - 10% to 30% -----good (3)
  - > 30% -----best (5)
- **Length of shoreline**
  - < 300 feet -----moderate (1)
  - 300' to 1000' -----good (3)
  - >1000 feet -----best (5)
- **Mean width of fringeland**
  - < 100 feet -----moderate (1)
  - 100' to 250' -----good (3)
  - >250 feet -----best (5)
- **Waterfowl hunting opportunity**
  - Little or None -----poor (1)
  - Partial -----moderate (3)
  - Good -----best (5)
- **Regional importance**
  - Low -----(1)
  - Moderate -----(3)
  - High -----(5)
- **Land Use**
  - < 25% natural -----moderate (1)
  - 25% to 75% natural --good (3)
  - 100% natural -----best (5)
- **Recreational values**
  - Limited -----moderate (1)
  - Partially limited -----good (3)
  - Unlimited -----best (5)
- **Adjacency**
  - Isolated----- (1)
  - Connected on one side---(3)
  - Connected on both sides--(5)



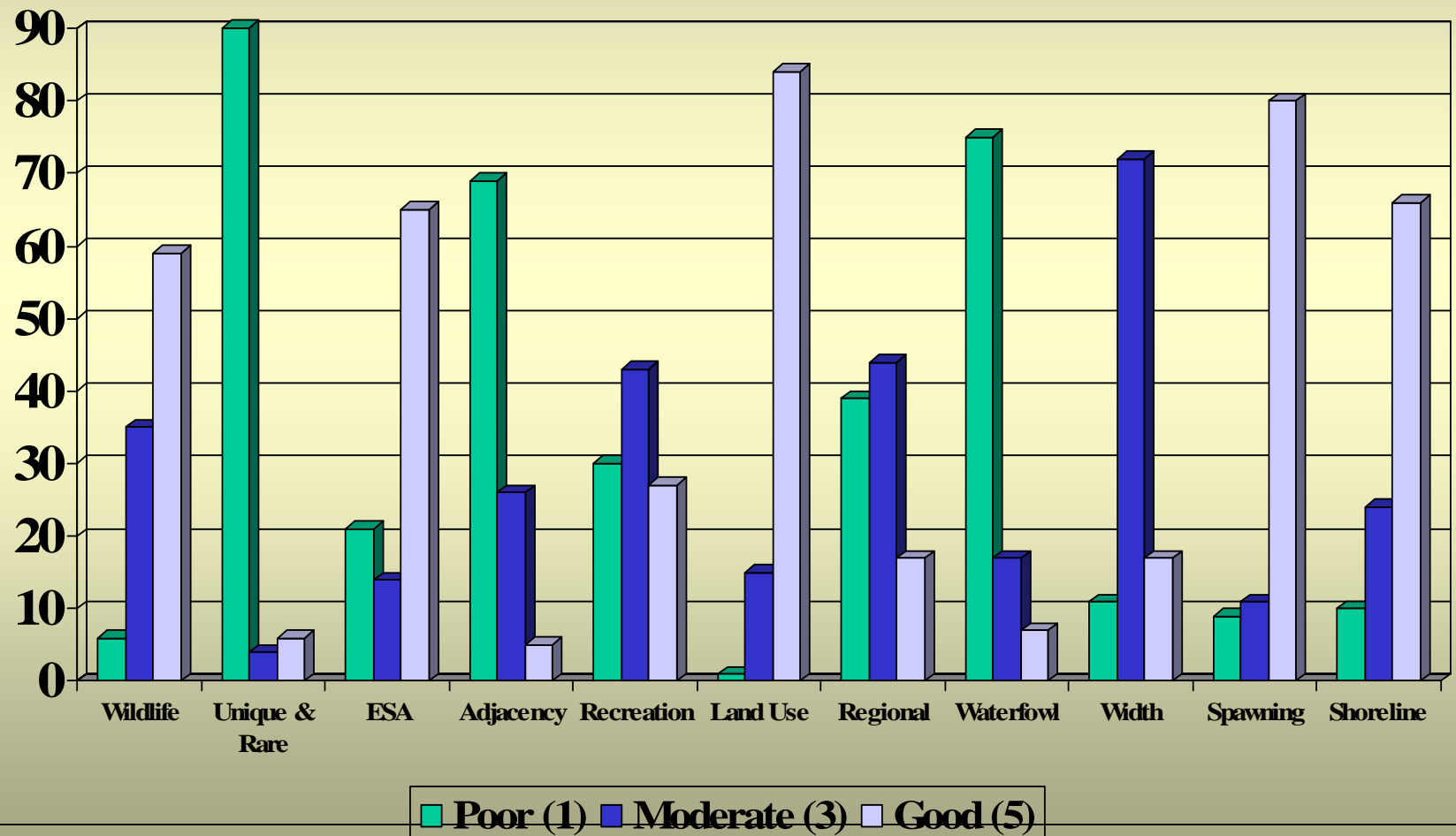
# Scoring Criteria

- **Environmentally sensitive areas including conservation areas**
  - < 10% ----- poor (1)
  - 10% to 30% -----good (3)
  - > 30% -----best (5)
- **Unique habitats and Threatened and Endangered Species**
  - Poor habitat W/ No records -----poor (1)
  - < 5% unique -----moderate (1)
  - Suitable habitat w/ no records----good (3)
  - 5% to 20% unique -----good (3)
  - Suitable habitat w/ known occurrences -- best (5)
  - > 20% unique -----best (5)
- **Terrestrial Wildlife**
  - < 1 acre – mod (1)
  - 1-5 acres – good (3)
  - >5 acres - best (5)

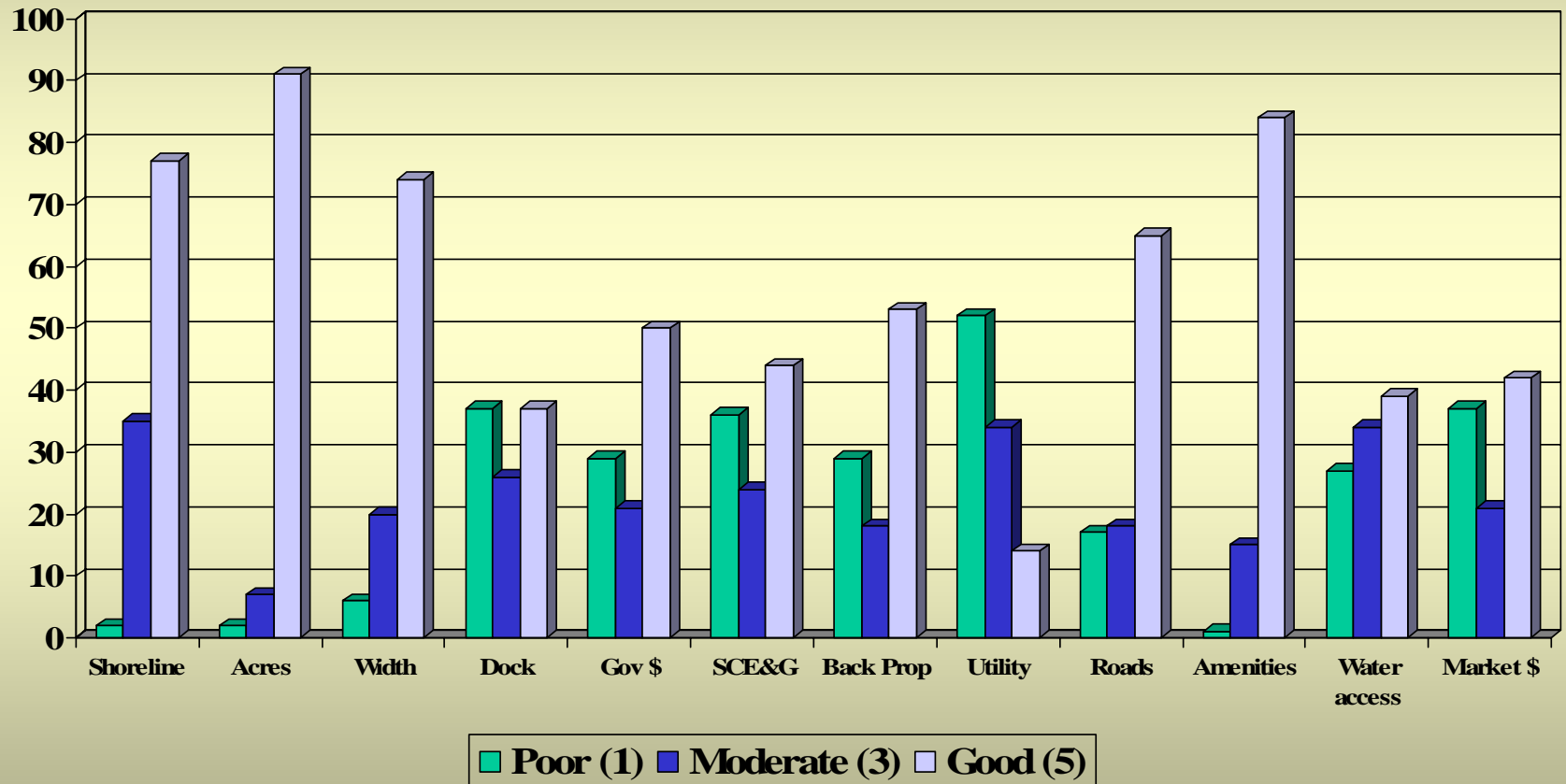
# Ranking

- Ranking is based on scores stratified into three groups with the high ranking scores in the top third, good ranking scores in the middle third, and moderate ranking scores in the bottom third. Equal distribution was not possible due to the large number of tracks that scored 39. These were placed in the good category.
- Scores ranged from a low of 17 to a high of 53.
- High ranking scores were  $>39$
- Good ranking scores were from 31-39
- Moderate ranking scores were  $<31$

# Comparison of Resource Value

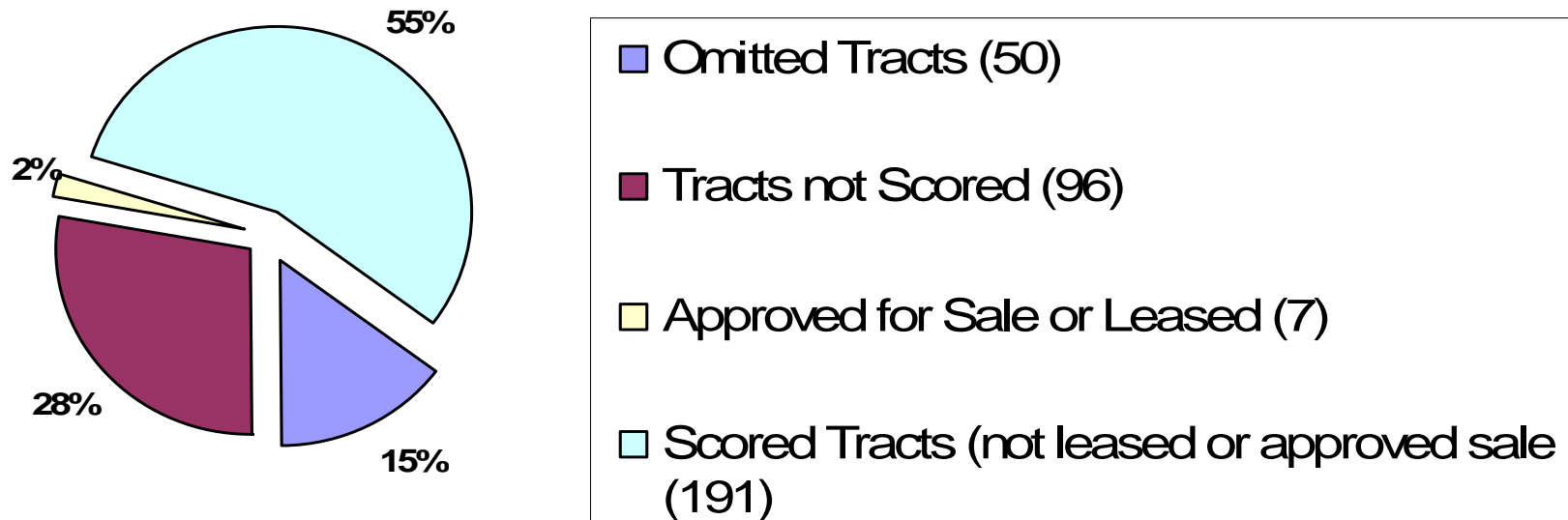


# Comparison of Economic Value



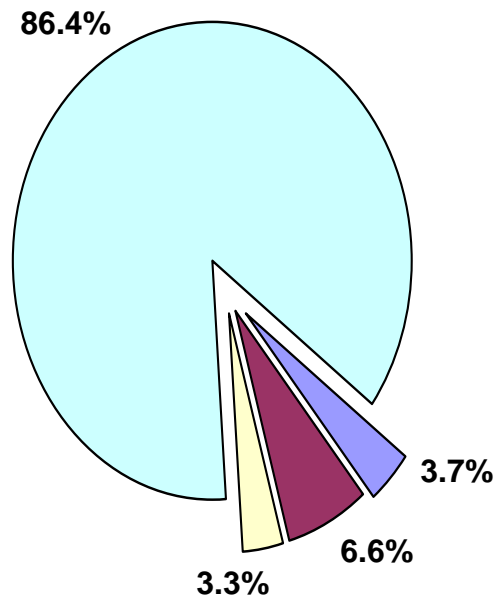
# Future Development Tracts

## Number of Individual Tracts



Adjusted Total Number of Tracts = 294 after removal of omitted tracks.

# Future Development Tracts Acreage



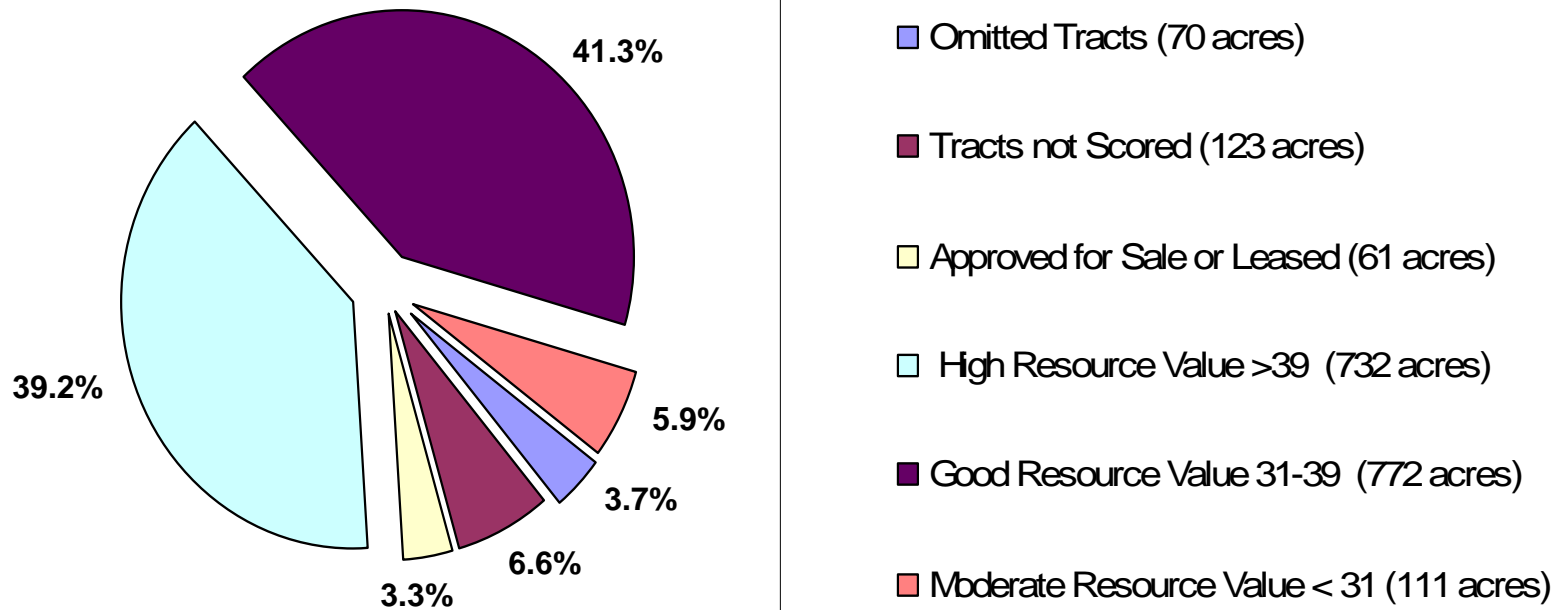
- Omitted Tracts (70 acres)
- Tracts not Scored (123 acres)
- Approved for Sale or Leased (61 acres)
- Scored Tracts (not leased or approved sale (1615 acres)

Total Acreage = 1869 acres



# Future Development Tracts

## Natural Resource Value Acreage

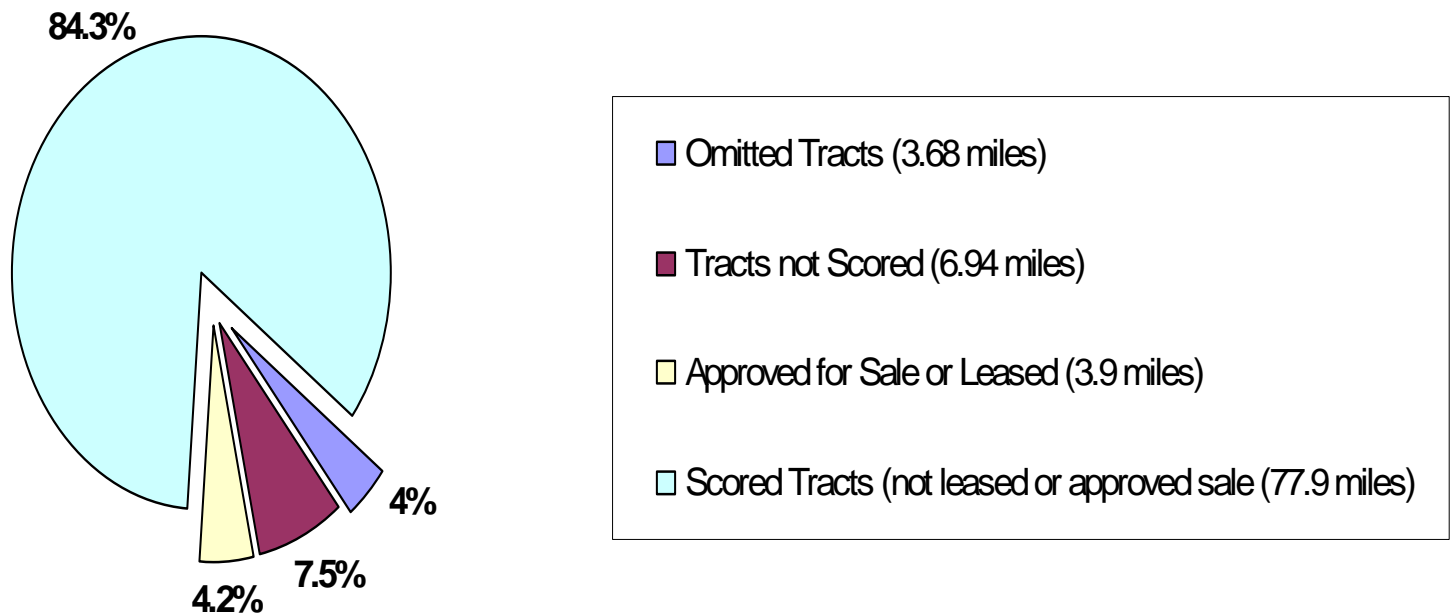


Total Acreage = 1869 acres

(Good – High) Resource Acreage = 1504 acres

# Future Development Tracts

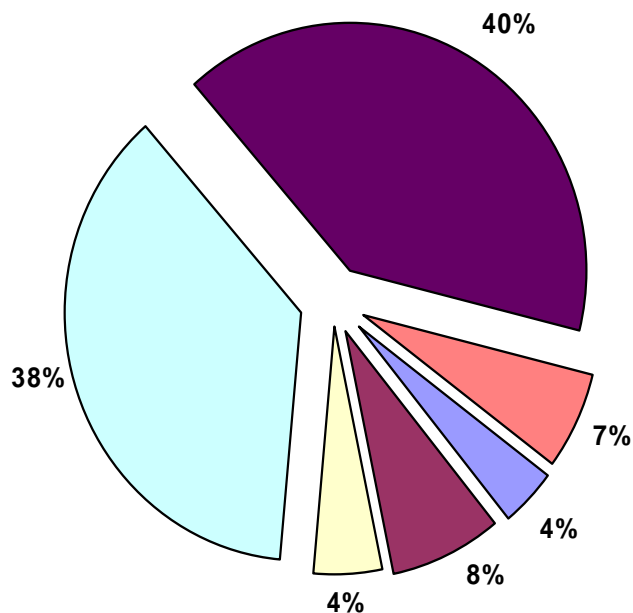
## Miles of Shoreline



Total Shoreline Miles = 92.4 miles

# Future Development Tracts

## Ranked Miles of Shoreline



- Omitted Tracts (3.68 miles)
- Tracts not Scored (6.94 miles)
- Approved for Sale or Leased (4.2 miles)
- High Resource Value >39 (34.66 miles)
- Good Resource Value 31-39 (37.27 miles)
- Moderate Resource Value < 31 (5.98 miles)

Total Shoreline Miles = 92.4 miles

(Good – High) Natural Resource Shoreline Miles = 71.93 miles

# Summary

- Currently, only 15% of Lake Murray fringelands is in a classification (Forest and Game Management) that will not allow any form of development. A small amount of additional lands with no development will be provided by conservation areas.
- 294 future development tracks were evaluated, 198 were scored
- Of the 198 scored, 7 have been sold or leased, 79 were combined into 29 groups, 141 scores were made.
- Most tracks had abundant ESA, were naturally forested, and were of sufficient size to provide habitat. Also noted was the limited amounts of waterfowl areas and unique habitats.
- Conclusion: Rebalancing land use to protect natural resources is well justified.

# Recommendations



- A portion of the tracts with high natural resource value should be declared ESA and left undisturbed for the life of the license.
- All remaining tracts that were scored for natural resources will remain natural and in the project with the possible exception of public recreation and very limited private lake access.
- All tracts that were not scored will remain in the future development classification.

The End





# Framework for A 21<sup>st</sup> Century Lake Murray Shoreline Management Plan

By John Frick - stakeholder

# What is the most essential element for Shoreline preservation?

- Acceptance and Support by all Stakeholders



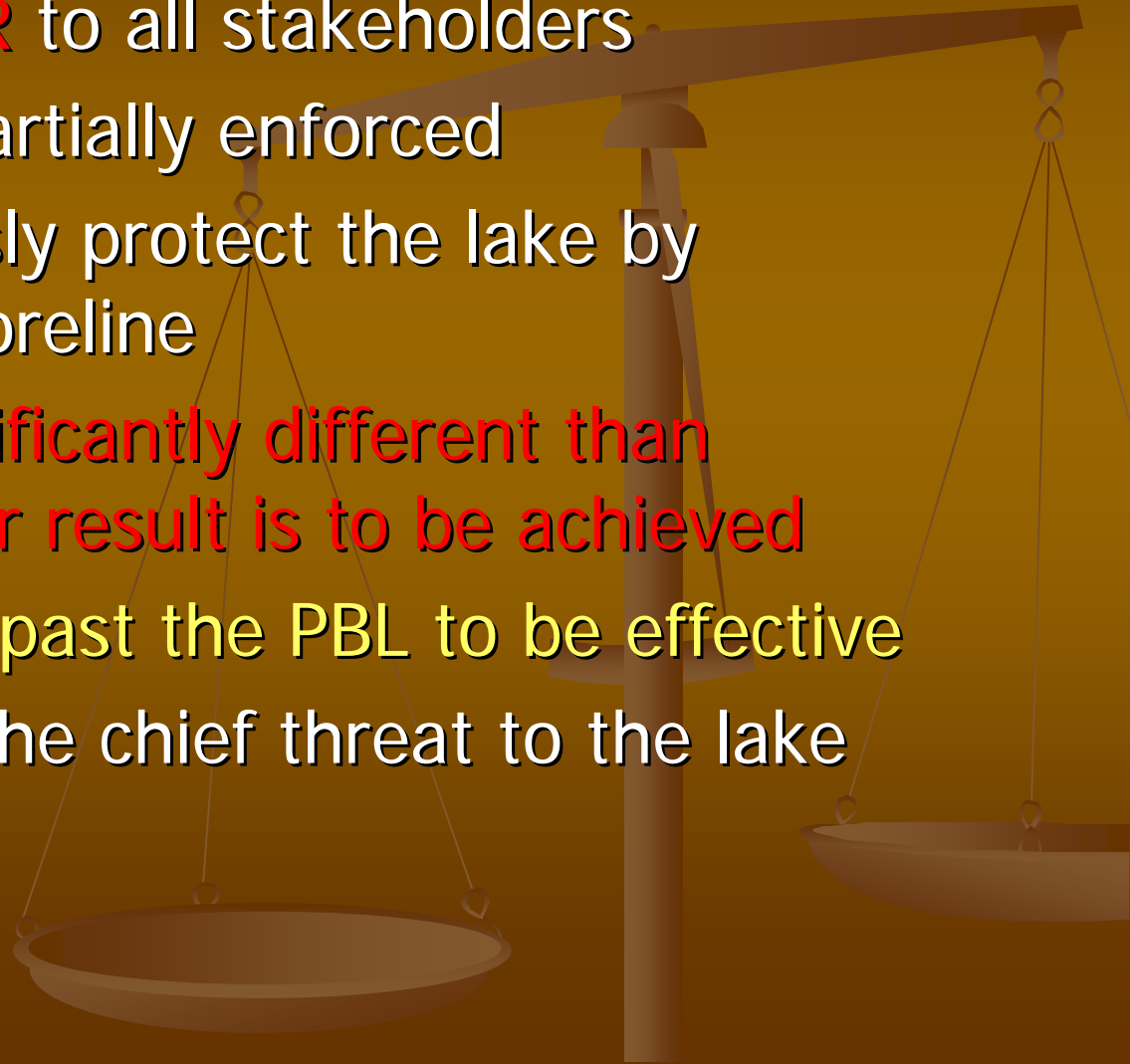
# Who comprises this Group?

- General Populace
- SCANA
- Back Property Owners
- Local Governments
- State Government
- Federal Government



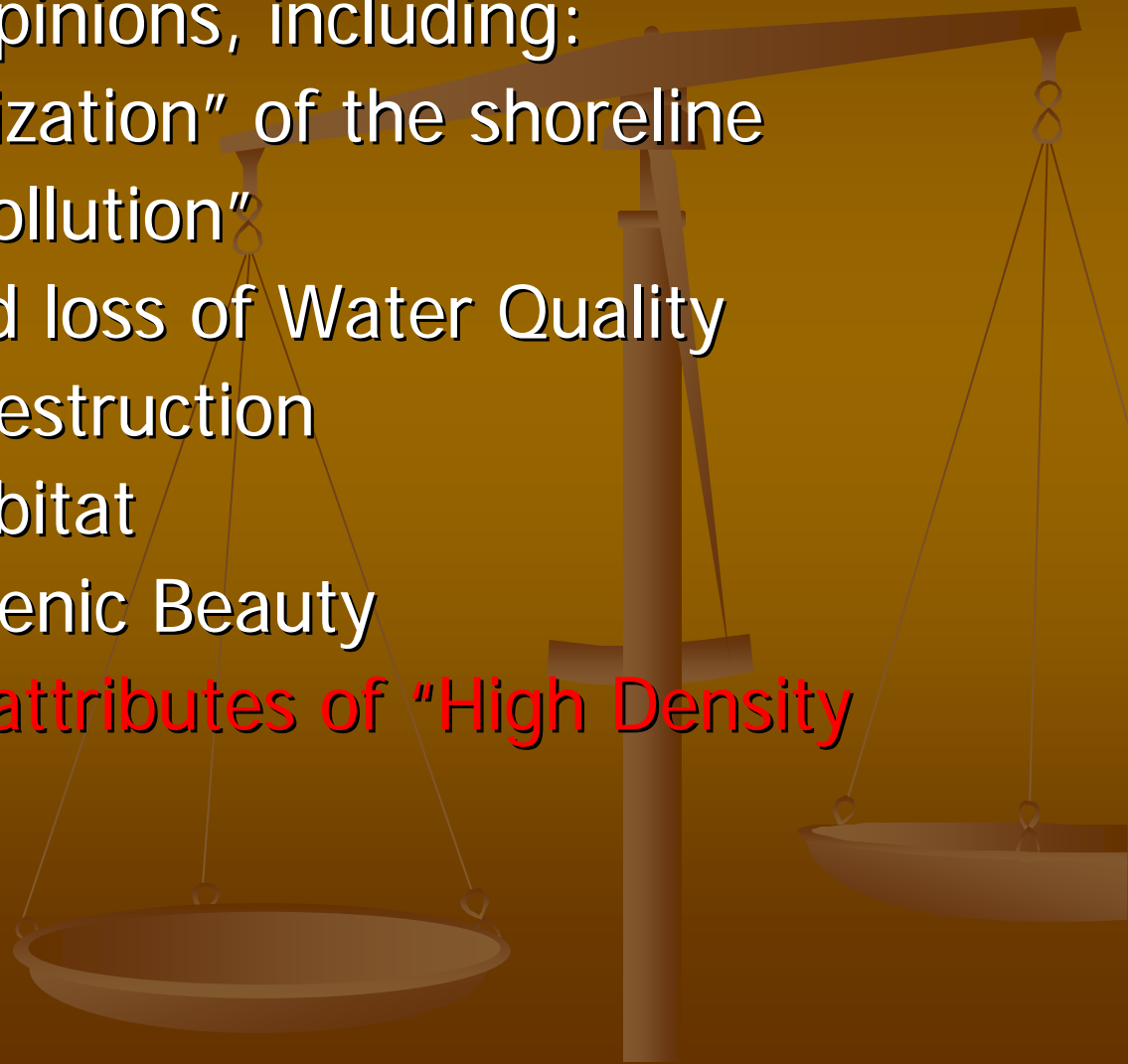
# What Plan Attributes are required to achieve acceptance?

- Plan must be **FAIR** to all stakeholders
- Plan must be impartially enforced
- Plan must obviously protect the lake by preserving the shoreline
- **Plan must be significantly different than existing.....if better result is to be achieved**
- **Plan must extend past the PBL to be effective**
- Plan must nullify the chief threat to the lake



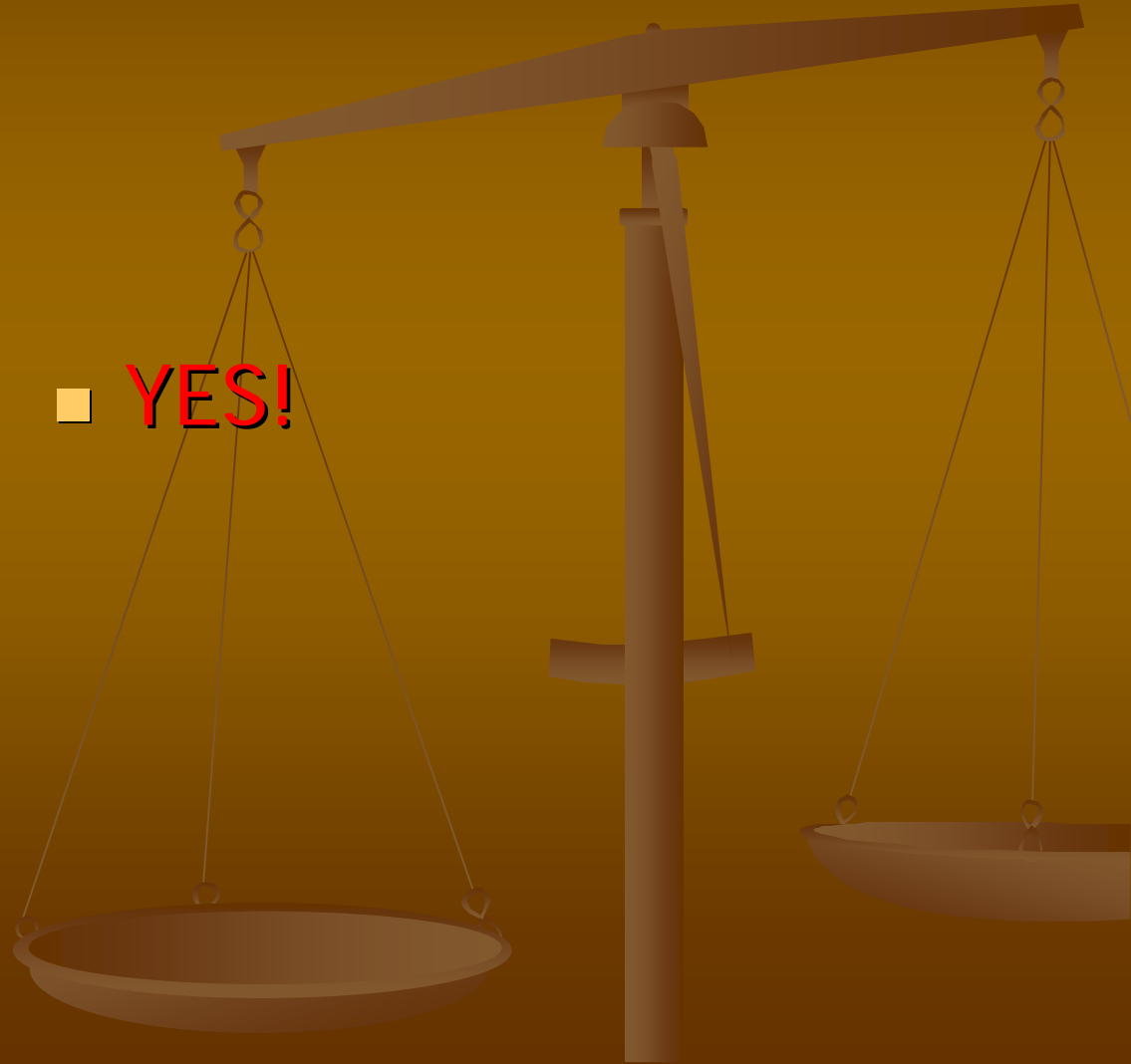
# What are the biggest threats to the Lake?

- There are many opinions, including:
- Continued "Urbanization" of the shoreline
- "Urban Sourced Pollution"
- Sedimentation and loss of Water Quality
- Shoreline buffer destruction
- Loss of wildlife habitat
- Loss of Natural Scenic Beauty
- All the above are attributes of "High Density Development"



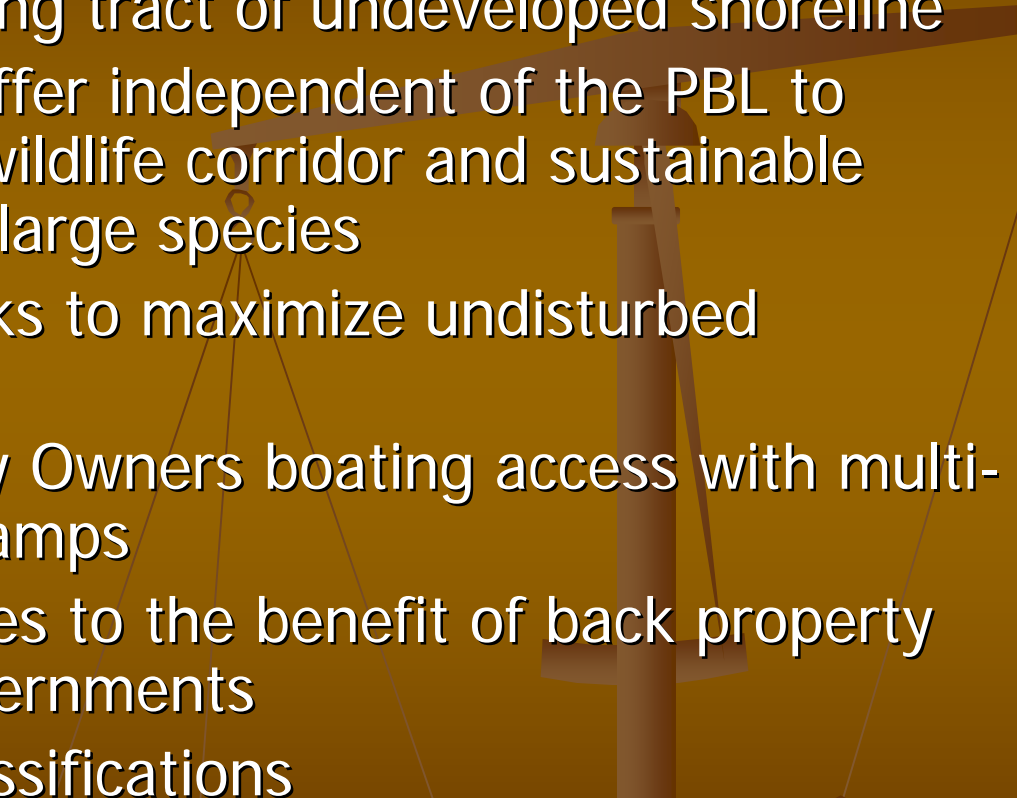
# Is there a Plan that will meet all Stakeholders needs and Protect the Lake?

- YES!

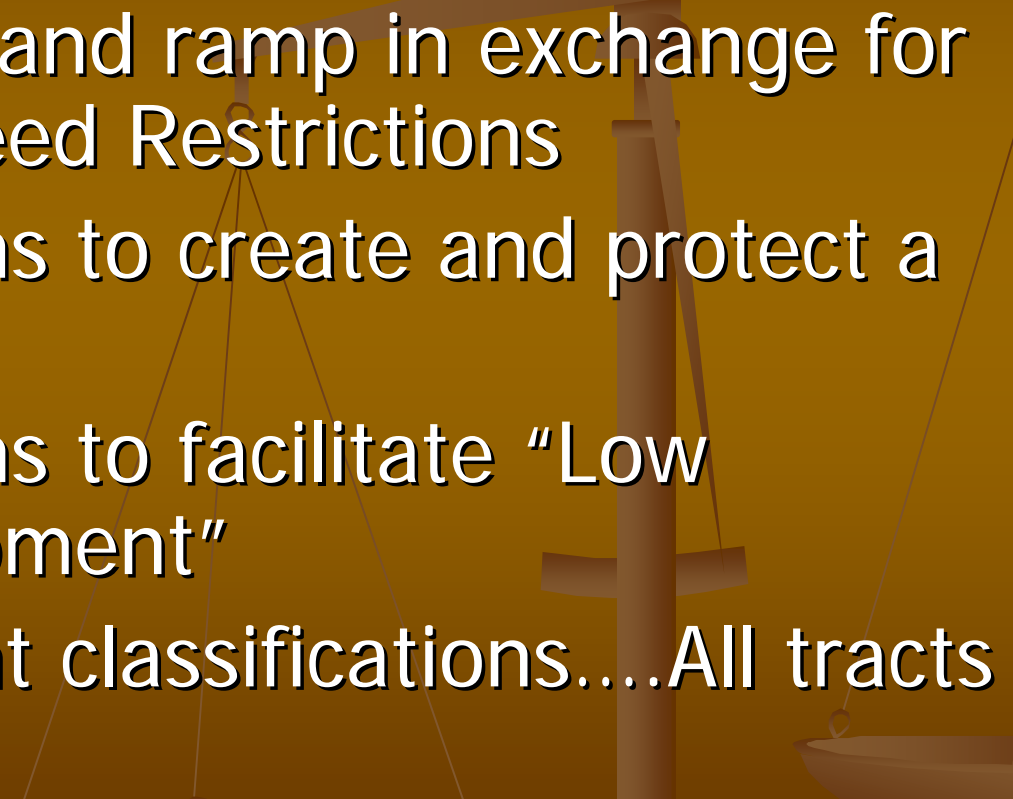




# Framework for an Acceptable Plan

- Protect every remaining tract of undeveloped shoreline
  - Require a uniform buffer independent of the PBL to provide an effective wildlife corridor and sustainable habitat for small and large species
  - Eliminate private docks to maximize undisturbed shoreline
  - Give all Back Property Owners boating access with multi-slip docks and boat ramps
  - Protect property values to the benefit of back property owners and local governments
  - Eliminate Current Classifications
- 

# How can this be Accomplished?

- Multi-slip docks and ramp in exchange for the following Deed Restrictions
  - Deed Restrictions to create and protect a uniform buffer
  - Deed Restrictions to facilitate “Low Density Development”
  - Eliminate current classifications....All tracts to be protected
- 

# Benefits of this Plan

- Large Net Gain in conserved acreage
- Conservation of Resources necessary for wildlife preservation
- Protection of water quality
- Enhancement of the aesthetic scenic beauty of the shoreline
- Protection of property values
- Protection of tax base for local governments
- Enhanced public compliance



# Welcome to Wingfield — by Dee

Dee Simmons





# Wingfield



...a new vision  
for Lake Murray living

*Why is Wingfield different?*





# Wingfield vs traditional lake developments

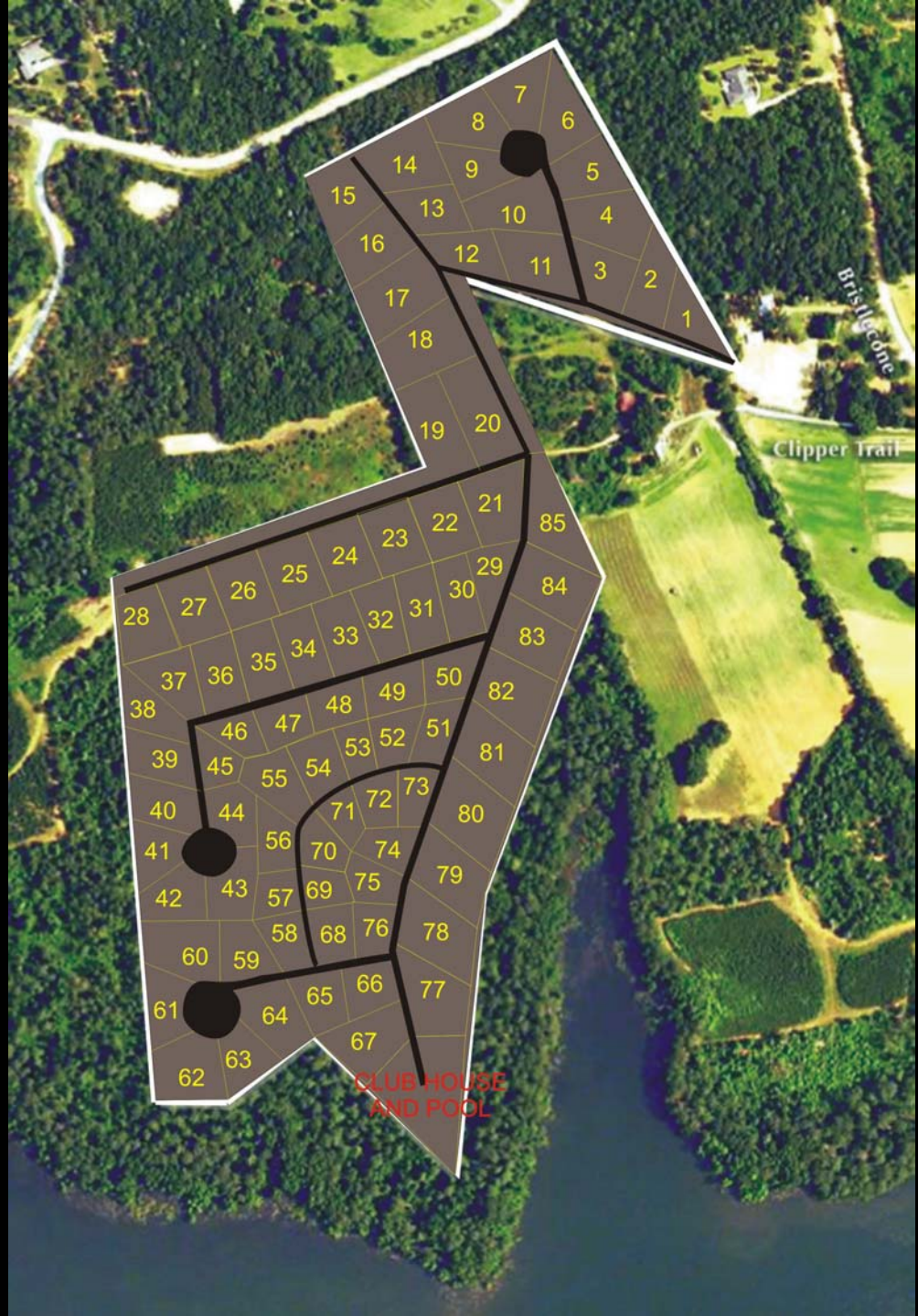
32 acres

2200 feet shoreline

High Density - 85 lots  
(not the maximum number of lots  
allowed in this area)

22 individual docks\*

*\*This does not take into consideration other  
restrictions imposed on the property such as ESA's.*



# Wingfield

## Low Density

(11 homes on 32 acres)

10 slip boat facility

Ramp

Dry Boat Storage  
located on property





## Wingfield vs traditional lake developments

### Wingfield

- Low Density
- 10 slip facility
- Ramp so boats can be removed
  - Dry storage on property
  - Natural Habitat Area (NHA) surrounding perimeter of every lot which can not be touched by homeowner\*
- Heavy restrictions on clearing of lot
  - Less than 2% of "fringe land" disturbed
  - Wildlife preserved
- Shoreline, lake, and ESA's protected

### Traditional Developments

- Highest Density Possible
- 22 docks (accommodating 44 boats)
- Boats not removed from lake unless necessary
  - Land is clear cut at the beginning of the construction with no regard to wildlife or resources lost
- No restriction on lot clearing
- Majority of "fringe land" cleared
  - ESA's destroyed
  - Lake polluted
- Shoreline vegetation and wildlife destroyed

*Wingfield is different from traditional developments on Lake Murray because it:*

- does not pollute the lake*
- conserves the shoreline / “fringe” land*
- protects the natural wildlife*
- preserves the way of life for Wingfield residents*



*Wingfield...*

*A place where  
people and nature  
can live in harmony.*



*Conservation is the cornerstone of this pristine community.*





Wingfield development plan preserves the fringe land by:

Low Density:

limiting the number of homes on the back property therefore decreasing the amount of pass through traffic over the fringe land as well as at the waters edge



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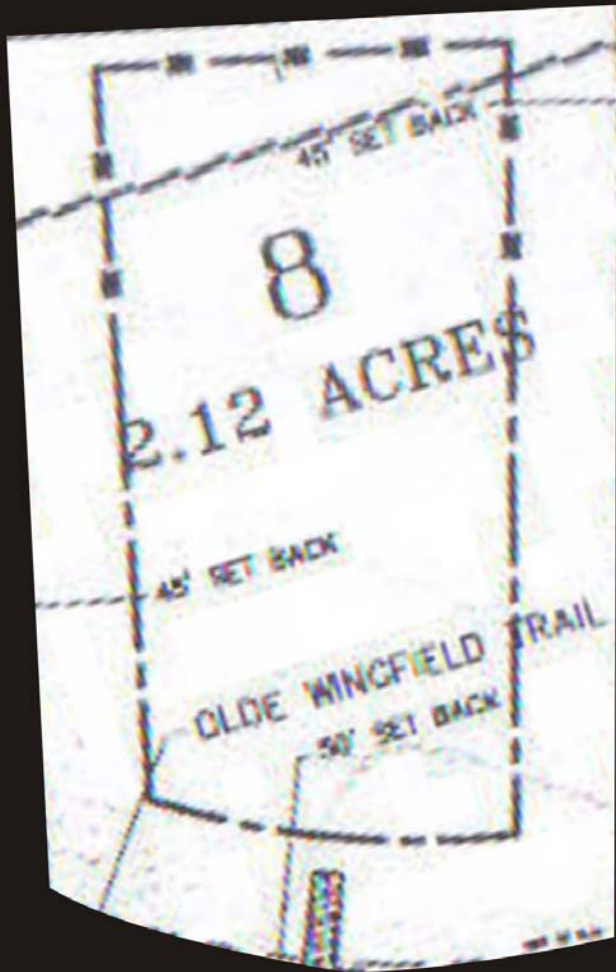
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Natural Habitat Area:

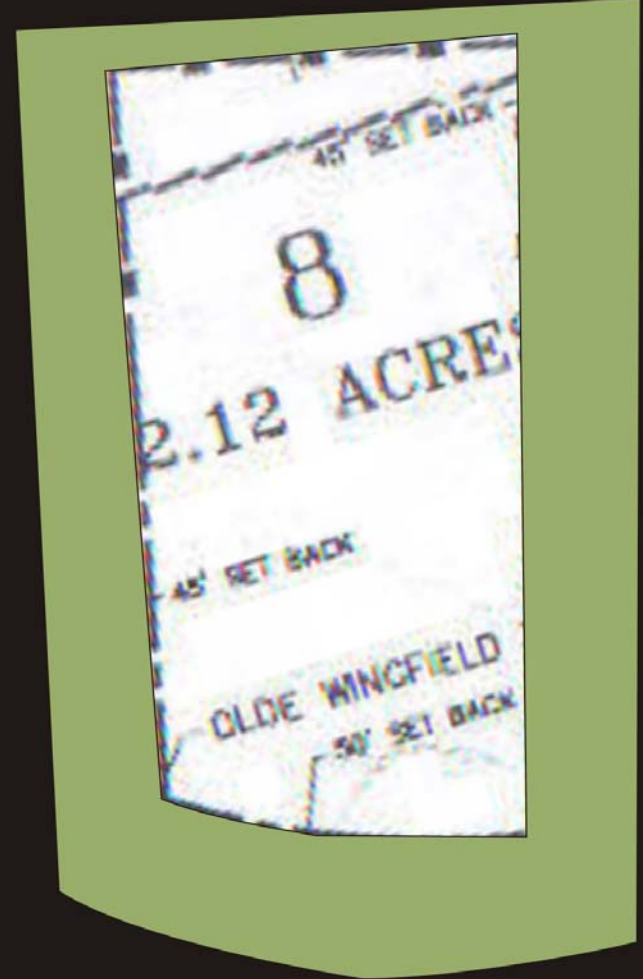
placing restrictions on the homeowners ability to clear land that touches the fringe land preventing people from crossing over onto SCE&G property with the clearing of their land. This will be enforced by the HOA and the Estate Keeper and there are penalties for not abiding.



Lot 8 property lines



Shaded area represents NHA



## Wingfield development plan preserves the fringe land by:

Low Density: limiting the number of homes on the back property therefore decreasing the amount of pass through traffic over the fringe land as well as at the waters edge

Natural Habitat Area: placing restrictions on the homeowners ability to clear land that touches the fringe land preventing people from crossing over onto SCE&G property with the clearing of their land. This will be enforced by the HOA and the Estate Keeper and there are penalties for not abiding.

### Restricted Clearing:

restricting the size of the trees that can be cleared from the property will keep the larger trees in place to preserve the natural inhabitants as well as keeping the shoreline more natural in appearance with just glimpses of homes. This will be enforced by the HOA and the Estate Keeper and there are penalties for not abiding.





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### NHA and Restricted Clearing:

These two will work together to keep the fringe land cleaner because the restrictions will prevent additional runoff containing soils, fertilizers, pesticides, herbicides, etc... by both decreasing the amount of land to be landscaped as well as creating a "buffer zone" which will allow water space to soak into the ground before exiting the home site.

# Wingfield development plan preserves the fringe land by:

Low Density: limiting the number of homes on the back property therefore decreasing the amount of pass through traffic over the fringe land as well as at the waters edge

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One 10 slip facility vs 22 individual docks:

Allowing one access area with 10 slips will prevent additional traffic through the rest of the property keeping the fringe land cleaner and less disturbed than if there were one dock every 100 feet. There is over 2200 feet on the water so the theoretical potential would be 22 docks\* which would mean at least 22 paths through the fringe land.

*\*This does not take into consideration other restrictions imposed on the property such as ESA's.*



Wingfield development plan protects the lake and shoreline by:

Low density development limits the number of homes on the back property which in turn decreases the number of “residential” boats and boat traffic in that specific area which will pull up to the shore and beach indefinitely with high density developments.



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Low Density Traffic: limiting the number of residence will decrease the number of people at the waters edge who could potentially destroy the existing ESA's providing habitats for various animals. Having a large housing development will bring lots of families (Chapin schools...) with lots of kids who are going to explore unsupervised, build forts, cut trees, make fires, etc..., while adults will clear land for larger yards, pet enclosures, a great swimming area, and the ESA's will eventually be destroyed. No one will be able to enforce the SCE&G rules and the developer will not care.



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10 slip facility: Allowing one access area with 10 slips will keep the shoreline cleaner and less disturbed than if there were one dock every 100 feet. There are over 2200 feet on the water so theoretical potential would be 22 docks\* with at least one boat and possibly two at every dock for a potential of 44 boats.

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\*This does not take into consideration other restrictions imposed on the property such as ESA's.

Ramp/Storage Area: Having a storage area on the property and a ramp will enable homeowners to remove boats from the water and place them in dry storage when not in use or when they need servicing. This will prevent possible oil/gas leaks (from various reasons) into the lake that can occur when boats sit in the water for extended periods of time with or without use. The convenience of the ramp makes this possible and will help to keep the shoreline aesthetically appealing by have a practical way of removing boats when not in use.

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NHA and Restricted Clearing: These two will work together to keep the lake cleaner because the restrictions will prevent additional runoff containing fertilizers, pesticides, herbicides, etc... by both decreasing the amount of land to be landscaped as well as creating a "buffer zone" which will allow water space to soak into the ground before exiting the home site.

# Wingfield development plan protects the lake and shoreline by:

Low density development limits the number of homes on the back property which in turn decreases the number of "residential" boats and boat traffic in that specific area which will pull up to the shore and beach indefinitely with high density developments.

Low Density Traffic: limiting the number of residence will decrease the number of people at the waters edge who could potentially destroy the existing ESA's providing habitats for various animals. Having a large housing development will bring lots of families and the ESA's will eventually be destroyed. No one will be able to enforce the SCE&G rules and the developer will not care.

10 slip facility: Allowing one access area with 10 slips will keep the shoreline cleaner and less disturbed than if there were one dock every 100 feet. There are over 2200 feet on the water so theoretical potential would be 22 docks\* with at least one boat and possibly two at every dock for a potential of 44 boats.

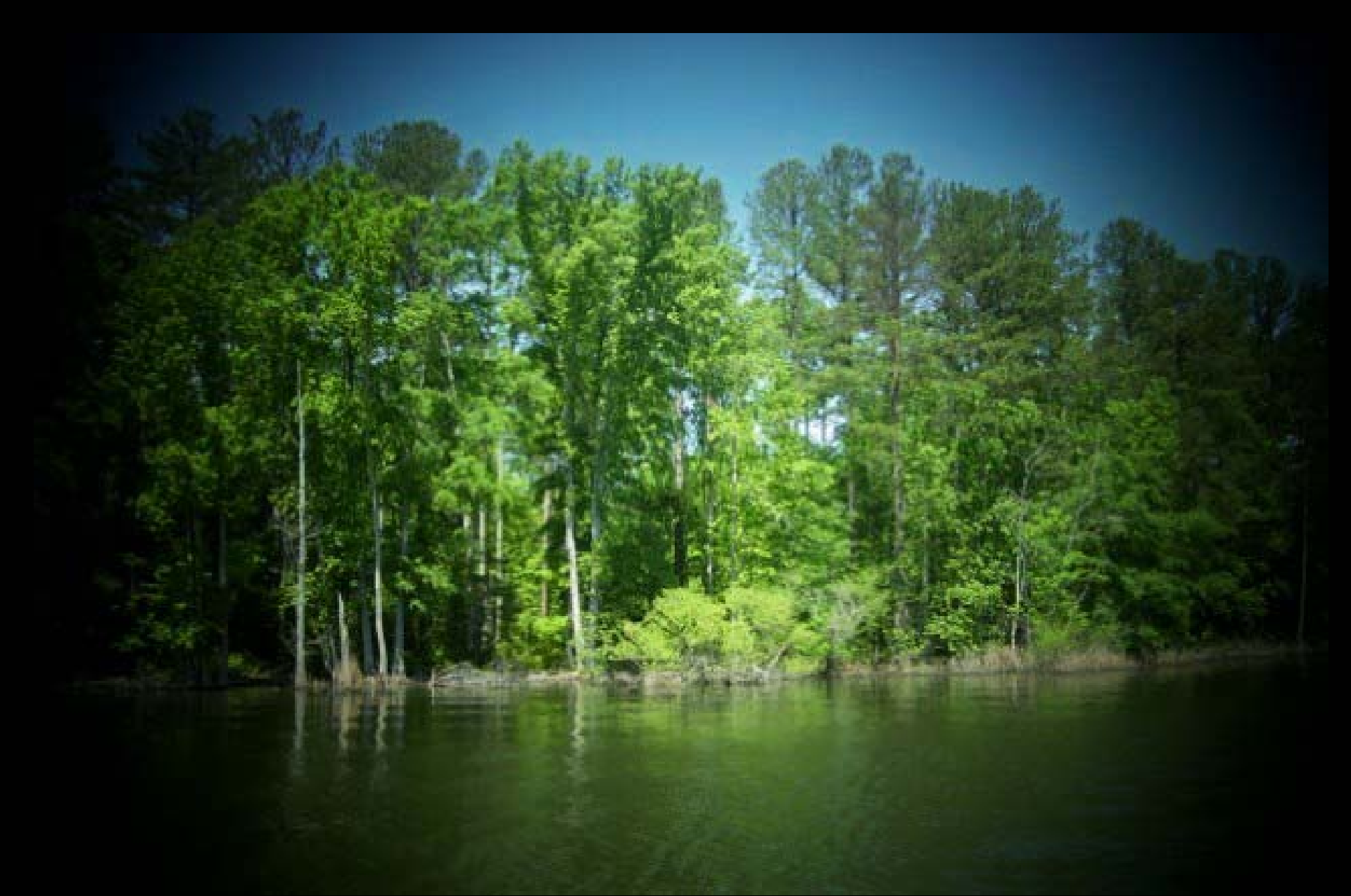
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Storm water run-off controlled on property through EPSC requirements preventing erosion.





“The shoreline will remain naturally pristine as it serves as a sanctuary to the wildlife calling it home. ”



The new Wingfield...

Over 40 acres and 3500+ feet of shoreline.

This nearly doubles the shoreline conservation efforts on this property or it can have the reverse effect and be twice the destruction and lost of wildlife.

The entire cove could be destroyed or enhanced.

# SUPPORT OR OBJECTIONS







**Wingfield is not simply a place to reside...  
it is a place to experience.**

# Commerce Association of Lake Murray

**Commerce Association of Lake Murray**

***Southshore Marina***

***Jakes Landing***

***Lighthouse Marina***

***Lake Murray Marina & Yacht Club***

***Lake Murray Boat Club***

***Sea Ray***

***Sea Tow Lake Murray***

***HydroTech Marine***

***Siesta Cove***

***Big Birds Landing***

***Quality Marine***

***Holland's Marina***

***Putnam's Landing***

***Acapulco USA***



# Interested Businesses

Dockside Resturant  
Palmetto Graphix  
Marine Surveys Inc.  
Benchmark Marine Services  
Advanced Docks  
Jacks Docks N Decks  
Ray Clepper Inc.  
Nationwide Insurance  
Spinners Marina  
Breakwater Docks  
Carolina Boatworks  
Mid Carolina Marine  
Outdoor RV & Marine  
Lake Tours/ / Southern Patriot

Brown Marine&LM Boat Rentals  
Dexndox, Inc.  
Captain's Choice Marine  
Mobile Trailer Service  
Turner's Point  
Carolina Inboard  
Southlake Marine  
Columbia Powersports  
Carolina Honda  
Cyclone Motorsports  
Palmetto EZ Dock  
Lanier Sailing Academy @ Lake  
Murray

# Mission Statement

The Commerce Association of Lake Murray provides a voice for the business community serving Lake Murray and, in doing so, we shall seek to promote and protect natural resources, promote education for safe and responsible boating, maintain and expand the economic viability of facilities and services, and act as a liaison between the boating public, and regulators and legislators, so Lake Murray may be enjoyed by all for generations to come.

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# Communications

One point contact to and from the  
business community

SCE&G

DNR

Governmental Agency's  
Cap. City/ Lake Murray Country

News Media

Residents and Visitors

Homeowner's Associations

Other Associations/Clubs

Local Schools

# Involvement in Issues that Impact the Lake Murray area

**Re-License  
Lake Access**

**Economic Impact of Regulations  
Supporting existing Marinas and Landings  
Favorable business environment  
Avoid unintended consequences  
Offer Help and expertise**

# Long Term Goals

Expand season

More activities

Promote Clean/Safe Boating

Destinations

Points of Interest

Grow Boating

# Short term Goals

Clean Marina Certification

Expand group

Get the word out

Formalize organization

Align with other groups

- a. Home owners groups
- b. SC Marine Associations
- c. **Business** Associations
- d. Capital City / Lake Murray

Country

- e. National Grow Boating Initiative



# Commerce Association of Lake Murray

The Commerce Association of Lake Murray is committed to providing a voice for the business community serving Lake Murray and in doing so, we shall seek to, promote and protect; natural resources education for safe and responsible boating, **maintain and expand economic viability of facilities and services**, and act as a liaison between public regulators and legislators, so Lake Murray may be enjoyed by all for generations to come.

Marinas improve our economy.

Meeting the needs of  
the community:

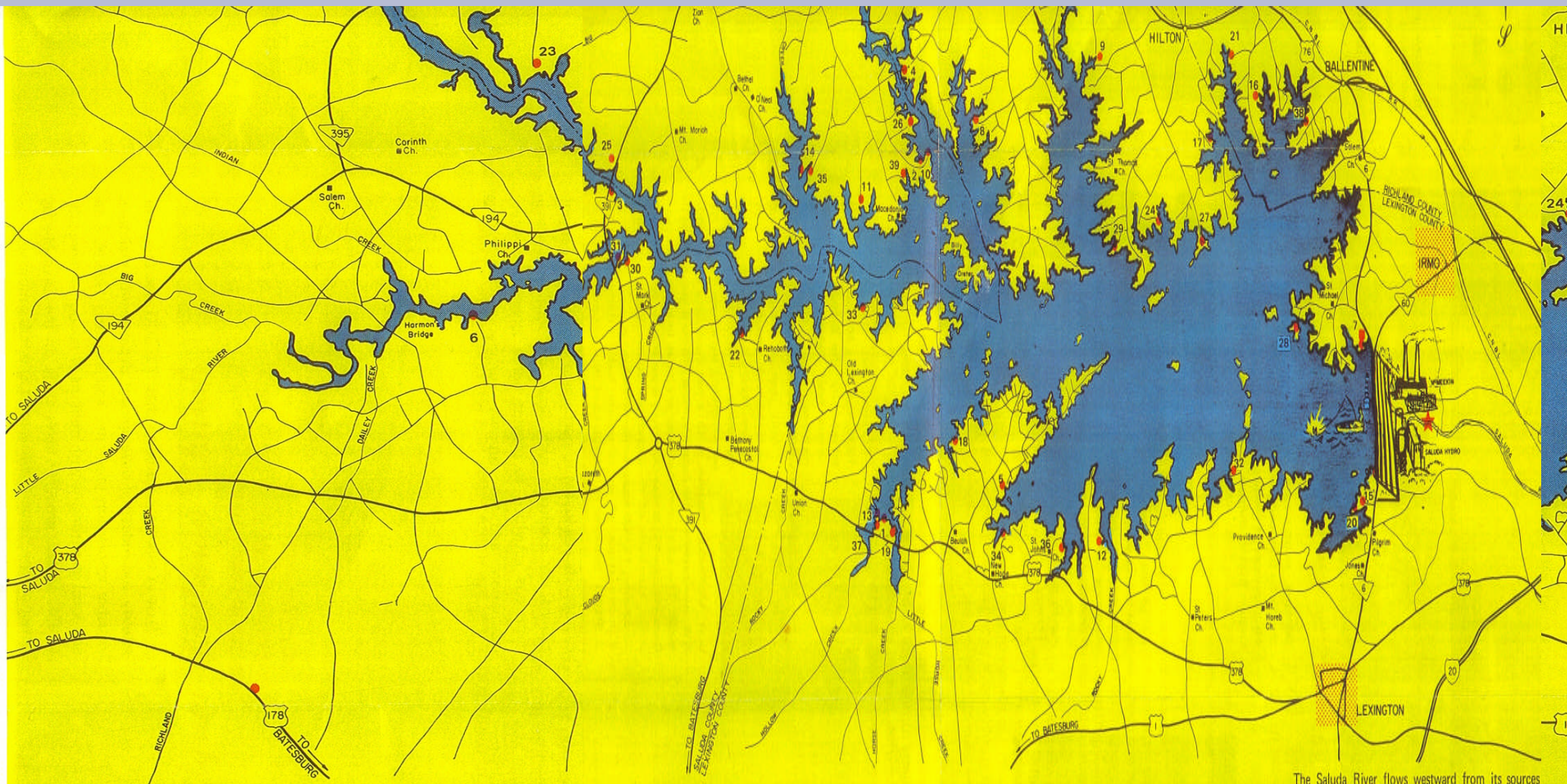
Commerce Association of Lake Murray  
is formally requesting that SCE&G  
make an amendment to the  
moratorium on multi slip dock permits  
to allow permit applications at existing  
commercial marinas.



A photograph of a sunset over a body of water. The sky is a mix of orange, pink, and blue. The water reflects the colors of the sky. In the foreground, there are silhouettes of trees and branches. In the middle ground, there are several boats docked along the shore. The overall mood is peaceful and contemplative.

Questions?





KEY TO LANDINGS AND CLUBS					
1. ADAMS' LANDING	F-5	16. JOHNSON'S MARINA	I-3	31. SHEALY'S LANDING	D-4
2. AMICK'S LANDING	F-3	17. LAKE MURRAY B.T. & SPTS. CLUB *	I-3	32. SNELGROVE'S LANDING	I-5
3. BLACK'S BRIDGE MARINA	D-3	18. LAKE MURRAY F.M. CAMPGRD.	G-5	33. SWYGERT'S LANDING	F-4
4. BUCK'S MARINA	F-3	19. LAKESIDE MARIN	F-5	34. TAYLOR'S LANDING	G-5
5. CIRCLES CLUB *	G-5	20. LEXINGTON BOAT CLUB *	J-5	35. TOM'S LANDING	E-3
6. COLLUM'S LANDING	C-4	21. LOCKHART'S LANING	I-3	36. TURNER'S LANDING	G-5
7. COLUMBIA SAILING CLUB *	J-4	22. MARTIN'S LANDIN	E-4	37. WEED'S LANDING	F-5
8. CRYSTAL LAKE FAM. CAMPGRD.	G-3	23. MAYER'S LANDIN	C-3	38. WELL'S MARINA	J-3
9. EPTING'S CAMP	H-3	24. MILLS' LANDING	H-3	39. WILSON'S LANDING	F-3
10. FRIENDLY BOATING CLUB *	F-3	25. MORRIS' LANDIN	D-3	40. RAY'S MOTEL	F-7
11. HAMM'S LANDING	F-3	26. NEWBERRY LION CLUB *	F-3	41. NEWBERRY EXCHANGE CLUB *	F-3
12. HENDRIX'S LANDING	H-5	27. PALMETTO LANDIN	I-4	42. CRAYNE'S LANDING	F-3
13. HOLIDAY SHORES LANDING	F-5	28. PINE ISLAND CLU *	I-4	43. SNUG HARBOR	F-3
14. HOLLAND'S LANDING	E-3	29. PUTMAN LANDIN	H-4		
15. JAKE'S LANDING	J-5	30. RIKARD'S LANDIN	D-4		
				PRIVATE CLUB *	

LANDINGS AND CAMP SITES SHOWN ARE FOR GENERAL INFORMATION ONLY AND ARE IN APPROXIMATE LOCATION.

## MAP OF LAKE MURRAY AND VICINITY

SOUTH CAROLINA ELECTRIC AND GAS CO.  
CORRECTED TO JUNE 1, 1968

GRAPHIC SCALE IN MILES  
0 1 2 3 4  
COMPILED FROM AERIAL PHOTOGRAPHS & S.C. HIGHWAY DEPT. COUNTY MAPS  
LAKE OUTLINE INDICATES 354 FOOT LAKE LEVEL

REVISED MAY 1, 1969

The Saluda River flows westward from its sources the Blue Ridge Mountain chain, turns south, enters Lake Murray, spins the turbines of Saluda Hydro, and winds its way to confluence with the Broad River Columbia.

## Map Legend

Indicates S. C. E. & G. Co. ■  
Public Parks  
McMeekin Steam and Saluda  
Hydro Generating Complex ★

R

D G

3  
DEPT.  
E. LEV

9





# Adaptive Management in the Context of FERC Licenses

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Recreation RCG  
February 7, 2007





# What is Adaptive Management?

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A type of natural resource management in which decisions are made as part of an ongoing science-based process.

Source: Unified Federal Policy for a Watershed Approach to Federal Land and Resource Management



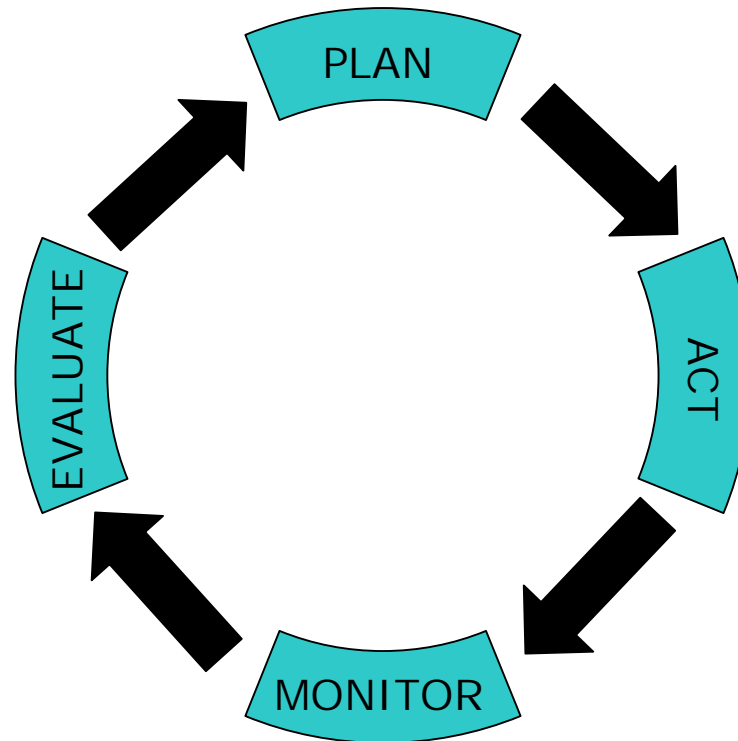
# Adaptive Management Basic Steps

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- 1. Determine the goals for the resource.
- 2. Method to test or evaluate if goals are met.
- 3. Ability to change based on evaluation.

# The Cycle of Adaptive Management

---



Adapted from Pajak, 2000



# Plan

---

- Clarify goals
- Assess status and trends of related indicators
- Develop and compare management alternatives
- Seek consent and plan actions



# Act

---

- Implement planned actions
- Reward integrity and results



# Monitor

---

- Monitor all indicators
- Communicate results





# Evaluate

---

- Compare actual vs. planned results
- Analyze indicator relationships
- Adapt and repeat cycle



# What does FERC think?

---

- “Adjustments to measures required during the license term will be based on information gleaned from ongoing monitoring or other post-license studies”

Source: Policy Statement on Hydropower Licensing Settlements



# FERC License Examples

---

- Sinclair Project (FERC No. 1951)
- Clark Fork Project (FERC No. 2058)
- Mokelumne River Project (FERC No. 137)
- Carpenter-Remmel Project (FERC No. 271)
- Baker River Project (FERC No. 2150)



# FERC Concerns

---

FERC may modify adaptive management measures to:

- (i) ensure limitations on changes
- (ii) provide for FERC review and approval of decisions.



# Where are we?

---

- Still in planning stage
- Establishing baseline of management indicators
- Planning actions

# Rebalancing Shoreline Uses on Lake Murray: The DNR Perspective

South Carolina Department of  
Natural Resources





# Lake Issues Related to Shoreline Classification

- Wildlife and Fisheries
- Habitat Protection
- Water Quality
- Recreation
- Aesthetics



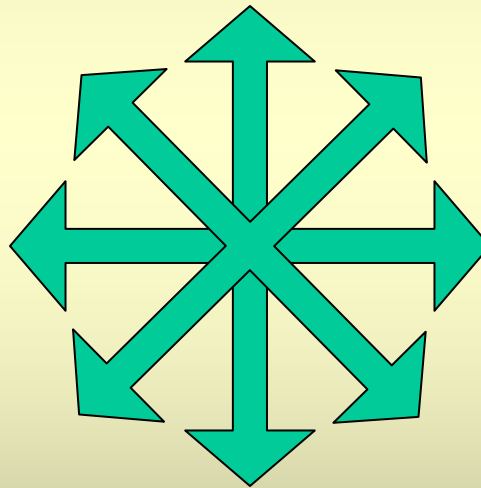
# What constitutes a “good” lake shore?

## Ecology

- Diverse flora and fauna
- Good breeding, foraging and nursery habitat
  - Refuge for wildlife
- Rare, T & E species (sometimes)

## Values

- Hunting and fishing
- Aesthetics



## Functions

- Filtration
- Flood attenuation

## Water Quality

- Pollution free
- Appropriate temperature
- Adequate DO levels
- No pesticides, herbicides, oil, etc...

## Morphology

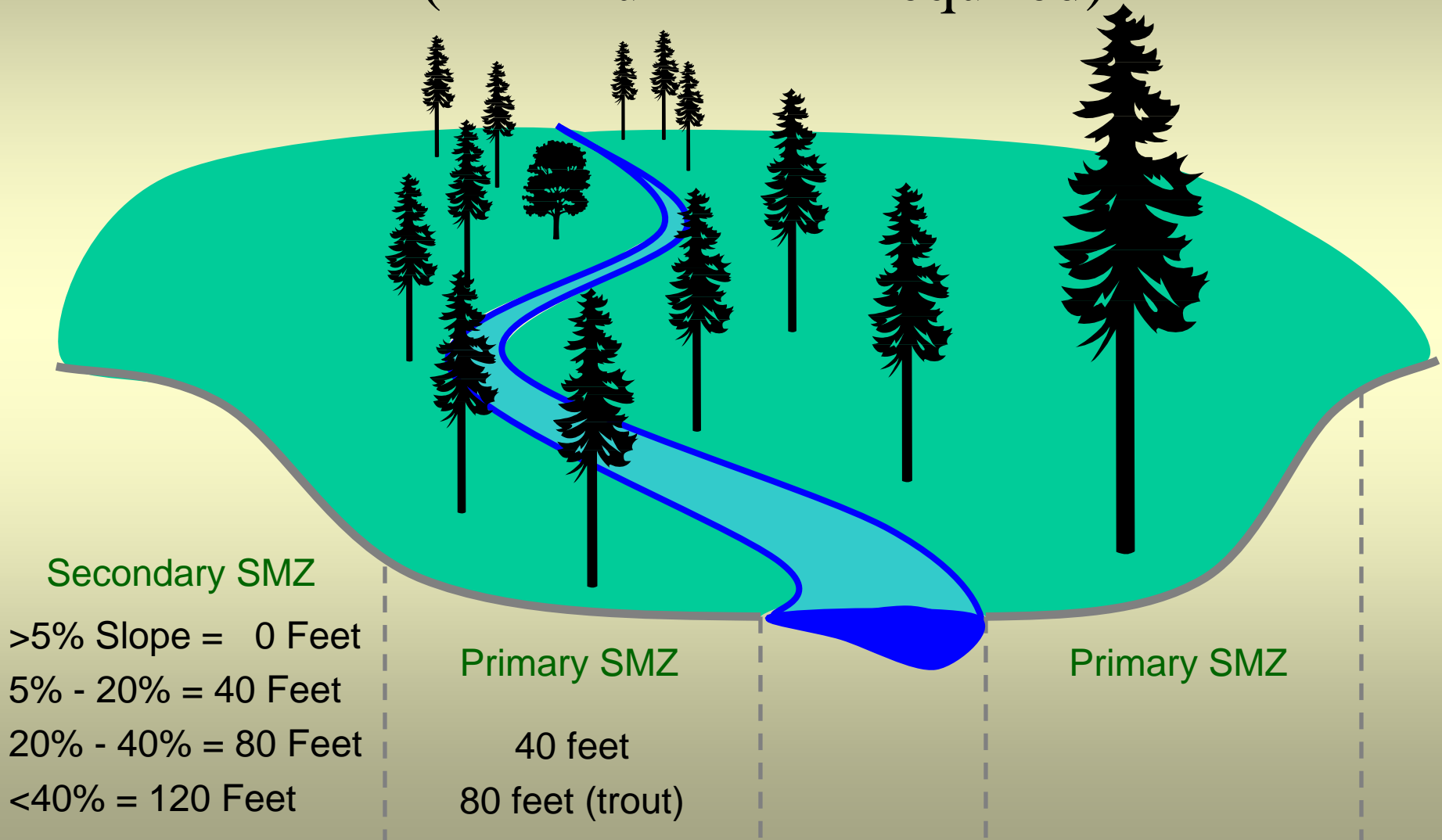
- Stable shoreline
- Diverse near-shore habitat

# **Benefits Of Riparian Setbacks**

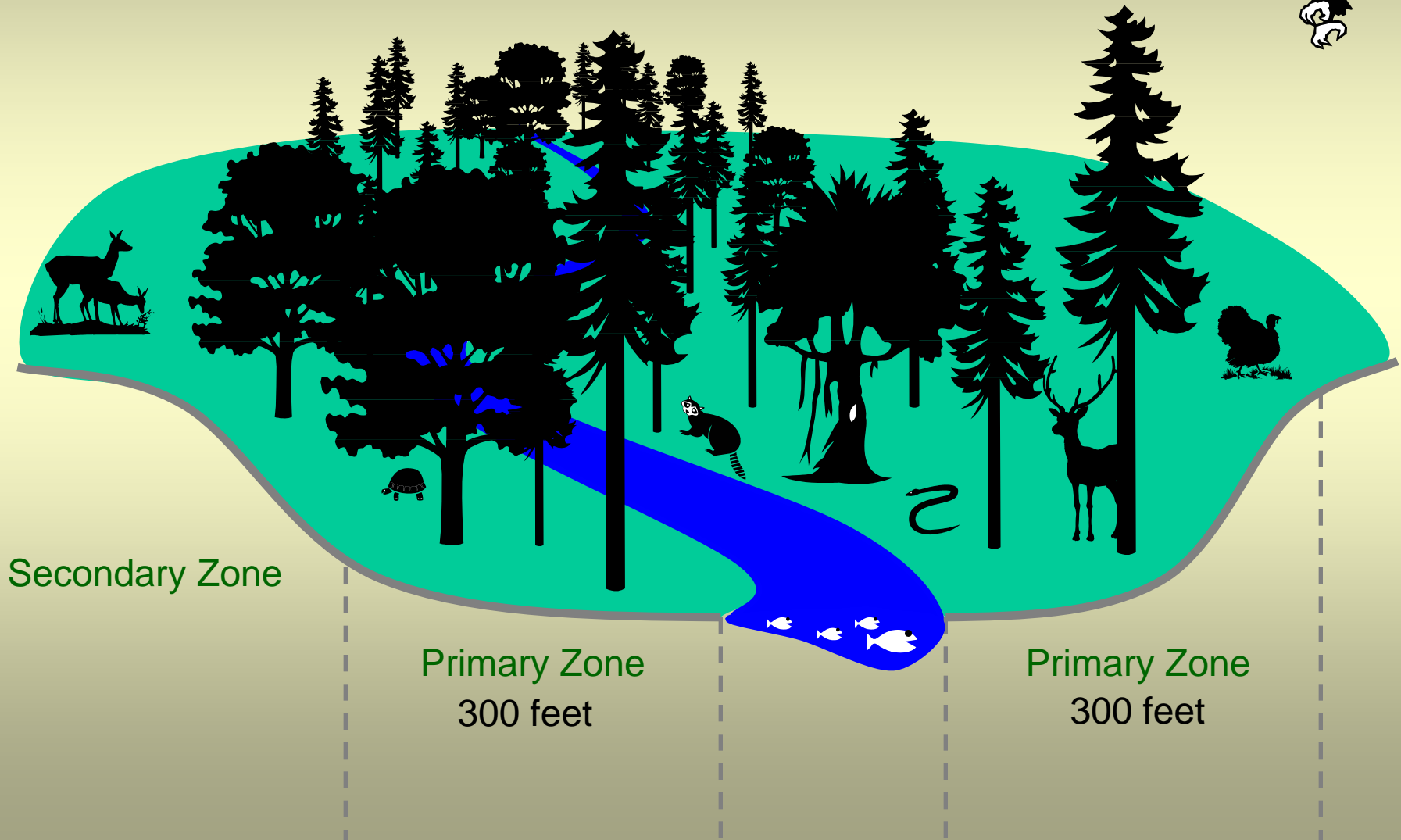
- Erosion control and sediment retention by slowing runoff.
- Surface and ground water quality protection through nutrient cycling through nitrogen fixation and the storage of sediment bound phosphorus.
- Ecosystem protection by providing habitats for resident and transient plant and animal populations.
- Recreational services including hiking, picnicking, and the protection of resources for sport fishing.
- Cultural services by providing opportunities for noncommercial uses such as aesthetic, artistic, educational, or scientific uses.

# Streamside Management Zones

(Minimum BMP Required)



# Buffers Maximized for Wildlife



**Table 4: Recommended Buffer Width  
for Birds**

Article	Width Studies (feet)	Minimum Width Recommendation (feet)
Hodges and Krementez (1996)	118-6849	328
Keller et al (1993)	82-2624	328
Kilgo et al (1998)	82-1640	Both Narrow and Wide
Kinley and Newhouse (1997)	46-230	230
Smith and Schaefer (1992)	65-492	No Recommendation
Spackman and Hughes (1995)	82-656	492-574
Thurmond et al (1995)	49-164	49
Triquet et al (1990)	49-75	No Recommendation

(Wenger, 1999)



# Federal Power Act Considerations

Section 4(e) requires the Commission, before making a decision on land sales, to consider if the hydropower project has given "equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality."

Section 18 CFR § 2.7 (a) states that the licensee must "include within the project boundary enough land to ensure the optimum development of recreational resources afforded by the project including those for sport fishing and hunting".

# Current Shoreline Protection Measures

- Protection of emergent vegetation below the 360 elevation
- 75 foot setback
- Conservation areas
- Environmentally sensitive areas
- Shoreline erosion management
- Lake elevation



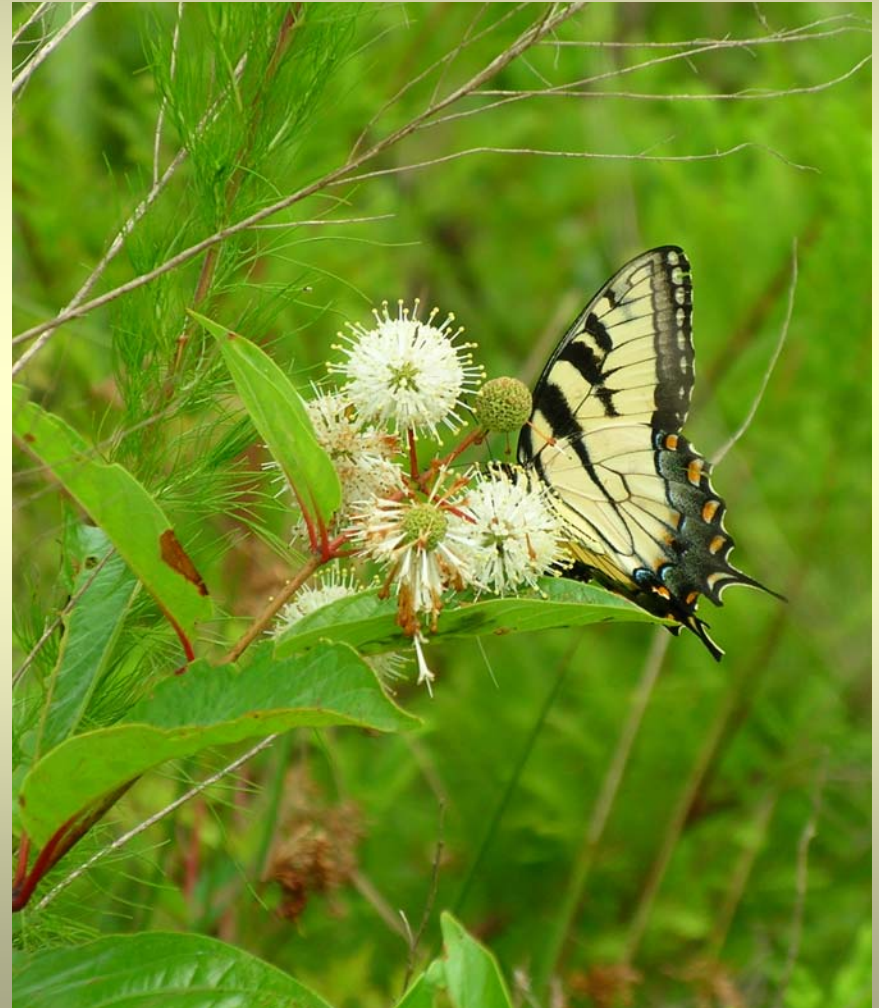
Setback after years of understory clearing and diseased and hazardous tree removal

# Can the 75 foot setback be improved?

- Widen to 100 feet
- Increase the “no clearing zone”
- Maintain a closed canopy by replacing diseased and hazardous trees.
- Increase penalties and fines
- Improve educational outreach
- Involve stakeholders in monitoring

# Environmentally Sensitive Areas

- Shallow Coves
- Bottomland Hardwood and Wet Flats
- Vegetated shoreline





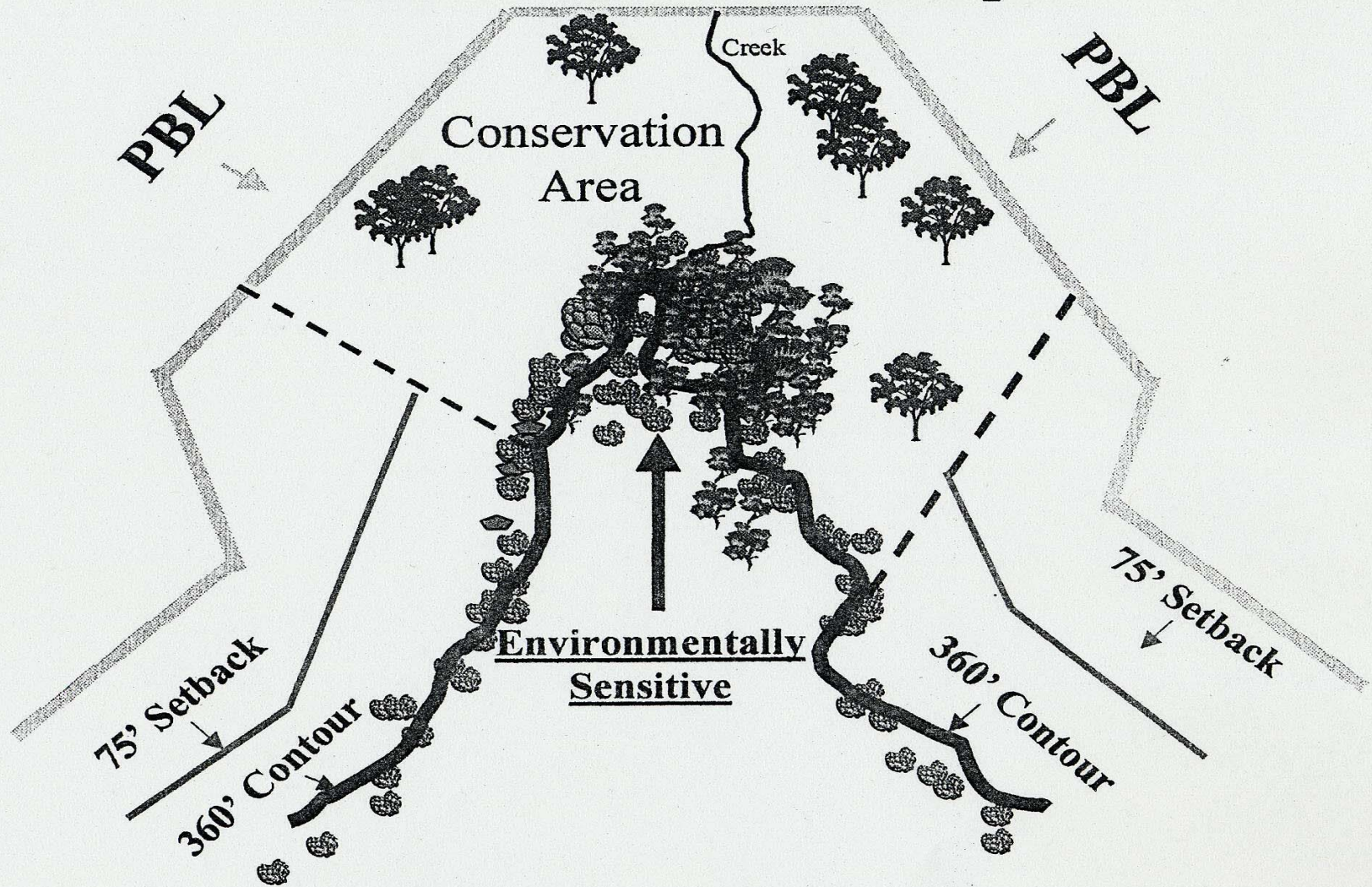


Can the Vegetation be  
protected?





# Conservation Area Example



Future Development Fringeland Classification  
Lake Murray (FERC Project 516)

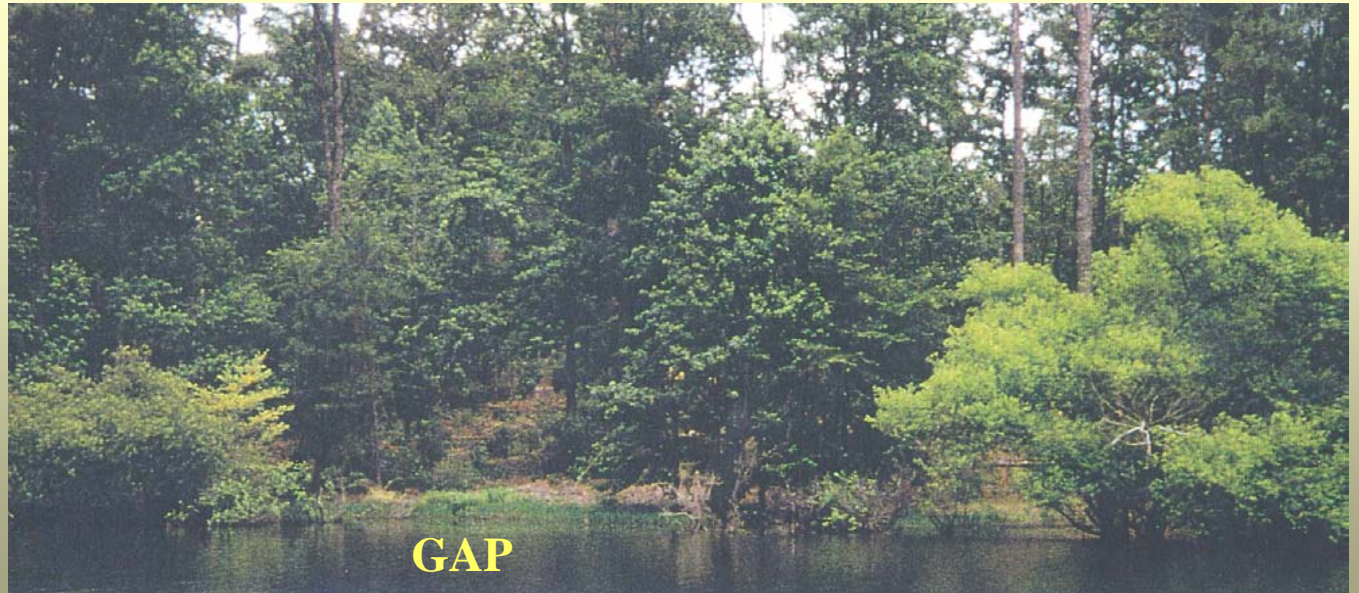


# Vegetated Shoreline

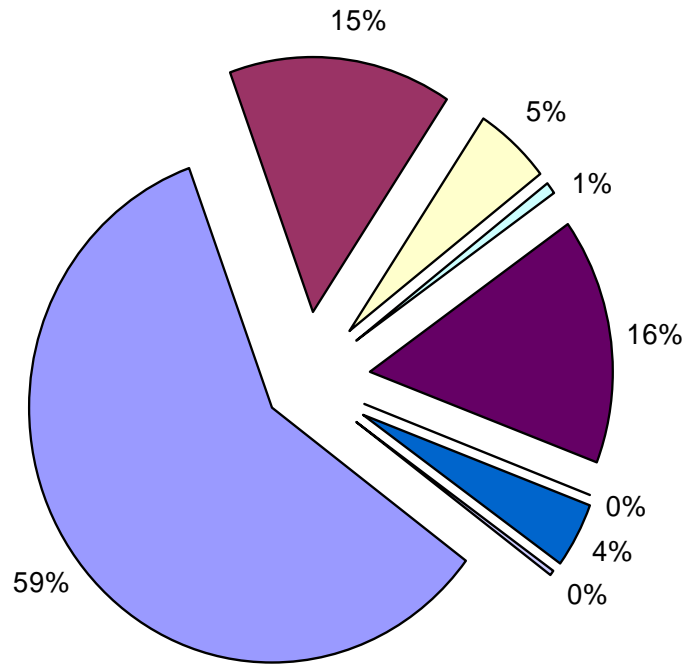


Continuous

Intermittent  
(Gap = 8' to 20')



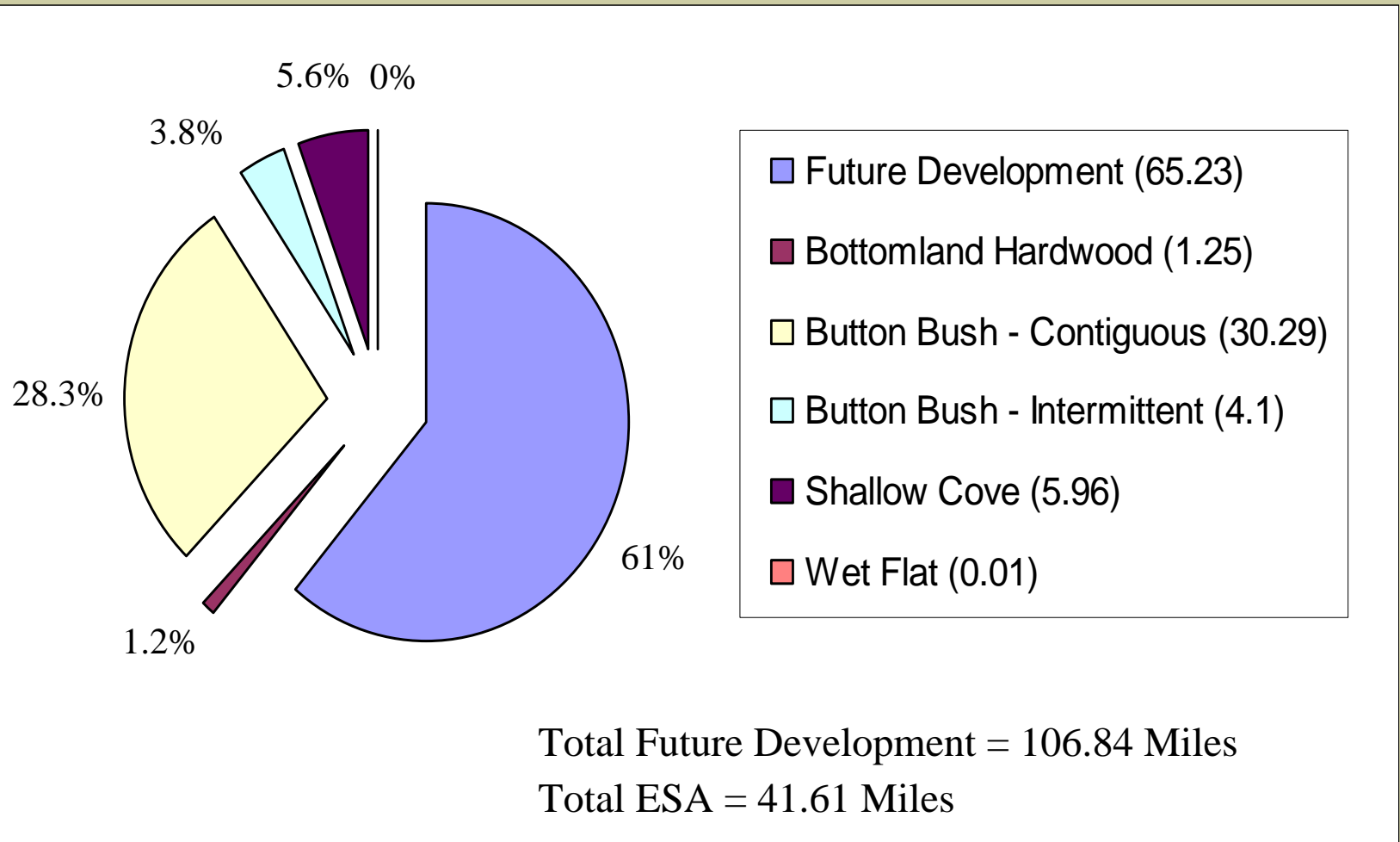
# Shoreline Classification



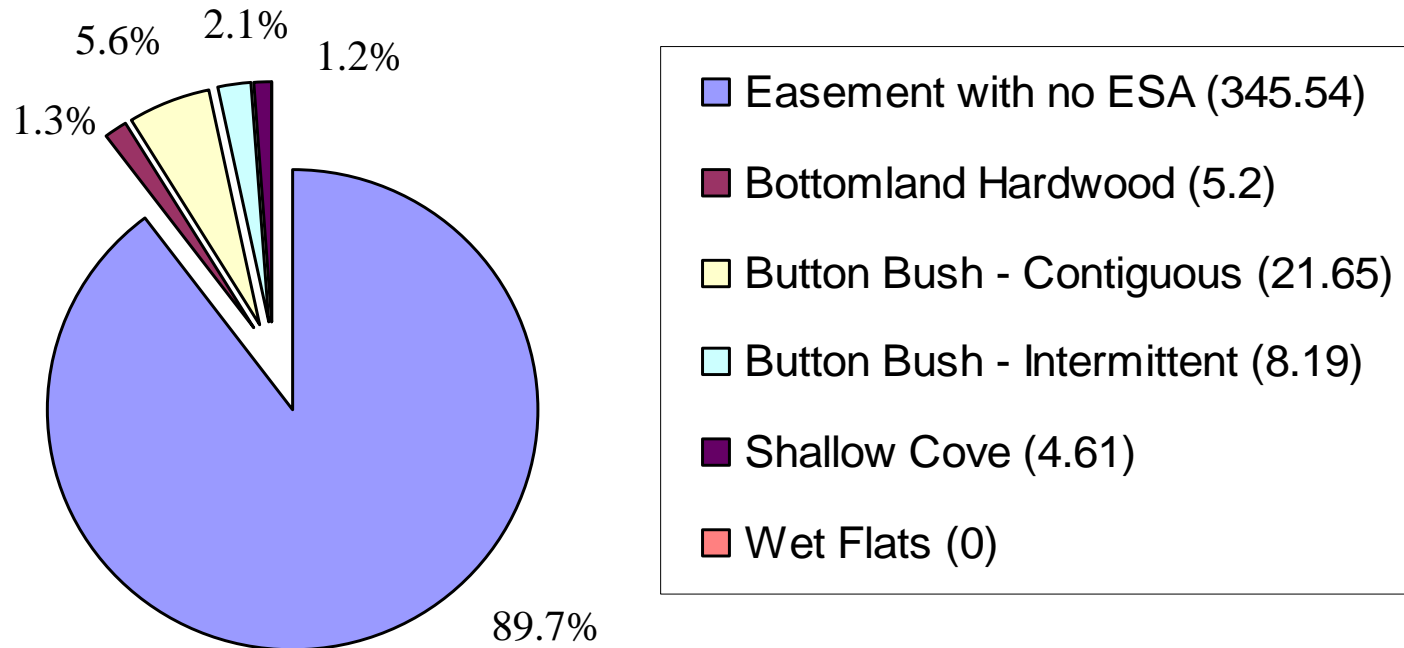
- Easement (385.19)
- Forest & Game Mngt (98.23)
- Public Recreation (32.14)
- Commercial Recreation (5.81)
- Future Development (101.33)
- Conservation Areas (0.71)
- 75-Foot Setback (27.3)
- Project Operations (1.63)

Total Shoreline = 652.34 miles

# Future Development Classification



# Easement ESA



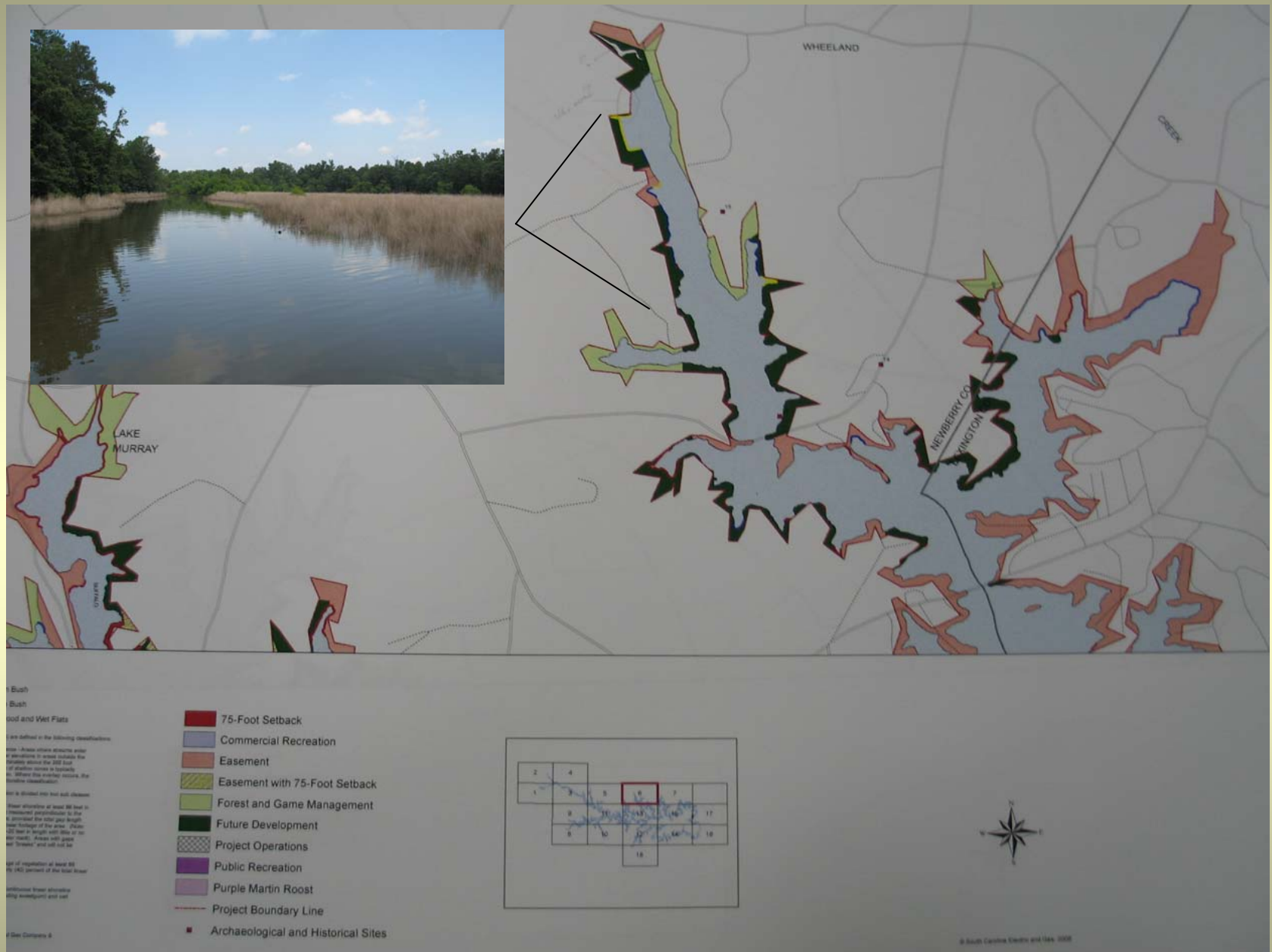
Total Easement Shoreline = 385.19 Miles  
Total ESA = 39.66 Miles

# SCDNR Land Protection Proposal

## Selection Criteria

- General habitat quality
- Fish spawning and nursery habitat
- Length and depth of undeveloped shoreline
- Waterfowl hunting opportunities
- Habitat in surrounding region
- Aesthetics
- Recreational values
- Adjacency

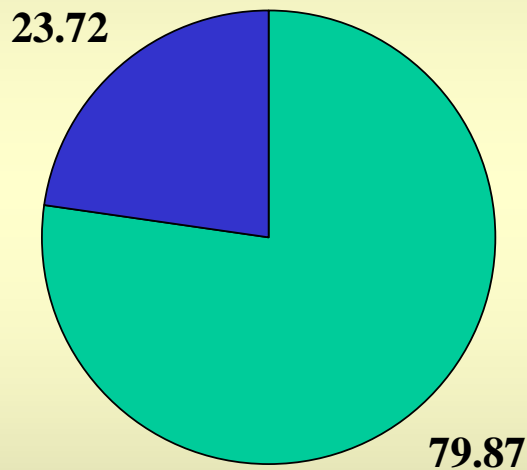




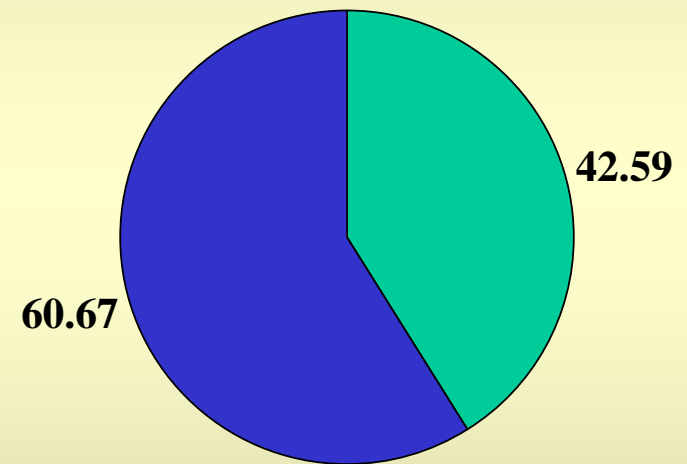
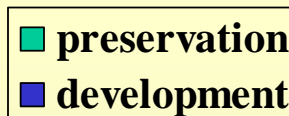
Example of a shoreline management plan (Camping Creek)

# Past Rebalancing Efforts

Miles of Shoreline Classified Future Development



DNR proposal  
(August 23, 2004)



SCE&G proposal  
(April 18, 2005)

# Two-bird Cove

SCE&G proposal




SCDNR proposal



# Public Outreach Programs for Shoreline Management

Various Examples from  
Hydro Operators Around  
the United States

A stylized, layered mountain range graphic in shades of teal and blue, located in the bottom right corner of the slide.

# Discussion Points

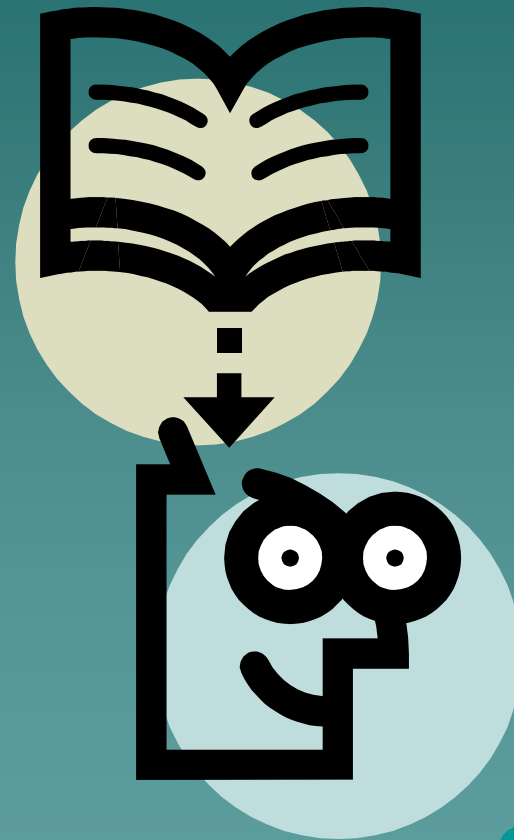
- ◆ General Methods for Public Outreach
- ◆ General Examples of Public Outreach
- ◆ Public Outreach Specifically for Shoreline Management





# General Methods for Public Outreach

- ◆ Newsletters
- ◆ Bill Stuffers
- ◆ Videos
- ◆ Website Information
- ◆ Seminars/Tours

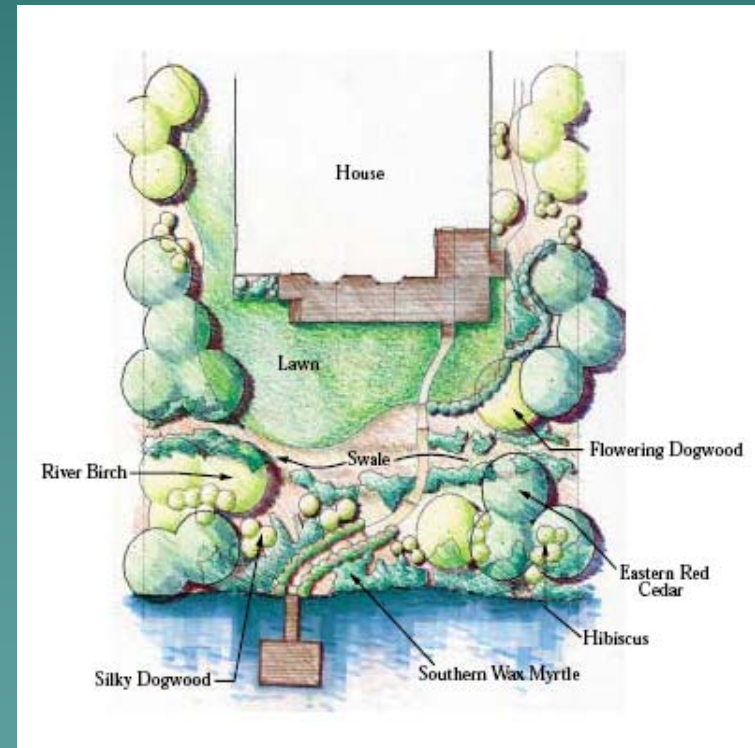




# General Examples of Hydro Outreach

- ◆ Northern States Power Company
    - Winter Ice Fishing Safety Tips
  - ◆ Massachusetts Electric Company
    - Bill Stuffers Detailing Recreation Opportunities
  - ◆ Georgia Power Company
    - Children's Coloring Sheets Explaining Hydro
  - ◆ Alabama Power Company
    - Newsletter for Lakefront Property Owners
  - ◆ New York Power Authority
    - Videos Explaining the Functions of each Dam
- 
- A stylized, layered mountain range graphic in shades of teal and blue, located in the bottom right corner of the slide.

## ◆ Illustrated Shoreline Management Pamphlet




# Themes And Focal Points Of This Program

- ◆ **Focuses primarily on environmental stewardship**
  - Strongly encourages native plantings
  - Explains water quality issues and the benefits of a vegetated buffer
  - Provides landscaping and shoreline stabilization examples
  - Provides a short explanation of permitting processes and contact information. However this is not the primary focus of the document

◆ **Quarterly Newsletter** -Mailed to lakeshore residents



# Themes And Focal Points Of This Program

- ◆ **Focuses primarily on lake management with recreation components**
    - Provides updates on lake levels
    - Provides updates of volunteer efforts
    - Every issue includes a section pertaining to permitting, with contact information for lake management personnel
- 
- A stylized, layered mountain range graphic in shades of teal and blue, located in the bottom right corner of the slide.



# SMP Focused Outreach: Duke Energy

## ◆ SMP “Quick Tips”

Duke Energy and the Catawba Riverkeeper Foundation are providing this document as a way to encourage lake residents and business entities (contractors, landscapers, builders, etc.) to conduct activities around the lake responsibly. This document should be used as a guide to better understand how to protect the shoreline and who to contact prior to doing any work around the lake. The brochure does not replace Duke Energy's Shoreline Management Guidelines (SMG), the Shoreline Management Plan (SMP) or state and local regulations. The SMG and SMP will be used by Duke Energy Lake Management to evaluate any requests for activities within the project boundary.



Duke Energy operates the Catawba-Wateree Hydroelectric Project with a license granted from the Federal Energy Regulatory Commission (FERC). FERC is responsible for issuing licenses for the construction, operation and maintenance of lakes and hydroelectric facilities not owned or operated by a federal agency.

The Federal Energy Regulatory Commission gives Duke Energy the authority and responsibility to manage “project” and “non-project” uses within the project boundary of the lake. Project uses include hydroelectric facilities operation, public recreation access and certain wildlife enhancements. Non-project uses include activities such as piers, docks, marinas, excavation and conveyances such as line crossings and shoreline stabilization.

The “project” boundary is a geographic boundary (generally represented on Catawba River lakes by “100 feet” or the “full pond” elevation around the lake) which outlines the hydroelectric project property. To identify the project boundary line on your property, Duke Energy recommends referencing the registered survey of your property. Project boundary questions can also be directed to Duke Energy's Lake Management representatives by calling 1-800-443-5193.

Through the Shoreline Management Guidelines and Shoreline Management Plan, Duke Energy allows property owners and other interests to apply for a permit for certain activities within the project boundary. These activities include but are not limited to:

- Multi-slip marina facility construction and operation.
- Residential facilities – private access from a lot adjacent to the lake boundary.
- Private facilities (i.e., piers) construction.
- Shoreline stabilization – rip-rap, seawalls, bio-engineering, etc.
- Excavation – removing material from within the lake boundary.
- Conveyances – bridge crossings, water intakes, utility line crossings, wastewater outfalls, etc.
- Miscellaneous lake uses – fish attractors, water ski courses, etc.

Prior to conducting any activity within the project boundary, Duke Energy Lake Management should be notified.

### Protect the Lake – Preserve the Riparian Zone!

The Riparian Zone is the vegetated area adjacent to the lake. The Riparian Zone consists of four zones: submersed (underwater), emergent (usually underwater), shrub (underwater only part of the time) and terrace (rarely underwater). The Riparian Zone provides critical habitat to fish and wildlife, helps reduce erosion of soils into the water and serves as a filter for runoff of fertilizers and other chemicals. Several counties and the state of North Carolina have a buffer ordinance that regulates activities outside the project boundary that may impact activities an individual may desire to conduct on their property. Only through direct written authorization does Duke Energy allow vegetation to be removed from within the project boundary.

The following activities within the project boundary require **PRIOR WRITTEN APPROVAL** from Duke Energy:

- beginning any shoreline stabilization activity,
- clearing or cutting trees, shrubs or other vegetation within the project boundary,
- beginning construction or rebuilding piers or any other structure,
- planting or introducing vegetation and
- all excavation.

Generally, the following activities are **NOT ALLOWED** within the project boundary of Duke Energy lakes:

- advertising signs, except for inconspicuous manufacturer's labels on permitted structures or “For Sale” signs on boats,
- depositing any refuse (trash), leaves or burnt brush,
- satellite antennas/dishes or other fixed communications antennas,
- any part of a permanent dwelling,
- swimming pools,
- earth fill,
- septic tanks and associated drain fields,
- abandonment of personal property including, but not limited to cars, boats, boat trailers and building materials,
- pens, kennels or other facilities for the housing or care of pets,
- fences, except to confine live stock,
- wells,
- planting any plant that is not native to North Carolina and/or South Carolina and
- any other use determined unacceptable by Duke Energy.

### Why are buffers (existing trees, shrubs, ground covers, and leaf litter) important?

Vegetated buffers collect sediment and digest waste, chemicals and other pollutants while providing wildlife habitat and adding scenic beauty.

Wider vegetated buffers along tributaries, streams and the shoreline offer better protection of water quality in the lake. The state of North Carolina and many counties in North Carolina and South Carolina require permanent buffers. Prior to disturbing any vegetation adjacent to the project boundary, the homeowner or developer should contact your local county planning office or for North Carolina lakes also contact the North Carolina Department of Environment and Natural Resources (NCDENR).

### What can you do to protect the Buffer and Riparian Zone?

To protect the buffer on your property:

- Contact your local county planning office or in North Carolina the NC Department of Environment and Natural Resources to educate yourself on the buffer laws in your area.
- If you are using a contractor, make sure they know how important protecting the buffer and reducing sedimentation is to you and the lake overall.
  - Contractors should install and properly maintain a silt fence to reduce the amount of storm-water run-off and silt that reaches the lake.
- Monitor progress as your lot is being cleared, your pier is being built or the shoreline is being stabilized. Talk to your contractor if you see activity that seems to be disturbing the buffer.

### Protecting the Riparian Zone!

Nature has a keen sense of what is needed to stabilize the shoreline and protect buffered areas. The best and most cost effective ways to protect the buffer and riparian zone along your property are also the most natural, aesthetically pleasing and environmentally sensitive. Here are a few techniques:

#### Bio-engineering

- Live stakes are live, rooted vegetation planted into the shoreline.
- Live fascines are large bundles of branches bound and used to fill shallow trenches and planted with native vegetation.
- Brushmatresses are a combination of live stakes, live fascines and branch cuttings, which provide immediate protection against erosion.
- Coir Mats are bio-like interlocking arrangements of unbarbed logs filled with suitable growing soils and layers of live branch cuttings rooted inside the structure.
- Reed Clumps are rooted divisions wrapped in geotextile fabric and staked down in trenches at the water's edge.
- Coconut fiber rolls and hay bales are used to break water and reduce the energy and speed of the water hitting the shoreline.

#### Vegetation

- The right vegetation for your property will depend on a number of factors including, but not limited to:
  - lake level fluctuations (contact 1-800-829-LAKE or [www.duke-energy.com](http://www.duke-energy.com) for lake level information),
  - slope of the shoreline,
  - vulnerability to wave energy and
  - soil types.

Hard structures such as rip-rap and seawalls can also be used to protect the shoreline from waves and wind. Hard structures can be a good alternative where there is:

- wave action, either from boats or wind,
- unsuitable soils for plant growth,
- inadequate sunlight to stimulate plant growth and
- bank height too great to re-grade to an acceptable slope.

### BEFORE YOU BEGIN ANY WORK ALONG THE WATER'S EDGE ON YOUR PROPERTY:

CONTACT YOUR LOCAL COUNTY PLANNING OFFICE OR IN NC THE NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES TO BETTER UNDERSTAND BUFFER LAWS

AND

CONTACT DUKE ENERGY LAKE MANAGEMENT TO DETERMINE IF WRITTEN APPROVAL IS REQUIRED FOR ACTIVITIES WITHIN THE LAKE BOUNDARY.

The following numbers are provided for additional information about requirements regarding lake activities.

Duke Energy  
Lake Use Permitting – 1-800-443-5193  
Lake Level Use – 1-800-829-LAKE  
Watershed Management – 704-382-0169  
NC Division of Water Quality – 704-663-1969  
NC Division of Land Reclamation – 704-663-1899  
NC Department of Health & Environmental Control  
Columbia – 803-863-6303  
Catawba – 803-395-2491  
Central/Northern – 803-863-6300  
Wateree – 803 – 803-776-8548

Surge County – 803-438-4383  
McDowell County – 828-882-7121  
Caldwell County – 803-386-6552  
Alexander County – 803-632-1000  
Catawba County – 704-463-6264  
Iredell County – 704-876-3116  
Lincoln County – 704-738-8446  
Gaston County – 704-622-4181  
Mickelthorp County  
Environmental Protection – 704-336-5636  
Engineering and Building – 704-336-3728  
York County – 803-360-3524  
Lancaster County – 803-386-3732  
Chester County – 803-561-6942  
Fayette County – 803-712-5866  
Rowan County – 803-622-2154

Lake Norman Marine Commission – 704-372-2419  
Mountain Island Marine Commission – 704-372-2416  
Lake Wylie Marine Commission – 704-348-2705

Duke Energy Lake Management will issue STOP WORK directives for any violations detected within the project boundary. Consequences for those violations include one or more of the following:

- Unwanted construction delays.
- Loss of security deposits.
- Suspension or cancellation of approved applications.
- Increases in fees.
- Modifications or removal of non-complying structures and restoration of disturbed areas at the owner's expense.
- Loss of any consideration for future lake use applications.

Violations of state and local rules and regulations could also result in additional consequences from those organizations.



# Themes And Focal Points Of This Program

- ◆ **Focuses primarily on permitting policies, however includes an emphasis on buffer zone protection and shoreline stabilization**
  - Explains permitted and non-permitted activities within the project boundary
  - Includes contact information for Duke Energy and local agencies
  - Explains why buffer zones are beneficial and includes buffer zone protection measures
  - Describes a variety of bank stabilization measures

# SMP Focused Outreach: Southern California Edison

- ◆ Tree Care Information
  - Included on company website
  - Provides information on proper planting techniques and care
  - Includes a “Photo Gallery” of recommended species



*Washington Hawthorn (Crataegus spp.)*  
summer blooming, white flowers; fall color; winter fruiting, attracts birds  
Mature height: 35 feet  
Mature spread: 20 feet  
Sunset Zones 1-11, 14-17  
[Click here for more information](#)



*Citrus Fruit Trees (Citrus)*  
summer fruiting (lemon, lime, grapefruit, orange, tangerine)  
Mature height: 30 feet  
Mature spread: 15 feet  
Sunset Zones 8, 9, 12-14  
[Click here for more information](#)

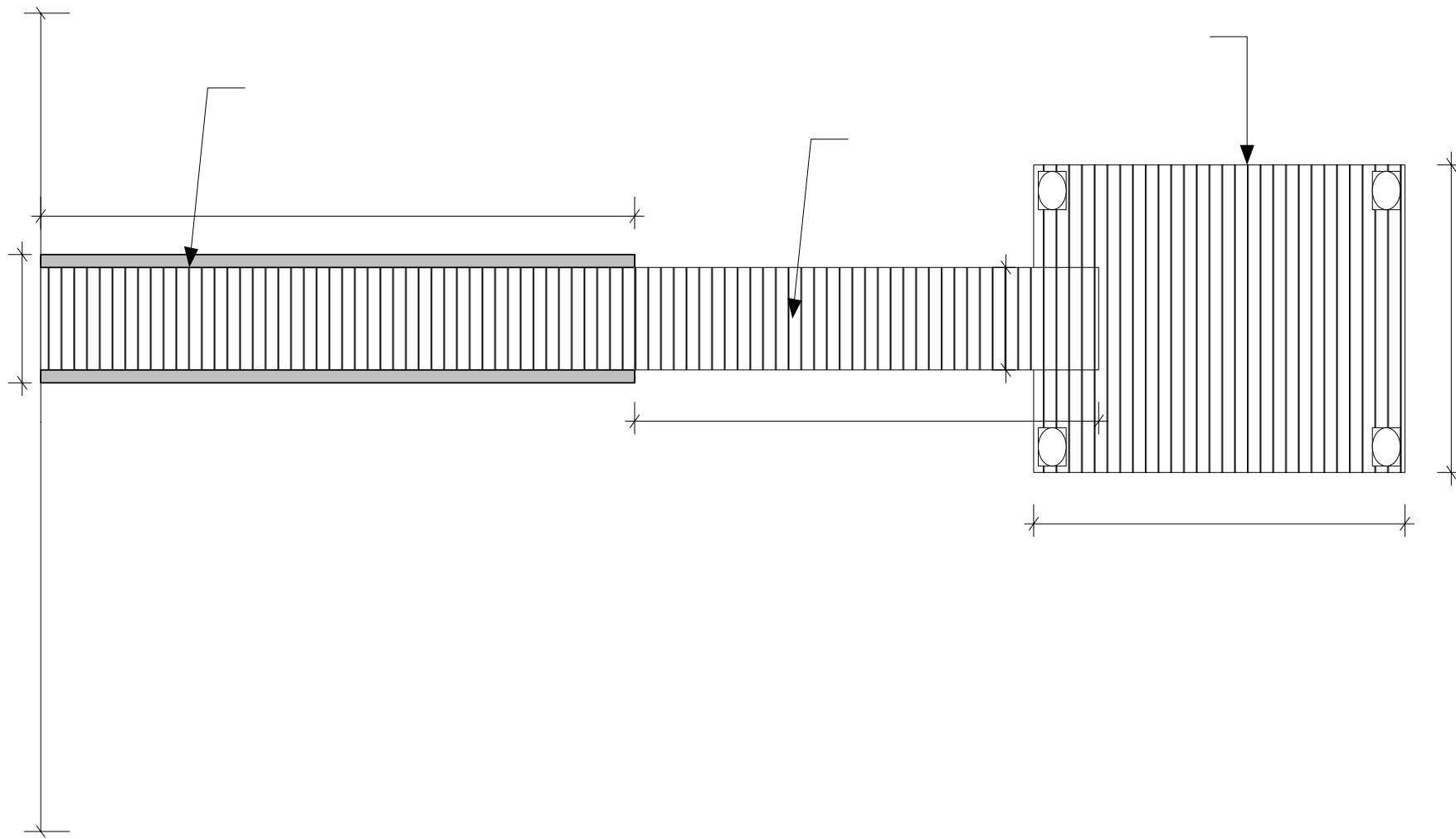
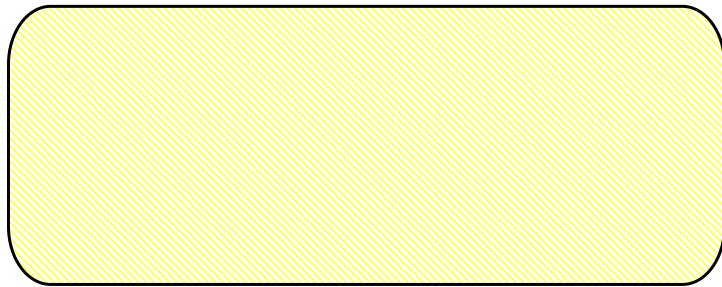


# Questions?



# Lake Murray Dock Permitting

Project 516





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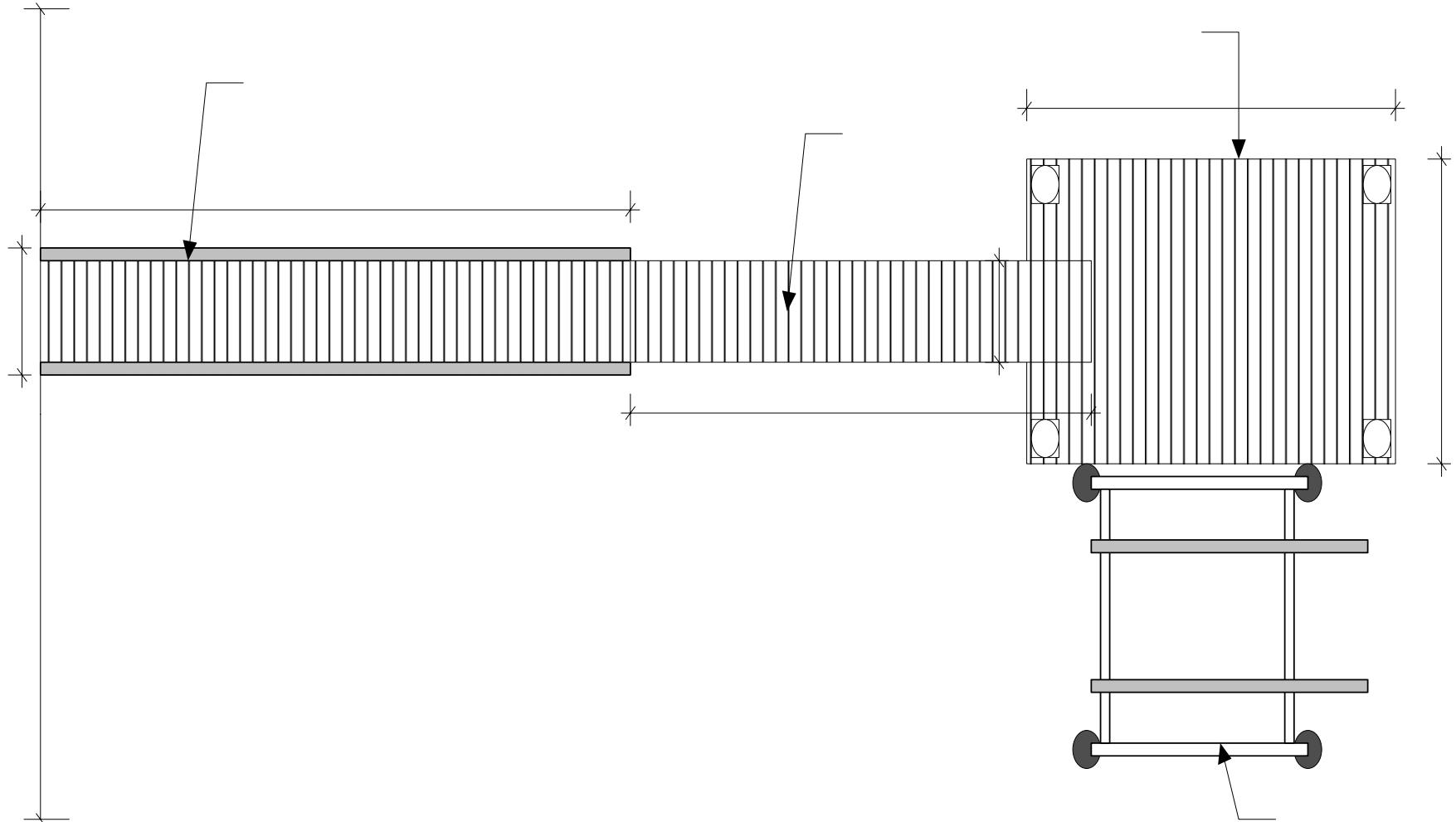
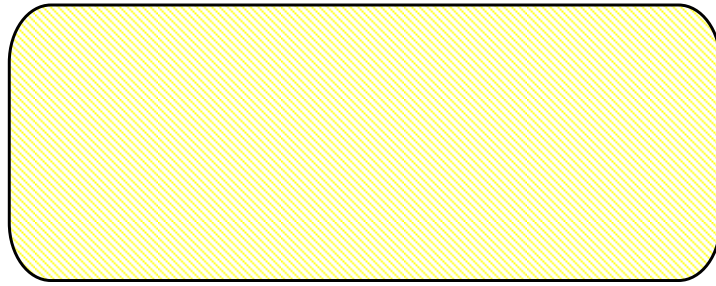




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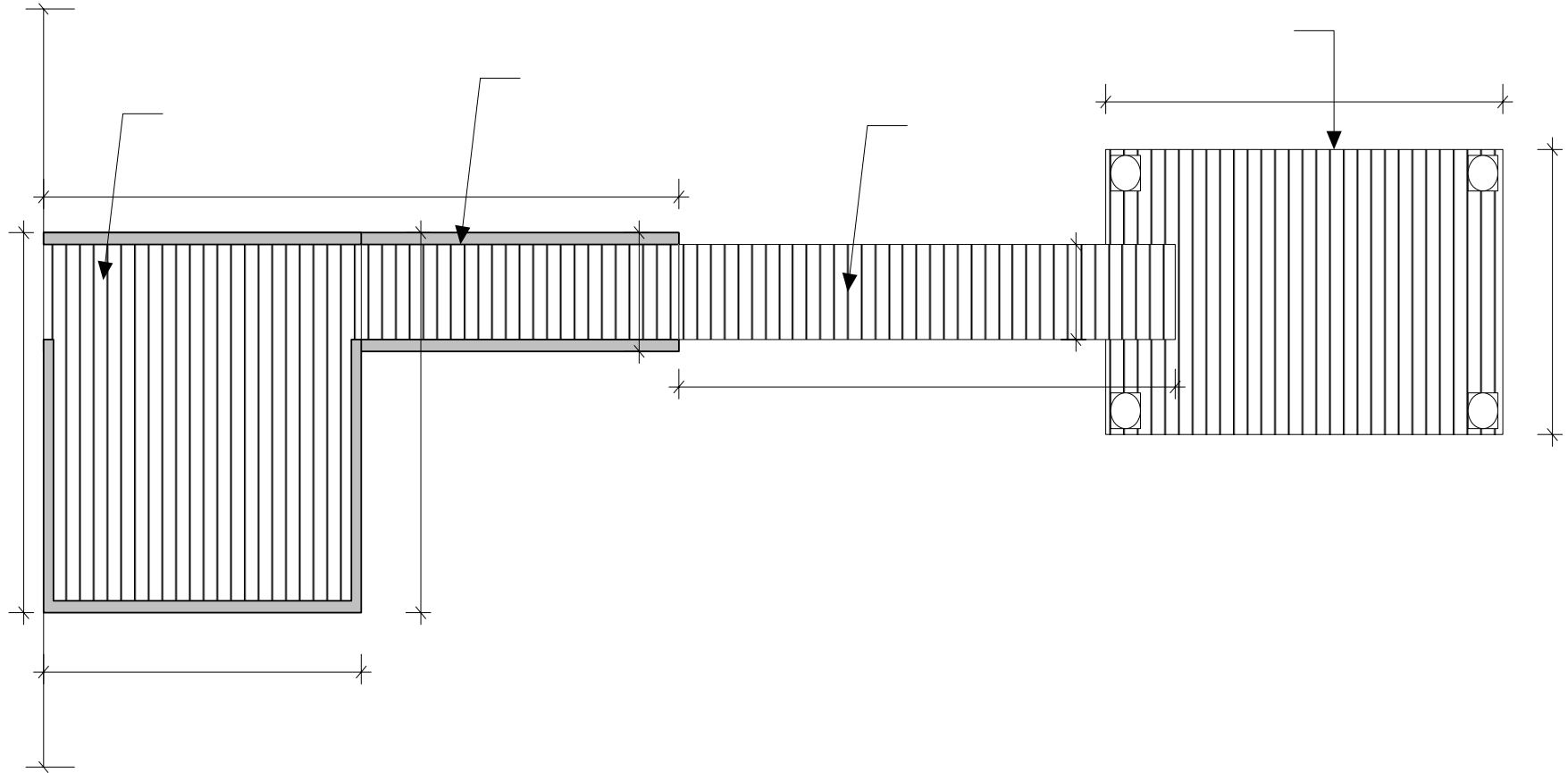
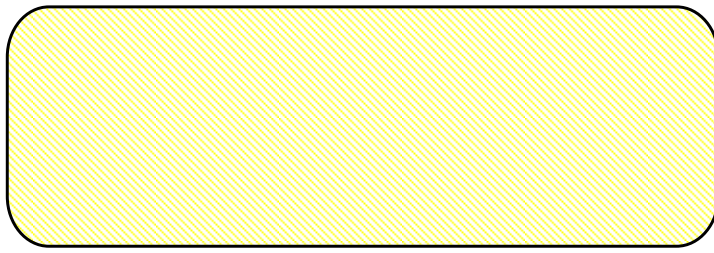




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TOUR

PLATING AREA





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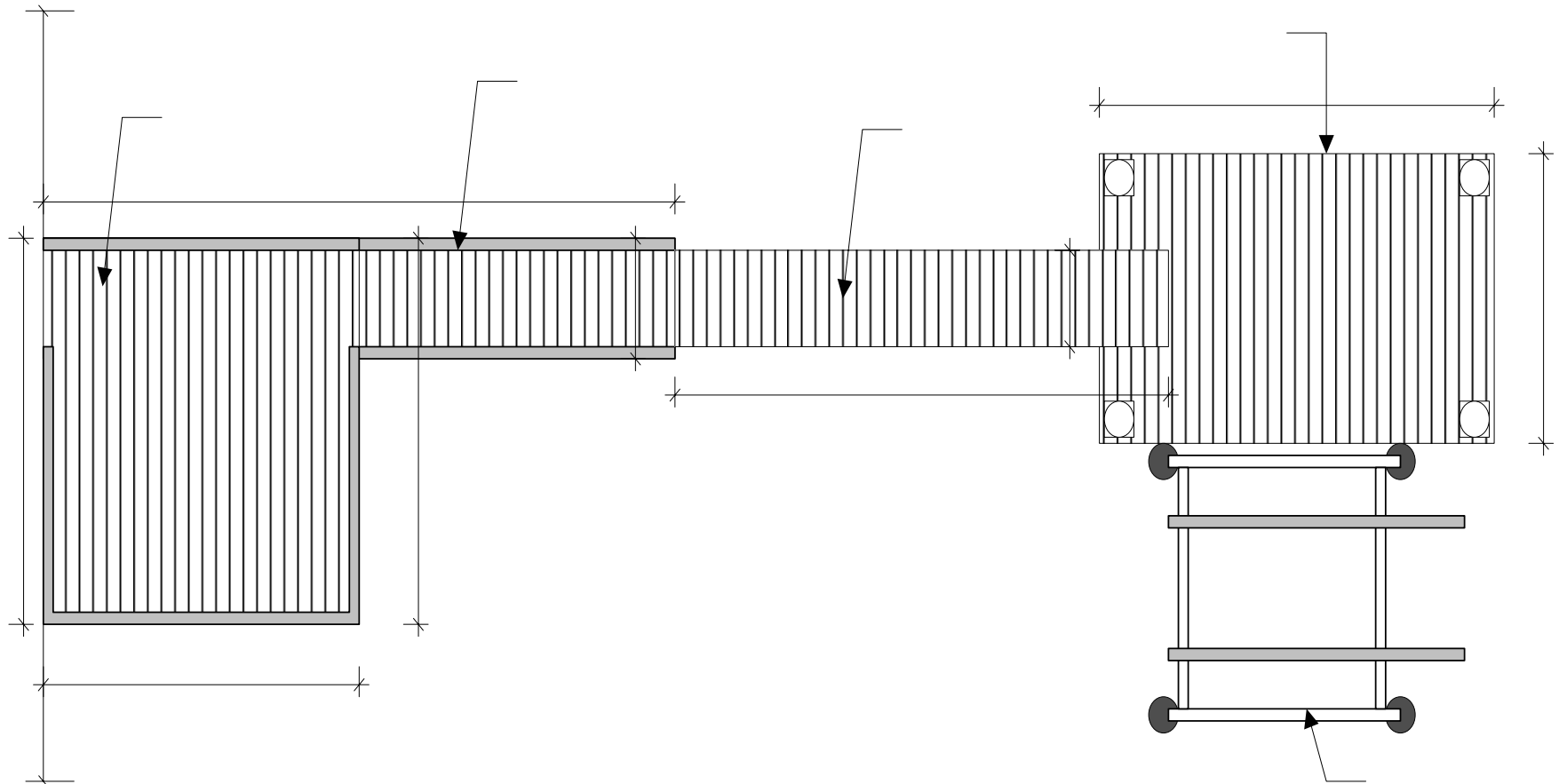
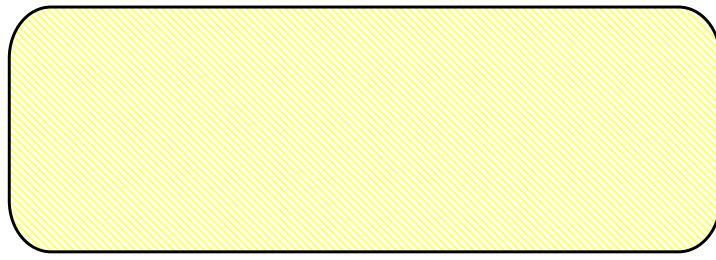


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CONTOUR

SEATING AREA





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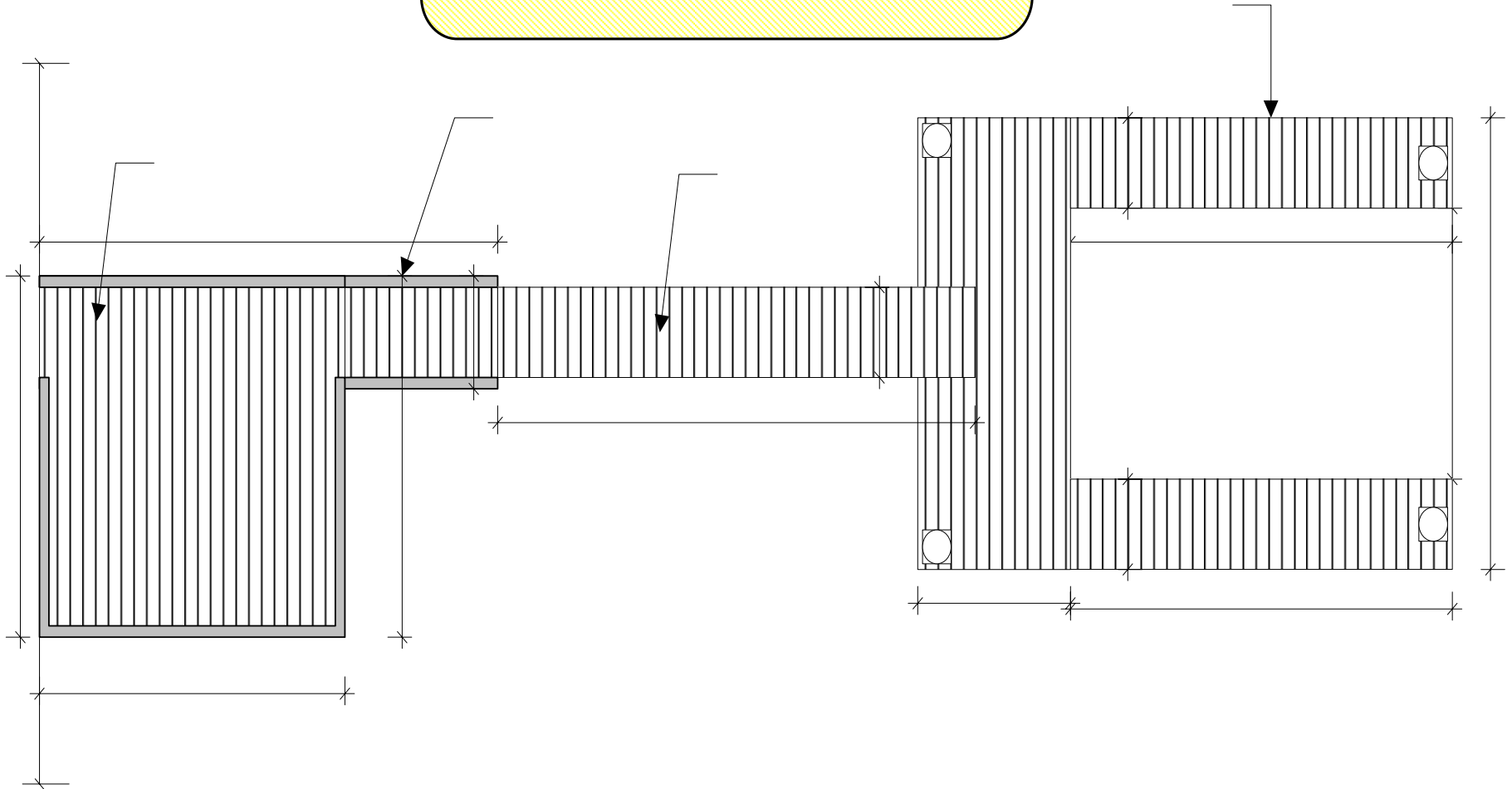
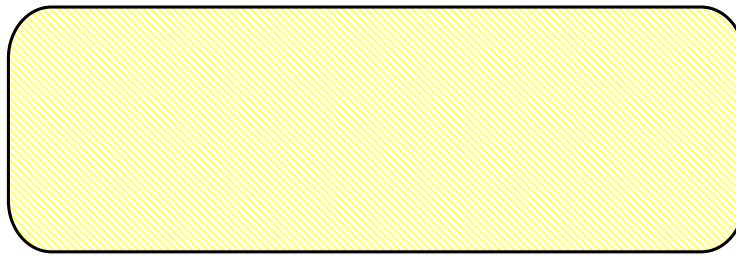
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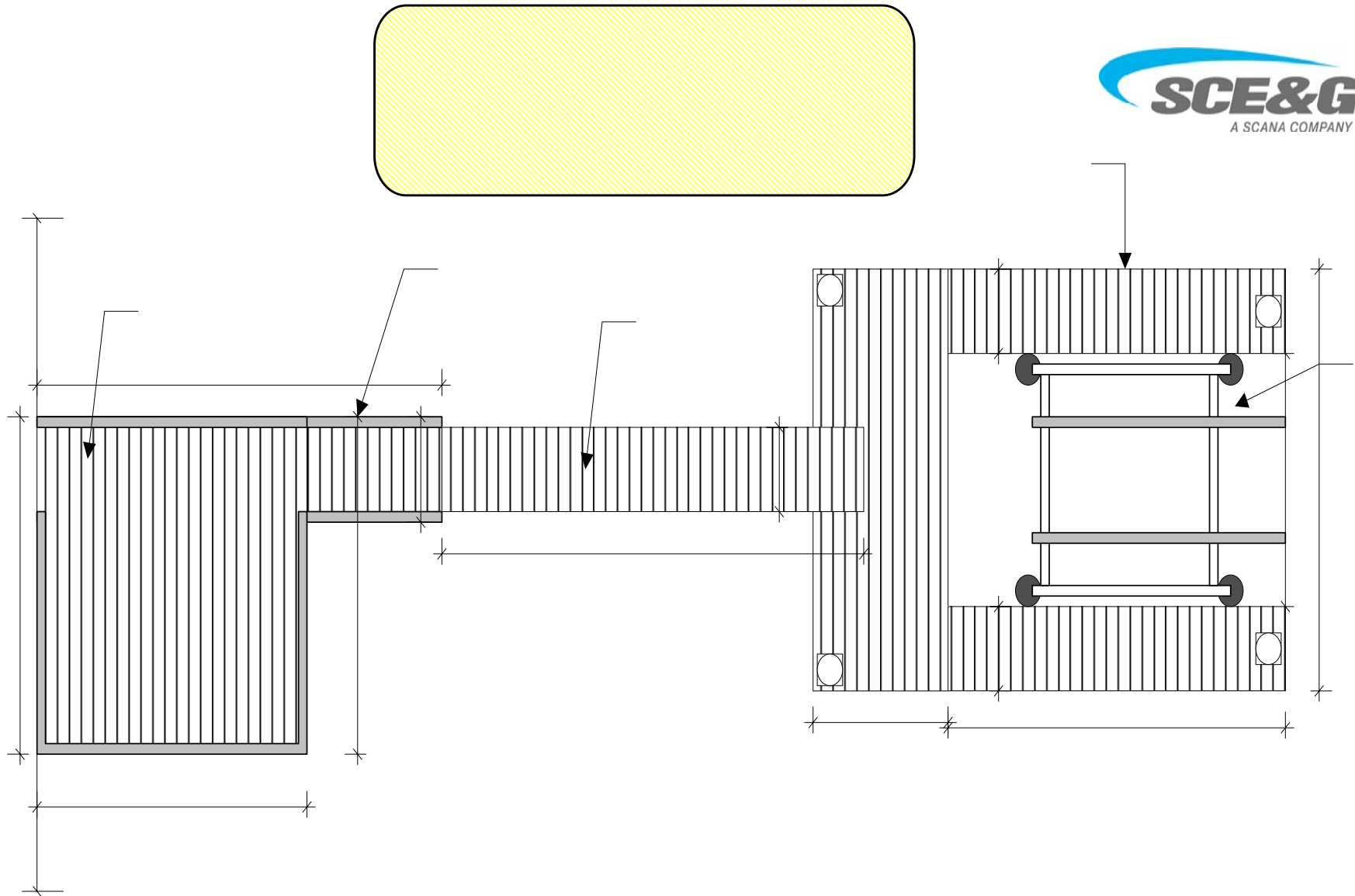
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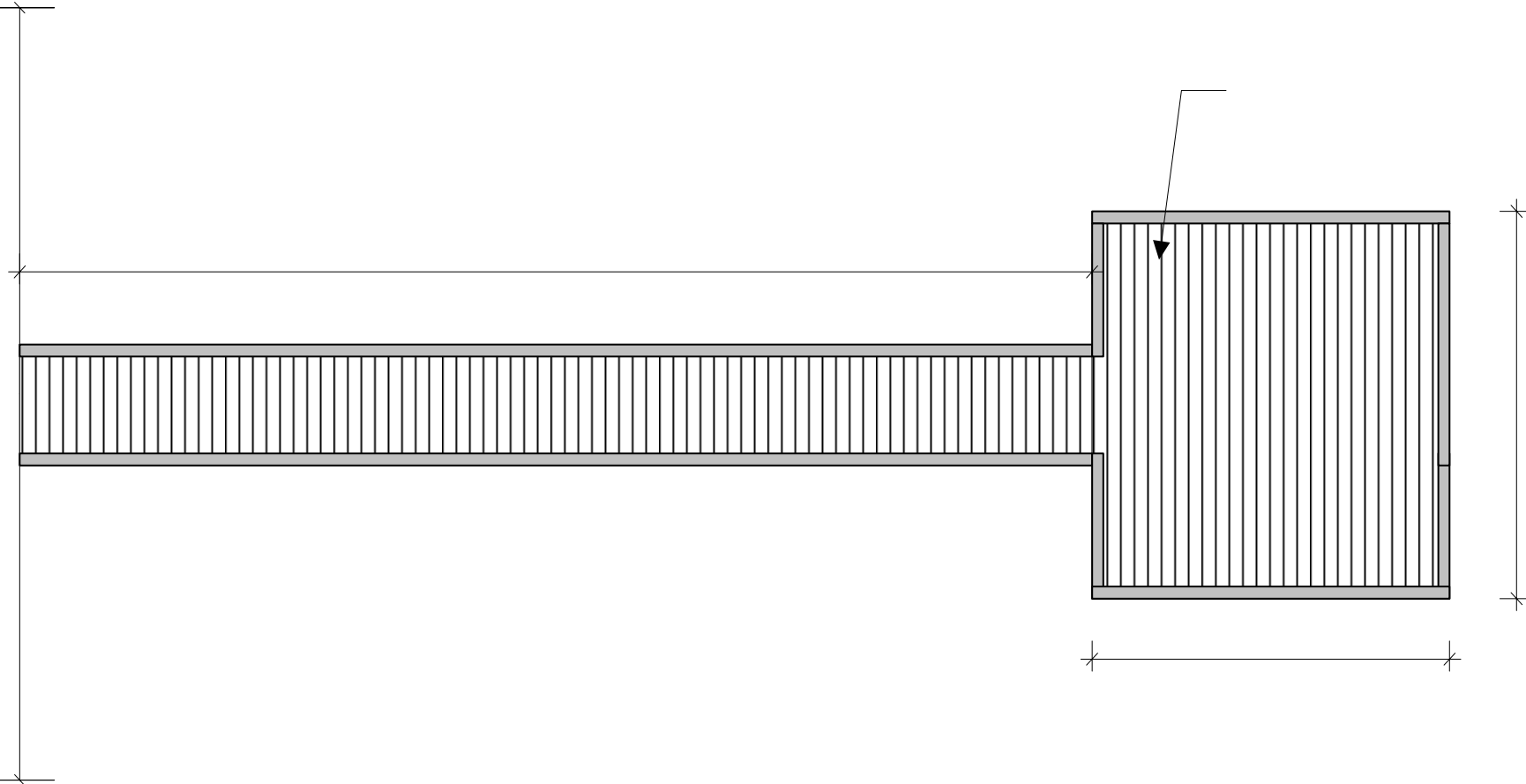
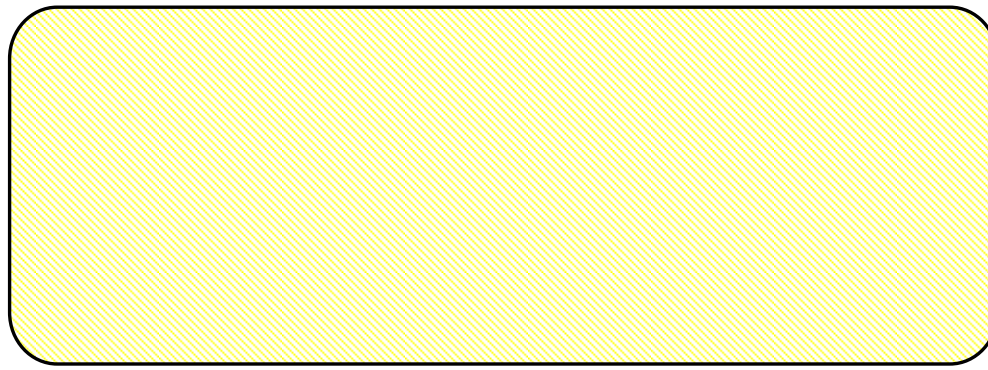
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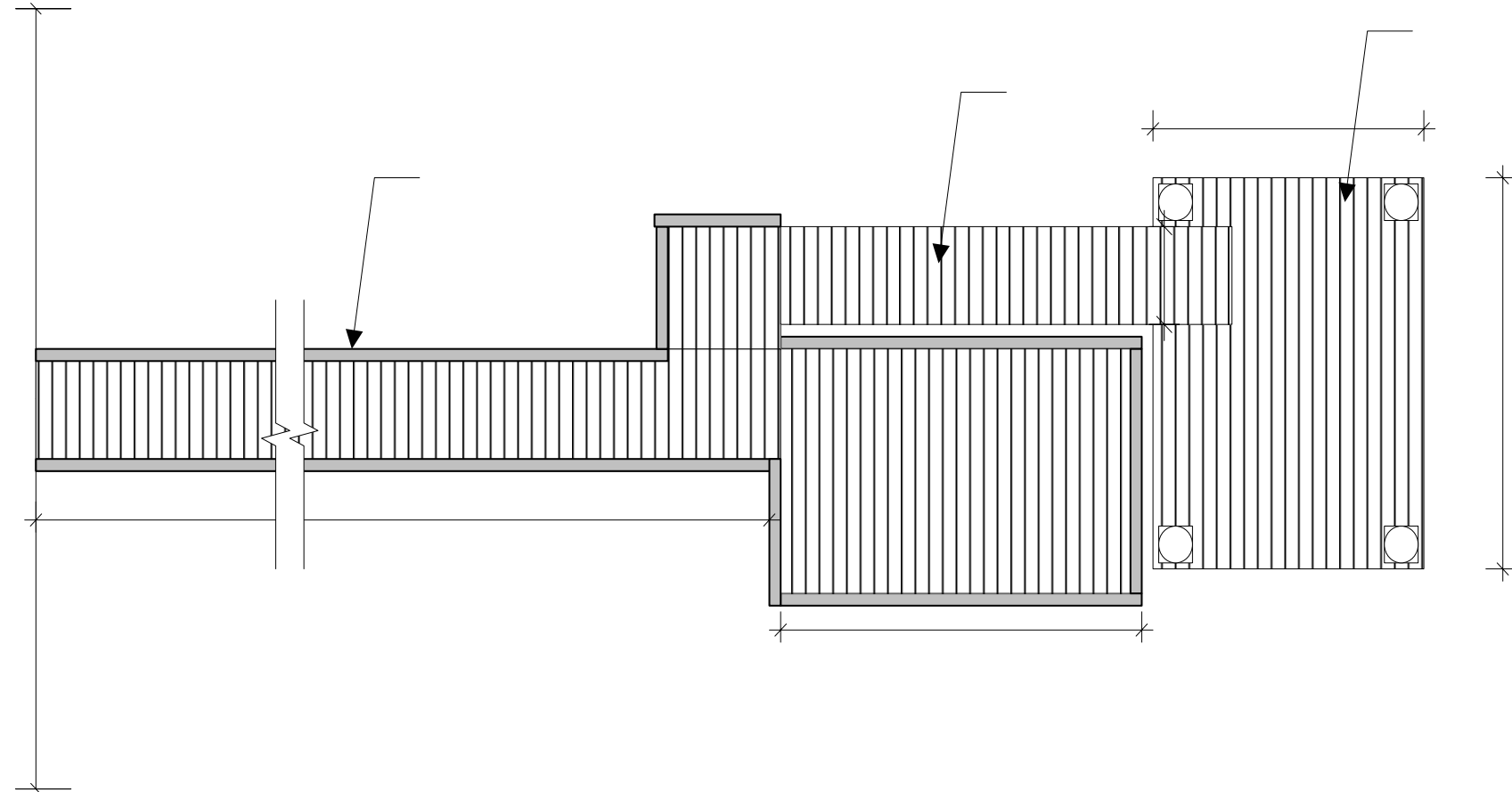
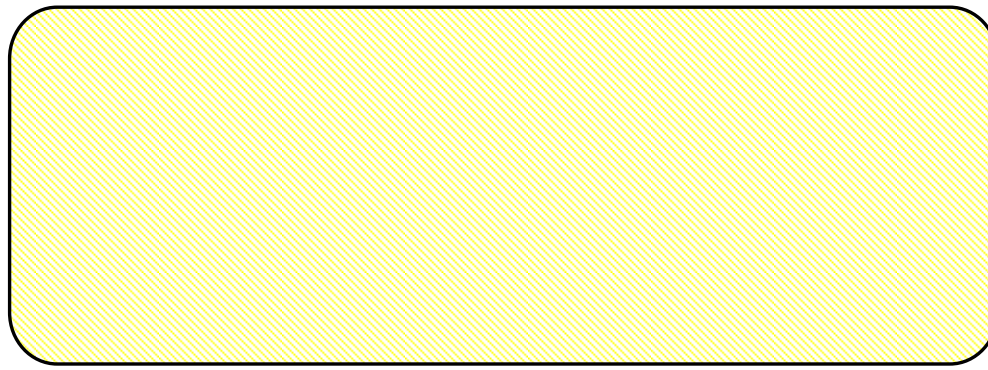






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# Environmentally Sensitive Areas

- **Shallow Coves with Stream Confluence**
- **Bottomland Hardwoods and Wet Flats**
- **Vegetated Shoreline**
  - **Continuous**
  - **Intermittent**





Shallow Coves with Stream Confluence – Areas where streams enter the lake and form coves where water elevations in areas outside the historical stream channel are predominately above the 355' contour line. The upgradient portion of shallow coves is typically vegetated with button bush and willow. Where this overlap occurs, the shoreline will be given a vegetated shoreline classification

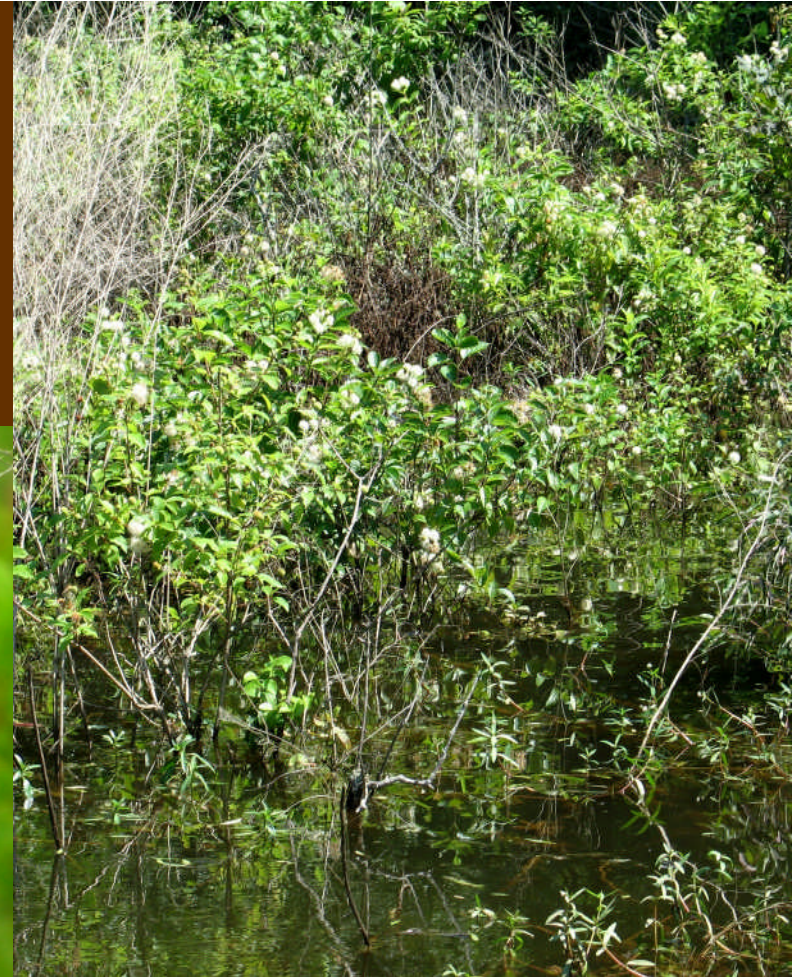




Bottomland Hardwood and Wet Flats - Continuous linear shoreline coverage of bottomland hardwood (excluding sweetgum) and wet flats at least 66' in length.



# Buttonbush





# Black Willow







Continuous – Continuous vegetated linear shoreline at least 66 feet in length with vegetation >5' wide measured perpendicular to the shoreline. This class can have gaps, provided the total gap length is less than 16 percent of the total linear footage of the area.





Intermittent – Linear shoreline coverage of vegetation at least 66' in length where sixteen (16) to forty (40) percent of the total linear footage is gap. (Note: Gap is defined as an area at least 8-20' in length with little or no vegetation below the normal high water mark). Areas with gaps larger than 20' in length are termed "breaks" and will not be considered vegetated shoreline.





# **South Carolina Electric & Gas**

## **SHORELINE MANAGEMENT PROGRAM**



**Tommy Boozer**  
**Manager**  
**Lake Management**

# SCE&G Lake Management Programs

## History

- Land purchasing and logging began in the spring of 1927.
- Work on the Dam began in September 1927.
- The Dam and power house were completed in 1930.
- First generation started at 7:00 a.m. on December 1, 1930.

# Saluda Construction - Loading



# Saluda Construction - Dumping





# Facts About Lake Murray

- Covers 78 square miles
- 48,239 surface acres
- 41 miles long
- 14 miles wide
- Provides storage for 763 billion gallons of water
- 650 miles of shoreline



# Lake Management and Recreation

- SCE&G Shoreline Management Plan was developed in 1975 with the Federal Power Commission, now the Federal Energy Regulatory Commission (FERC), to ensure compliance with the licensing requirement for the Saluda Hydro Project.
- FERC is the Federal Agency responsible for the overseeing, maintenance, and operation of the license for the Saluda Hydro Project.

SCE&G operates its shoreline permitting activities under a general permit issued by the US Corps of Engineers and the S. C. Department of Health and Environmental Control.

This permit authorizes SCE&G to be the residential permitting agency on Lake Murray.

Commercial requests are submitted and approved by DHEC, Corps of Engineers, and FERC.

# Lake Murray Shoreline Permitting Requirements

- Booklet
- Permit Application
- Vegetation Protection Agreement
- Flotation Requirements

# Approved Shoreline Activities

- Dock
- Dock Modification
- Boat Lift
- Boat Ramp  
(Concrete)
- Marine Railways
- Water Removal  
(for irrigation only)
- Excavation
- Limited Brushing
- Erosion Control
- Rip-Rap
- Retainer Wall
- Bio-engineering



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# Lake Murray Public Recreation

■ Public Parks (existing)	16	408 ac.
■ Future Parks	11	726 ac.
■ Impromptu Areas	23	
■ Public Marinas & Landings	31	
■ Private Marinas/Common Areas	57	
■ Islands Open to the Public	65	575 ac.





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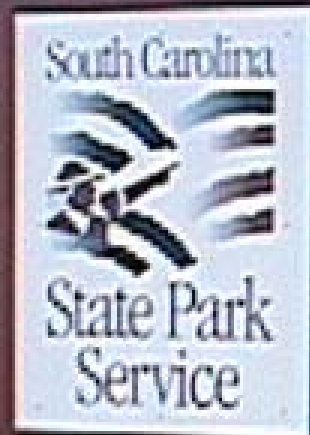


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# DREHER ISLAND



## STATE RECREATION AREA

S.C. DEPT. OF PARKS, RECREATION AND TOURISM





Saluda Shoals  
P A R K





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# Land Use Management Classification

- Project Operation
- Public Recreation
- Commercial Recreation
- Forest Management
- Forest and Game Management
- Future Development
- Easement Property

# Land Use Management

- P.B.L. - Project Boundary Line  
A property line surrounding the hydroelectric project that delineates the project boundary location and separates project property from non-project property.
- Project Property  
Land located within the Project Boundary Line and under the jurisdiction of the FERC.

- 360 Contour

The high pool elevation of Lake Murray.

- Vegetative Buffer Zone or 75 Foot Setback Area

A strip of land 75 feet wide (horizontally from the 360 contour). Creates a vegetative, aesthetic buffer along the lake shoreline.

- ESA

Located between the 360 contour and deemed as environmentally sensitive in an extensive shoreline inventory. Developed as a reference tool to prescribe management alternatives on SCE&G-owned fringeland.

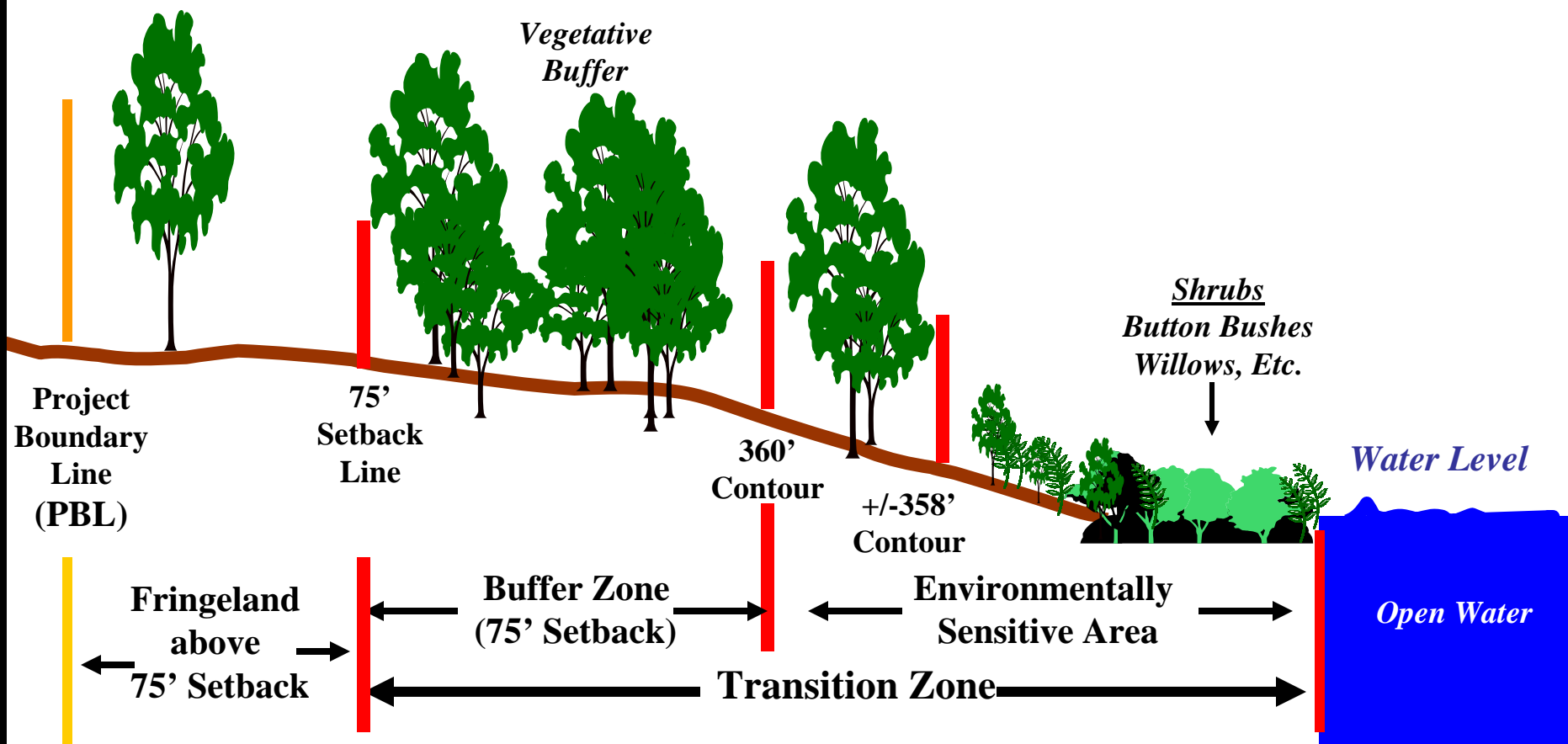


**SCE&G**  
**Vegetative**  
**Buffer Zone**  
**Protected Area**

Lake Murray  
FERC  
Project 516

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# Future Development Fringeland Classification Example Lake Murray (FERC Project 516)





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# Aquatic Plant Management

- Hydrilla
- Brazilian Elodea
- Illinois Pondweed
- Yellow Primrose
- Alligator Weed
- Curly Leaf Pondweed

## Control Methods

Lake Level (Draw Downs)

Herbicides Treatment

Mechanical Harvesting

Grass Carp





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# Shoreline Development

- Old Homes

- New Homes



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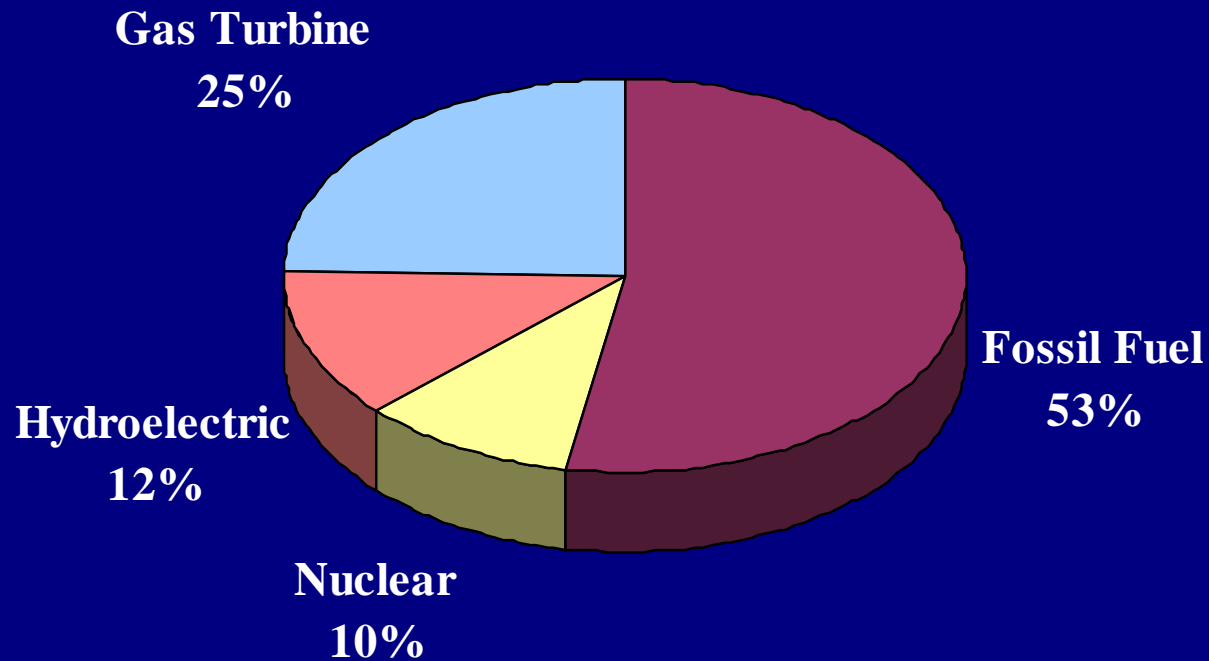


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# South Carolina Electric & Gas Generating Portfolio



# Saluda Dam Owner – SCE&G











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