

Water Primrose 2005

Lake Murray, South Carolina

Water primrose, an emergent plant, has become prevalent along the shoreline throughout much of Lake Murray. It became established at the water's edge during the extended drawdown of 2003 - 2004 (fig 1) and continued to thrive as water levels rose to normal high seasonal levels. The 346-foot contour can readily be seen by the location of the deeper primrose beds.

Fig 1

Water primrose established at the 346' drawdown zone in September 2004.



Lake levels during the growing season of 2005 have primarily been between 357' and 358' msl. These high levels have had little to no impact on the water primrose plants established at the 346' drawdown zone. The primrose growth rate was able to keep up with the water levels as the lake refilled after the drawdown (fig 2).

Fig 2

Water primrose beds thriving at the 346' drawdown zone during high water levels (358') in August 2005.



Most of the sampling this year was accomplished while the lake level was at 358 ft. Water primrose beds are found in shallow water along the shoreline, as well as at the 346' drawdown level. These deeper beds generally occupy the 10 to 12 foot depths – 346' to 348' levels – but some beds are established in as much as 17 feet of water – at the 341' level.

Approximately 145 miles of shoreline are infested with primrose throughout the lake. The greatest amount of growth and the most significant problems are found in the Saluda and Little Saluda Rivers. Over one-third of all the water primrose in Lake Murray is found in the Saluda and Little Saluda Rivers. Over 54 miles of the rivers' shorelines are affected by water primrose. This area also has a large number of beds established at the 346' drawdown zone.

Fig 3

Extensive growth of water primrose in a cove on the Little Saluda River



The Upper Lake is the area between the confluence of the Saluda and Little Saluda Rivers and the 'Gap' at Billy Dreher Island. The Upper Lake has primrose beds along 22 miles of shoreline

The main body of the lake, from the 'Gap' at Billy Dreher Island to the dam has over 68 miles of shoreline infested with water primrose. Many of the primrose beds in the main part of the lake are small shoreline patches, rather than extensive shoreline beds. The north side of the lake has considerably more than the south side, nearly 50 miles of primrose beds, compared to less than 20 miles along the south side.

Table 1. Summary of primrose infestations

Saluda River	20.8 miles of shoreline
Little Saluda River	33.6 miles of shoreline
Upper Lake	22.6 miles of shoreline
Main Lake, south side	19.3 miles of shoreline
Main Lake, north side	49.1 miles of shoreline
Total	145.4 miles of shoreline

Water primrose and alligatorweed have been present in Lake Murray for decades. Water primrose has been one of the primary reasons for many of the aquatic plant complaints made to SCE&G and SCDNR for many years; hydrilla complaints often turned out to be water primrose infestations. Although not restricted to the upper part of the lake, water primrose has always been more prevalent in the upper lake, often growing to nuisance levels. However, in the case of water primrose, nuisance levels meant that one, or only a few, property owners were impacted by primrose infestations. Sometimes, an entire cove would be affected, but usually nuisance primrose levels were limited in extent.

There is a strong correlation between shoreline disturbance and locations of water primrose beds. Wherever the natural shoreline vegetation has been removed, water primrose beds tend to occur. Shoreline beds of water primrose also occur along naturally vegetated shoreline areas, but they're more commonly found along disturbed shorelines. This has been noted for many years; however, the beds of water primrose established at the 346' drawdown area are now found in naturally vegetated areas as well as in disturbed areas – see figure 3. For infestations at 358' level, disturbed shorelines continue to have more water primrose than undisturbed shorelines.

Other Aquatic Plants

Alligator weed, *Alternanthera philoxeroides*, is present in many of the water primrose beds, sometimes in abundance. Two species of emergent plants were found this year in the lake that haven't been reported before – creeping burhead (*Echinodorus cordifolius*) and water pennywort (*Hydrocotyle ranunculoides*). Creeping burhead is usually a species of marshes and swamps, but can occur along lake shorelines in shallow water. Water pennywort, previously known only from the coastal plain, was found in one water

primrose bed in the upper part of the lake. This species has the potential to form large floating mats; however, it's usually found during the fall, winter and spring and it usually dies back in the summer.

Although hydrilla wasn't specifically a search target, no hydrilla was found during the course of the primrose survey.

Herbicide Treatment

An area on the north side of the Little Saluda River, near the western boundary of the Lake Murray project area, was treated with the aquatic herbicide, Renovate. Figures 4 and 5 show one section of the treatment area before and after herbicide application. I've received anecdotal information that lake residents and users are using Roundup in places to control the primrose.

Figure 4

Cove in May prior to herbicide application



Figure 5

Same cove in August after herbicide application



Summary

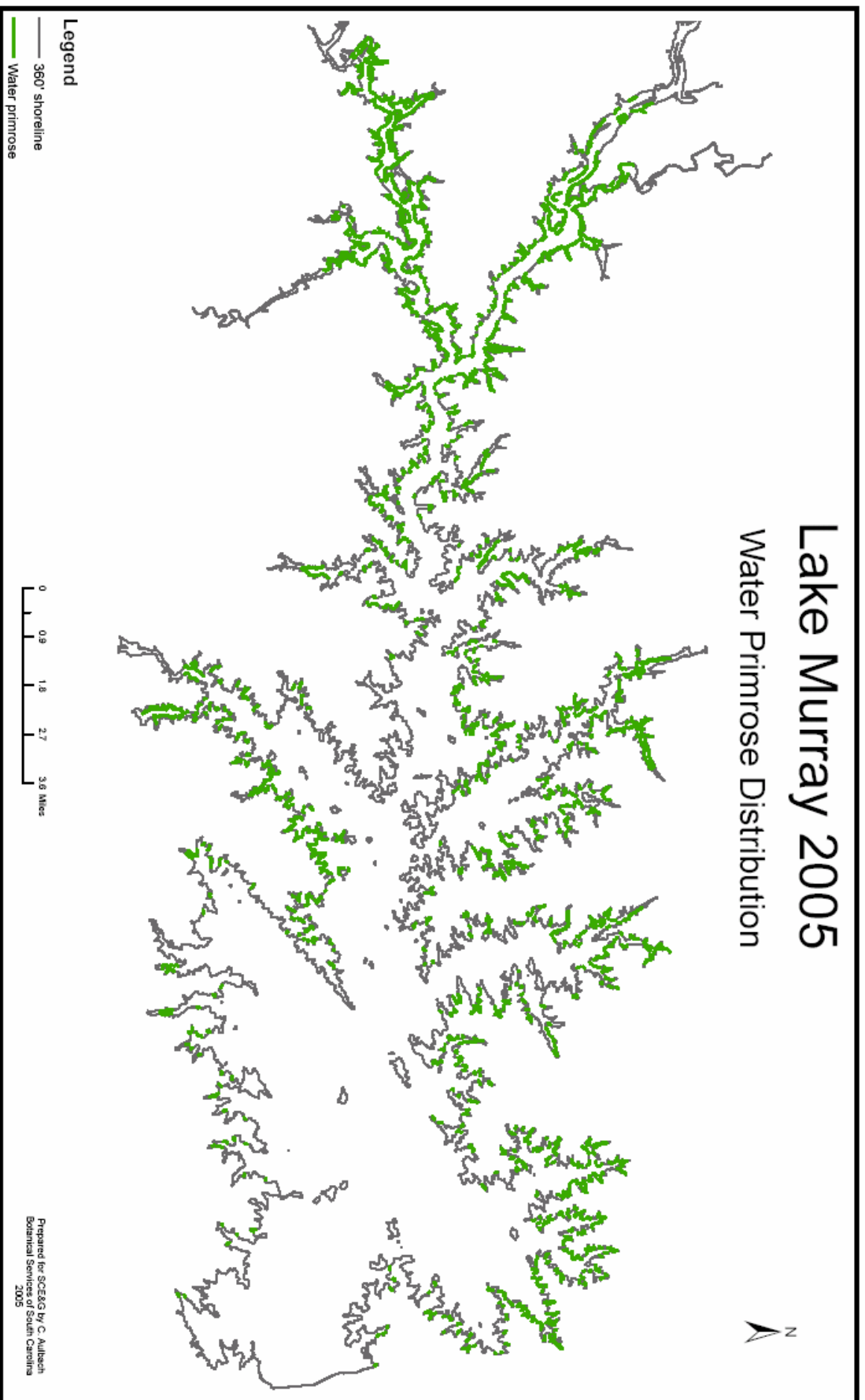
During the 2003-2004 drawdown of Lake Murray, water primrose became established at the 346' level, particularly in the upper part of the lake. It now occupies 145 miles of shoreline throughout the lake, with beds occurring along the shoreline as well as in deeper water.

Water primrose can't establish itself in deep water (10-12 feet), however, once established, it can persist and even thrive in deep water. There are a few places in Lake Murray where the primrose died back during the summer; however, in most areas, it continues to thrive in the deeper areas.

Herbicide application by well-intentioned lake users and residents is an issue that must be addressed. Physical removal by hand and by rakes was noted at a small number of properties. This is the most effective and the only available means by which lake users can and should control water primrose.

Lake Murray 2005

Water Primrose Distribution



Kacie Jensen

From: Dave Anderson
Sent: Thursday, September 28, 2006 10:34 AM
To: Van Hoffman; Dave Anderson; David Hancock; Dick Christie; George Duke; Jennifer Summerlin; Kelly Maloney; Lee Barber; Malcolm Leaphart; Marty Phillips; Patrick Moore; Steve Bell; Tim Vinson; Tommy Boozer; Tony Bebbler
Cc: Alan Stuart; 'Bill Argentieri'
Subject: Final Boat Density Study Plan

I know it's been a while since we looked at this (July 19), but Tommy, Alan, and I have been trying to get the "alternative" data from Berger (if you remember, Marty discovered that they had broken the lake up into smaller segments than reported).

We have reached the end of the rope and will proceed with the study plan as discussed. We have made a few changes based on the discussion at the July 19th meeting, but these changes don't affect the way the study will be conducted. Although I have marked this document as final, if you see any "red flags", please let me know as soon as possible so we can adjust the document as necessary. If I don't hear from anyone by next Friday, we will proceed with the study.

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



Boating Density
Study Plan (20...



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Study Plan (20...

**SOUTH CAROLINA
ELECTRIC & GAS COMPANY**
COLUMBIA, SOUTH CAROLINA

SALUDA HYDROELECTRIC PROJECT
(FERC NO. 516)

BOATING DENSITY STUDY PLAN

FINAL

SEPTEMBER 2006

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

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1.0 PURPOSE OF THE STUDY

The Saluda Project is an existing, licensed hydroelectric facility owned and operated by South Carolina Electric & Gas Company (SCE&G). The Project is located on the Saluda River in Richland, Lexington, Saluda, and Newberry Counties, SC. The project impounds the 48,000 acre Lake Murray, a popular recreation area for boating and fishing, having numerous public access sites and supporting several popular recreational sport fisheries.

In comments received on the Initial Consultation Document (ICD), the South Carolina Department of Parks, Recreation & Tourism requested a boating study of Lake Murray to examine boat densities and safety on the Lake now and into the future. The goals of this study are to:

1. Identify the area available for recreational boating on Lake Murray by lake segment.
2. Assess boat densities occurring under normal (weekend) and peak (holiday) use conditions on Lake Murray by lake segment.
3. Analysis of whether recreational boat use of Lake Murray is currently above, below, or at a desirable level by lake segment¹.

The results of this study will be provided to the Recreation Resource Conservation Group with the intent of providing necessary information for future recreation planning.

¹ As applied to this study, “desirable level” refers to the amount and type of boating the lake can accommodate without unacceptable social impacts.

2.0 DATA COLLECTION

The data used for this study includes a reexamination of existing aerial photographs of recreational boating on the Project, information collected from the survey research portion of the ongoing recreation assessment, and future use estimates being developed for the recreation assessment. Combined, the information will provide SCE&G with the inputs necessary to assess recreational boating densities and user preferences on Lake Murray.

2.1 Aerial Photographs

Existing aerial photographs collected during the 2001 aerial boat counts (The Louis Berger Group, 2002) will be used for this analysis. Aerial photos were taken on 3 holiday weekend days and 9 non-holiday weekend days (Table 1). Photographs were taken from an elevation of approximately 3,500 ft.

Table 1: Dates of Photographs Taken in 2001 to be Used for Estimating Boat Numbers and Locations

WEEKEND DATES	HOLIDAY DATES
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^a June 30, 2001 was actually on the July 4th weekend since July 4 fell on a Wednesday in 2001.

Berger (2002) divided the lake into 6 unique areas and presented the number of boats observed for each area. For this study, the lake will be divided into 12 segments that correspond with the segmentation being used in the ongoing Recreation Assessment (Figure 1). The 12 segments can be easily condensed to coincide with Berger's original 6 areas.

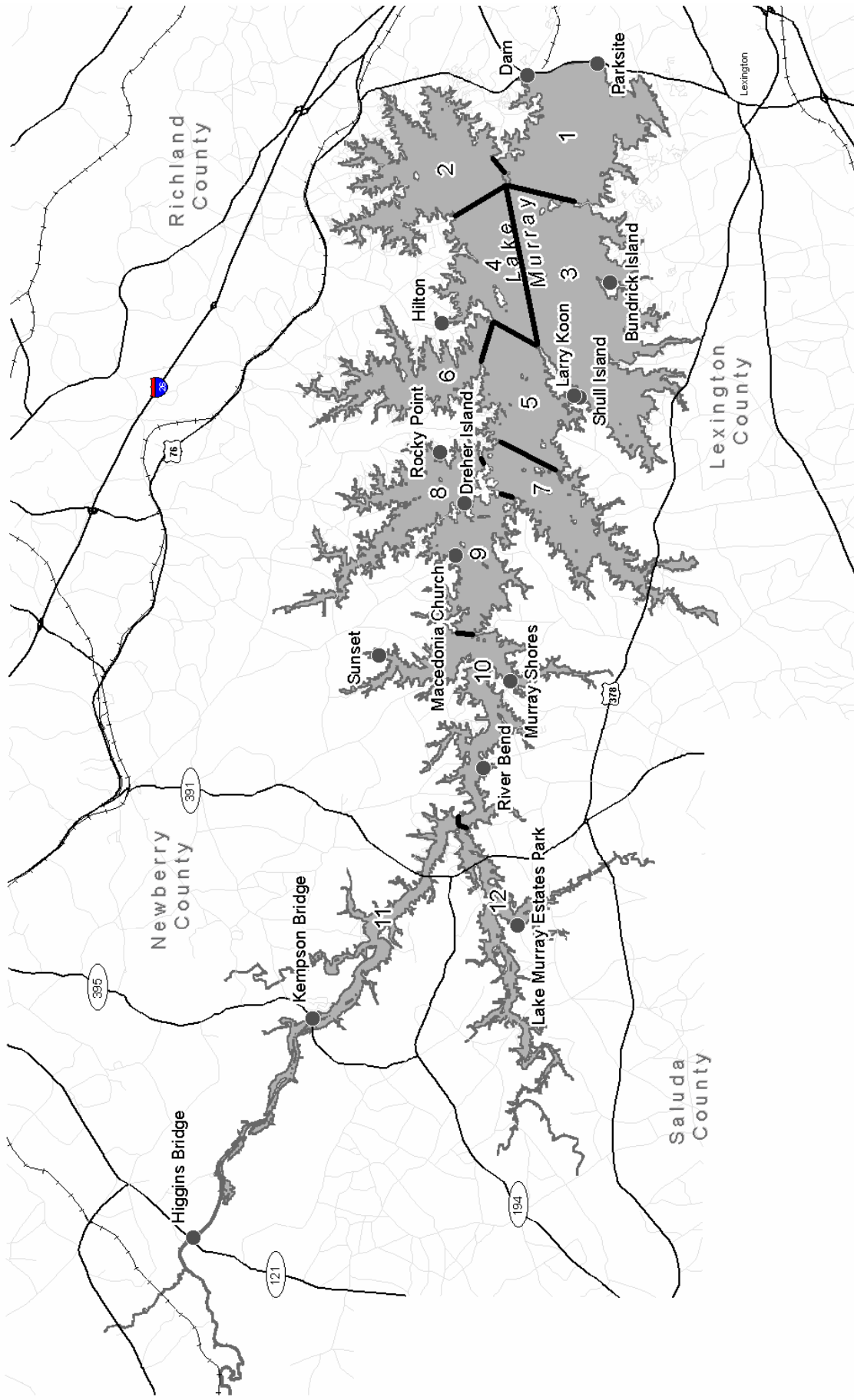


Figure 1: Division of Lake Murray into Segments for the Recreation Assessment

Boats appearing on each photograph will be counted and the number of boats observed will be tallied for each lake segment. Counts for each date will be stored in a Geographic Information System (GIS) as a unique record of data; records will be combined as necessary for analysis of normal (weekend) and peak (holiday) use periods. Total estimates for the 2001 recreation season will be accomplished by combining records.

2.2 Survey Data

As part of the Recreation Assessment being conducted concurrently with this study, exit interviews are being completed with users of SCE&G-owned recreation facilities. Respondents are asked if they spent any time on the water on Lake Murray. For those respondents that have spent time on the water, they are asked to indicate, on a segmented map of Lake Murray (Figure 1), where they spent the most time on the water and the resulting location is categorized into the corresponding lake segment. In order to ascertain perceptions of crowding on the water, respondents are also asked to rate the crowdedness of the lake on a scale from 1 to 5 (with 1 being “light,” 3 being “moderate,” and 5 being “heavy”). Respondents are also asked to identify their activities on the water, which will provide use estimates and distributions of activities occurring on different lake segments.

3.0 ANALYSIS

To estimate the preferred recreational boating level, the lake will be segmented and, for each segment, the level of current boating use and a preferred number of boats will be estimated. The preferred, or desirable, number of boats will define the number of boats that a segment can support without detrimental impact to the boating experience. Comparison of the estimated *current* level of use with the estimated *preferred* level of use will provide guidance on whether areas of the lake are being used above, below, or at preferred levels.

3.1 Lake Segmentation

Lake Murray will be divided into 12 segments for analysis purposes (Figure 1). These segments correspond with the segmentation used for the Recreation Assessment survey. Although we have divided the lake into more segments in order to determine boating densities in cove areas, the six segments identified in the Berger (2002) study were retained in order to provide a quality control check (i.e., the number of boats in each segment can be compared to estimates in the Berger report).

3.2 Current Use Estimates

Estimates of current on-water holiday and non-holiday use will be determined from the aerial photographs, adjusted by population increases and participation rates from the South Carolina Statewide Comprehensive Outdoor Recreation Plan (SCORP), for each of the 12 lake segments. The types of activities in which people are engaged will be estimated using results of the Recreation Assessment questionnaire, and discussed in the context of the SCORP.

3.3 Preferred Boating Capacity

The preferred recreational boating capacity of Lake Murray will be estimated based on procedures and standards identified in Bureau of Outdoor Recreation (1977), modified for use at this project. The usable boating surface area of each lake segment

will be determined by using the total surface area at full pond excluding islands and subtracting: (1) all isolated lake areas that are segmented from the larger reservoir and not accessible by boat from the lake; and (2) all areas within 75 feet (allowable length of private docks) of privately owned shorelines. For locations where shoreline development is not permitted, the 75 foot perimeter will still be applied to provide a conservative estimate of capacity.

For each lake segment, a preferred boating acreage will be estimated using procedures developed by the Bureau of Outdoor Recreation (1977) and modified by Warren and Rea (1989). The boating acreage for each lake segment will be estimated by assessing the characteristics of each segment and determining if these characteristics influence the overall recreational boating capacity for each lake segment in a positive (+1), neutral (0), or negative (-1) way. The following characteristics, referred to as factors, were adapted from Warren and Rea (1989):

1. Multiple use of water area. Reservoirs where a mix of different activities occur generally have a lower capacity level for each activity. This is because there is a higher potential of user conflicts between activity types than there would be at a reservoir that supports few activity types. Reservoirs that support few activities typically have higher capacity levels for each activity. As Lake Murray supports multiple recreation uses, the boating acreages for all lake segments will be adjusted by a negative (-1) rating for this factor.
2. Shoreline configuration. Reservoirs with an irregular shoreline tend to accommodate fewer boats than reservoirs with uniform shorelines. Lake Murray has a large, irregular shoreline and will therefore have boating acreages for all lake segments adjusted by a negative (-1) rating for this factor.
3. Amount of open water. Large areas of open water accommodate more boats and activities such as power boating, sailing, and water skiing in a safer manner than reservoirs with little open water. Lake segments with large areas of open water will be given a positive (+1) rating. Lake

segments with a moderate amount of open water will be given a neutral (0) rating. Lake segments with small areas of open water will be given a negative (-1) rating.

4. Amount of facility and shoreline development. Reservoirs with a high degree of public access, facilities, and shoreline development can support a higher recreational boating capacity than less developed areas. Also, recreators at locations with higher levels of development are more tolerant of higher use densities than recreators at less developed locations. Lake segments with a high level of development will be given a positive (+1) rating for this factor. Lake segments with a moderate level of development will be given a neutral (0) rating. Lake segments with a few or no public facilities or development will be given a negative (-1) rating.
5. Crowding. Crowding of lake segments can affect the recreational experience of users in a variety of ways. Crowding can contribute to user conflicts, displacement, and negatively impact user satisfaction. Perceptions of crowding can affect the behavior of recreational users, such as altering the times that they visit the lake or altering the locations they visit. Users from urban areas, or who typically visit higher use areas, are more accustomed to higher use densities than users from rural areas or users of lower use areas and are, therefore, generally more tolerant of crowding than others. Each segment will be assessed using the Recreation Assessment survey data of respondent's perceived level of crowding (rated on a scale of 1 to 5). Lake segments with a mean crowding level of 1 to 1.6 will be given a negative (-1) rating for this factor. Lake segments with a mean crowding level of 1.7 to 3.3 will be given a neutral (0) crowding rating. Lake segments with a mean crowding of 3.4 to 5 will be given a positive (+1) crowding rating.

Factor ratings will be determined and summed for each lake segment. The total factor rating score will be applied as an acreage adjustment in determining the preferred recreational boating capacity for each unique lake segment for the different boating activities. For example, the Bureau of Reclamation has determined the acceptable

acreage of water per boat for power boating is 9.0 acres (Table 2). A summed factor rating score for each lake segment is referenced in the adjusted acres/boat table. For example, a total factor rating score of -4 would increase the required acres of water per boat for power boating to 16.2.

Table 2: Acres of Water Needed Per Boat by Factor Adjustment (Source: BOR, 1977 and Warren and Rea, 1989)

Activity	ACRES OF WATER/BOAT										
	LOW	-4	-3	-2	-1	BASE	1	2	3	4	HIGH
Power Boating	18.0	16.2	14.4	12.6	10.8	9.0	7.8	6.6	5.4	4.2	3.0

The amount of useable surface area for each lake segment will be divided by the number of surface acres needed per boating activity to provide an estimate of the preferred number of boats that each segment of the reservoir might reasonably support at any given moment in time, assessed as though each activity were the only allowable use of the reservoir. To allow for multiple activity types, the number of boats will be multiplied by the distribution of boating activities that occurs at each lake segment during normal weekend use periods. Summing these provides the total recreational boating capacity for each lake segment, allowing for multiple activities to occur.

Some qualitative assessment of the findings will be required to address how different types of boating use may influence the estimated preferred recreational boating capacity of a lake segment. For example, some coves may provide excellent fishing opportunities that attract anglers, and may also be large enough to accommodate other uses such as tubing. Careful assessment of each lake segment will consider the types of recreational activities being undertaken in order to best determine the estimated preferred recreational boating capacity of that section.

3.4 Current Boating Density

The preferred recreational boating capacity for each lake segment will be compared with current boat densities for weekends and holidays. Using estimates of use derived from the aerial counts conducted at the project, the average number of boats at

Lake Murray on weekend days and holidays can be determined. Dividing the estimated current density by the estimated preferred recreational boating capacity will provide a percentage use density for each lake segment. For example, given a lake with 1,000 acres of usable surface area and a factor rating of -1, the preferred recreational “power boating” capacity would be 92.6 boats (1,000 acres/10.8 boats). If use estimates showed that the average number of boats on the lake is 50, then the percentage use density would be 54 percent (50/92.6).

Depending on the availability of data from the Safety RCG, the location of boating and related accidents will be assembled and plotted to determine whether there is a nexus between areas that experience high levels of boating accidents and areas with high boat densities. The location and severity of the accident, if available, will be mapped with the boating density for each lake segment.

4.0 REFERENCES

Bureau of Outdoor Recreation (BOR). 1977. Guidelines for Understanding and Determining Optimum Recreation Carrying Capacity. Department of Interior, Washington, DC.

The Louis Berger Group, Inc. 2002. Investigation of Boating Use on Lake Murray: Final Report. Prepared for South Carolina Electric & Gas Company, Columbia, SC.

Warren, Roger, and Phillip Rea. 1989. Management of Aquatic Recreation Resources. North Carolina State University, Publishing Horizons, Inc., Columbus, OH.

5.0 SCHEDULE

The proposed schedule for completion of the Boat Density Study is as follows:

TASK	DATE
Estimate number and location of boats as shown in 2001 photographs	November 2006
Analyze boat densities per lake segment and for the entire lake	December 2006
Estimate recreational boating capacity of each lake segment and for the entire lake	December 2006
Submit draft report	January 2007
Client and RCG review	February 2007
Finalize report	February/March 2007

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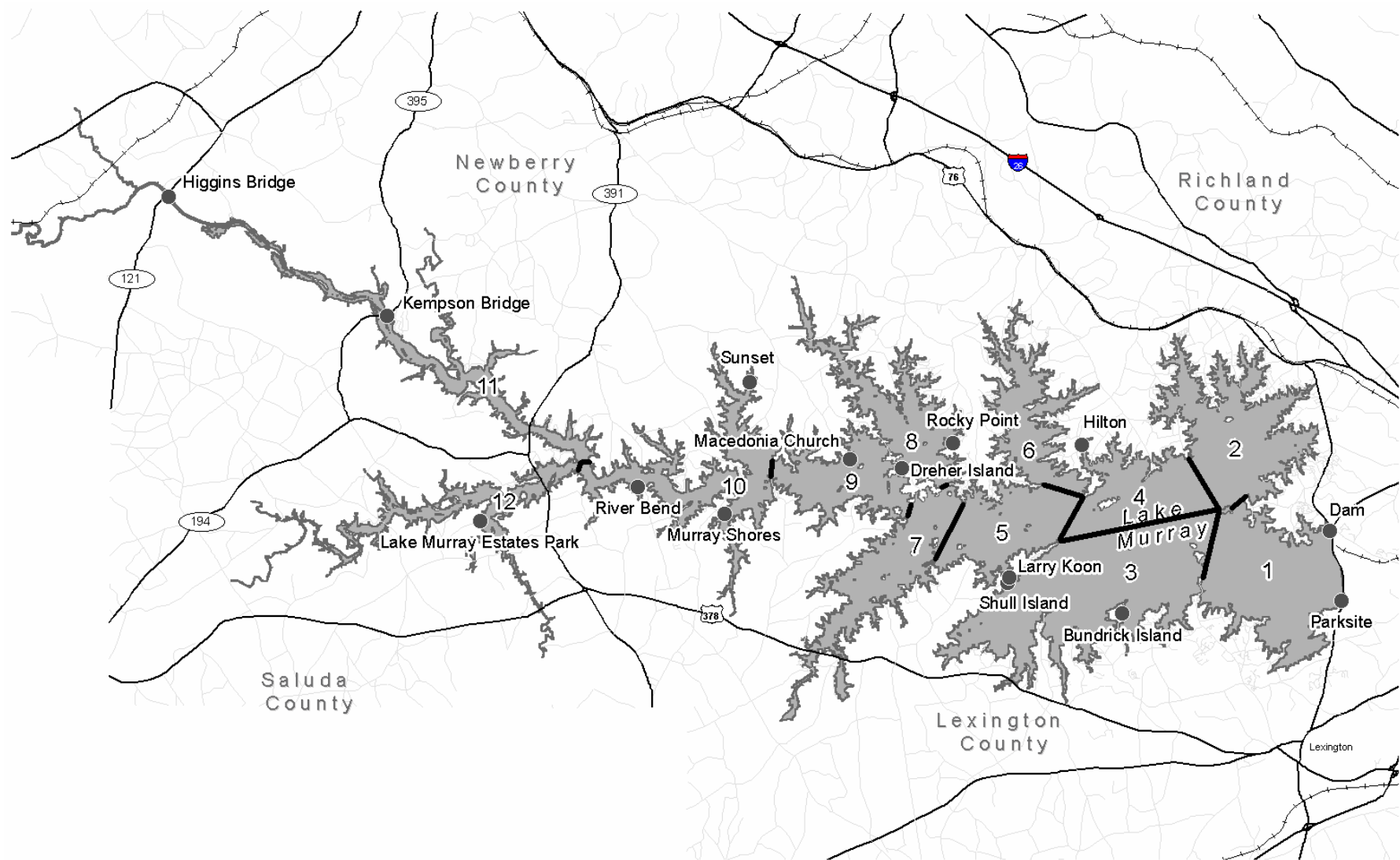


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segments with a moderate amount of open water will be given a neutral (0) rating. Lake segments with small areas of open water will be given a negative (-1) rating.

4. Amount of facility and shoreline development. Reservoirs with a high degree of public access, facilities, and shoreline development can support a higher recreational boating capacity than less developed areas. Also, recreators at locations with higher levels of development are more tolerant of higher use densities than recreators at less developed locations. Lake segments with a high level of development will be given a positive (+1) rating for this factor. Lake segments with a moderate level of development will be given a neutral (0) rating. Lake segments with a few or no public facilities or development will be given a negative (-1) rating.
5. Crowding. Crowding of lake segments can affect the recreational experience of users in a variety of ways. Crowding can contribute to user conflicts, displacement, and negatively impact user satisfaction. Perceptions of crowding can affect the behavior of recreational users, such as altering the times that they visit the lake or altering the locations they visit. Users from urban areas, or who typically visit higher use areas, are more accustomed to higher use densities than users from rural areas or users of lower use areas and are, therefore, generally more tolerant of crowding than others. Each segment will be assessed using the Recreation Assessment survey data of respondent's perceived level of crowding (rated on a scale of 1 to 5). Lake segments with a mean crowding level of 1 to 1.6 will be given a negative (-1) rating for this factor. Lake segments with a mean crowding level of 1.7 to 3.3 will be given a neutral (0) crowding rating. Lake segments with a mean crowding of 3.4 to 5 will be given a positive (+1) crowding rating.

Factor ratings will be determined and summed for each lake segment. The total factor rating score will be applied as an acreage adjustment in determining the preferred recreational boating capacity for each unique lake segment for the different boating activities. For example, the Bureau of Reclamation has determined the acceptable

acreage of water per boat for power boating is 9.0 acres (Table 2). A summed factor rating score for each lake segment is referenced in the adjusted acres/boat table. For example, a total factor rating score of -4 would increase the required acres of water per boat for power boating to 16.2.

Table 2: Acres of Water Needed Per Boat by Factor Adjustment (Source: BOR, 1977 and Warren and Rea, 1989)

Activity	ACRES OF WATER/BOAT										
	LOW	-4	-3	-2	-1	BASE	1	2	3	4	HIGH
Power Boating	18.0	16.2	14.4	12.6	10.8	9.0	7.8	6.6	5.4	4.2	3.0

The amount of useable surface area for each lake segment will be divided by the number of surface acres needed per boating activity to provide an estimate of the preferred number of boats that each segment of the reservoir might reasonably support at any given moment in time, assessed as though each activity were the only allowable use of the reservoir. To allow for multiple activity types, the number of boats will be multiplied by the distribution of boating activities that occurs at each lake segment during normal weekend use periods. Summing these provides the total recreational boating capacity for each lake segment, allowing for multiple activities to occur.

Some qualitative assessment of the findings will be required to address how different types of boating use may influence the estimated preferred recreational boating capacity of a lake segment. For example, some coves may provide excellent fishing opportunities that attract anglers, and may also be large enough to accommodate other uses such as tubing. Careful assessment of each lake segment will consider the types of recreational activities being undertaken in order to best determine the estimated preferred recreational boating capacity of that section.

3.4 Current Boating Density

The preferred recreational boating capacity for each lake segment will be compared with current boat densities for weekends and holidays. Using estimates of use derived from the aerial counts conducted at the project, the average number of boats at

Lake Murray on weekend days and holidays can be determined. Dividing the estimated current density by the estimated preferred recreational boating capacity will provide a percentage use density for each lake segment. For example, given a lake with 1,000 acres of usable surface area and a factor rating of -1, the preferred recreational “power boating” capacity would be 92.6 boats (1,000 acres/10.8 boats). If use estimates showed that the average number of boats on the lake is 50, then the percentage use density would be 54 percent (50/92.6).

Depending on the availability of data from the Safety RCG, the location of boating and related accidents will be assembled and plotted to determine whether there is a nexus between areas that experience high levels of boating accidents and areas with high boat densities. The location and severity of the accident, if available, will be mapped with the boating density for each lake segment.

4.0 REFERENCES

Bureau of Outdoor Recreation (BOR). 1977. Guidelines for Understanding and Determining Optimum Recreation Carrying Capacity. Department of Interior, Washington, DC.

The Louis Berger Group, Inc. 2002. Investigation of Boating Use on Lake Murray: Final Report. Prepared for South Carolina Electric & Gas Company, Columbia, SC.

Warren, Roger, and Phillip Rea. 1989. Management of Aquatic Recreation Resources. North Carolina State University, Publishing Horizons, Inc., Columbus, OH.

5.0 SCHEDULE

The proposed schedule for completion of the Boat Density Study is as follows:

TASK	DATE
Estimate number and location of boats as shown in 2001 photographs	November 2006
Analyze boat densities per lake segment and for the entire lake	December 2006
Estimate recreational boating capacity of each lake segment and for the entire lake	December 2006
Submit draft report	January 2007
Client and RCG review	February 2007
Finalize report	February/March 2007

Kacie Jensen

From: Alison Guth
Sent: Wednesday, June 13, 2007 2:25 PM
To: Alison Guth; 'Van Hoffman'; Alan Stuart; Alison Guth; 'Bill Argentieri'; 'George Duke'; 'John Frick'; 'Kim Westbury'; 'Randy Mahan'; 'Rhett Bickley'; 'Ronald Scott'; 'Roy Parker'; 'Theresa Powers'; 'Tommy Boozer'; 'Tony Bebbler'; 'Amanda Hill'; 'David Hancock'; 'Dick Christie'; 'Jennifer O'Rourke'; 'Joy Downs'; 'Ron Ahle'; 'Steve Bell'; 'Suzanne Rhodes'
Subject: Land Rebalancing Scoring Sheets

Hello all,

It was brought to my attention that on the Land Rebalancing scoring sheets many of the parcels had the same score, however the number ranking continued to rank them consecutively. For example, if there were five parcels that scored 48, excel sorted them alphabetically and they were ranked 1,2,3,4,5 even though they all should have had the same ranking of 1 since they were the same score and should be viewed equally. I have since fixed the ranking and have attached the scoring sheet below. Also, at the top of the excel sheet, instead of having the top 25, I have presented the parcels that scored the top 5 scores. I know that this is somewhat confusing so if you have any questions after viewing the excel sheets, feel free to contact me. Thanks, Alison



Land Rebalancing
comparison ch...

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Kacie Jensen

From: Dave Anderson
Sent: Monday, May 14, 2007 4:18 PM
To: 'Tony Bebber'; Alison Guth
Cc: 'Van Hoffman'; 'Bill Marshall'; 'David Hancock'; 'Dick Christie'; 'George Duke'; Jennifer Summerlin; 'Joy Downs'; Kelly Maloney; 'Lee Barber'; 'Malcolm Leaphart'; Marty Phillips; 'Patrick Moore'; 'Steve Bell'; 'Tim Vinson'; 'Tommy Boozer'
Subject: RE: Results of Lake Murray Assoc. survey of adjacent landowners

Attached is the report provided by the Lake Murray Association; thanks Joy!

-----Original Message-----

From: Tony Bebber [mailto:tbebber@scprt.com]
Sent: Thursday, May 03, 2007 8:03 AM
To: Dave Anderson; Alison Guth
Cc: Van Hoffman; Bill Marshall; David Hancock; Dick Christie; George Duke; Jennifer Summerlin; Joy Downs; Kelly Maloney; Lee Barber; Malcolm Leaphart; Marty Phillips; Patrick Moore; Steve Bell; Tim Vinson; Tommy Boozer; Tony Bebber
Subject: Results of Lake Murray Assoc. survey of adjacent landowners

I could not find on the relicensing website the results of the LMA survey as discussed recently when reviewing the Recreation Assessment. Can you provide me a copy or post and notify? If it is to be a part of the data we are using to plan recreation improvements, we all need to see it. Descriptions of the methodology would help too.

Thanks,

Tony Bebber, AICP
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SC Department of Parks, Recreation & Tourism
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Shaping & Sharing a Better South Carolina

websites: www.DiscoverSouthCarolina.com www.SouthCarolinaParks.com www.SCTrails.net

The Lake Murray Association, Inc.



Report on September 2005 Lake Murray User Survey

Survey Background and Criteria

Background

The Lake Murray Association (LMA) was formed in 1994 from a group of citizens who were concerned about the effect of normal daily operations on the elevation level of the lake, particularly during the winter months. To insure unbiased representation of all lake users, the LMA conducted a comprehensive survey of homeowners, day users and Lake Murray associated businesses in 1996. This survey quickly identified additional issues, beyond lake level, that concerned lake users. Primary among these was safety on the lake, water quality and recreational use and facilities. LMA has used the survey to formulate its user oriented policies for the past nine years - modifying the policies occasionally with information gathered at our public meeting and from constituent letters. LMA has also used the data when meeting with our State Representatives concerning legislative issues that would impact the use and operations of Lake Murray.

Criteria

The current survey re-emphasizes some issues from the 1996 survey but is also oriented toward identifying any new concerns that should be addressed by LMA as an intervener in the FERC - SCE&G re-licensing process during the next few years.

From mid October 2005 to February 2006, the LMA distributed approximately 5500 survey forms in an effort to reach as many lake users as possible. Of this number, approximately 1000 were delivered to our members via US mail, approximately 3600 were distributed by our directors to lake community neighborhoods in Lexington, Richland, Saluda and Newberry counties. The remaining 900 were placed in 25 Lake Murray related businesses around the lake. The owners of these businesses distributed them to their customers via mail, placed them in the bags with merchandise or placed them in a prominent place on their check out counters.

Approximately fifty percent of the returned surveys were signed or identifiable by respondents name (return address, etc.). All data entered into the survey data base can be validated back to specific survey forms.

LMA is confident that the returns are a true representation of the concerns that current lake users have about Lake Murray.

Results of the 2005 Survey of Lake Murray Users

South Carolina Electric and Gas (SCE&G) has applied to the Federal Energy Regulatory Commission (FERC) to renew their license to operate the Lake Murray hydroelectric facilities for the next 30-50 years. The Lake Murray Association is a major intervener for recommendations on future operations of Lake Murray. We are soliciting your input because a representative number of all the users; property owners, lake related businesses and other interested parties is absolutely essential in developing a fair and impartial license that will allow the most individuals to utilize the lake.

- 1. Do you own lake front property? Yes 880 No 263
- 2. Do you live on the lake or in a lake side community? Yes 853 No 290
- 3. Do you own a Lake Murray related business? Yes 74 No 1069

- 4. How frequently (daily, weekly, etc) do you use the lake?
 Daily 309 Weekly 449 2 x week 35 2 x month 34

Plus many more periods hard to categorize.

- 4.a. What is your primary use of Lake Murray?

Fishing 522 Swimming 217 Water Skiing 30 Personal Watercraft 17 Pleasure Boating 230 Diving 17 Irrigation 17 Drinking Water 3 Viewing 24
 Other: Kayaking, Bird watching, Feeding wildlife, Sailing, Business, Wind surfing

- 5. Do you own a water craft? (sail boat, power boat, pwc, etc.) Yes 1003 No 140

- 6. In which county do you live?

Lexington 777 Newberry 81 Saluda 65 Richland 203 Aiken 1
 Spartanburg 1 Fairfield 1 Greenville 1 Kershaw 1 Union 2 Sumter 1
 Orangeburg 1 Out of State 1

- 7. Are you a member of the Lake Murray Association? Yes 549 No 594

- 8. How do you feel about the number of free public access sites on Lake Murray?

Enough 585 Need more 279 No opinion 249

Other (explain) a. Convert Bundrick Island into a first class park. b. Too many! c. Fortunately Putnam landing is near us. d. Need safe boating usage. e. Leave it to the experts. f. More than enough! g. Lexington County needs additional free ramps.

Comments on question 8

But not many.
 I own property on the lake but there are many not so fortunate and I would like to see access for others.
 Would like to see more grass eating carp.

If government will get out of boat landing business
Enough access, not enough trailer parking.
Upgrade the ones we have. Ex. One off Amicks Ferry Rd is very small.
We need wake buoys at all public accesses in coves.
I'd hate to see more traffic on the water but the public should have more access.
I keep my boat at Jake's landing.
When I didn't live on the lake, I have said "need more", but now I'm selfish and don't want extra traffic.
Any boater/water crafter should have to either obtain a permit or pay each time they put in to use the lake. My taxes pay for that. Non-residents should pay.
Let the public buy their own lake property. I appreciate the effort LMA has put forth concerning water issues, however we all know SCE&G is going to flex their muscle whenever they please. They do not own the water in LM, it is made up of navigable wat
More of a "beachy" or sandy area.
Lexington County needs additional free ramps.
The lake was not made to live on. It was made to make electric power. Water quality: all the button bushes & other shoreline structure have been removed. Some of the chemicals used on lawns & houses runs into the lake. The rules that apply to the lake are not enforced.

9. Currently, free public lake access is better on the:

North side 89 South side 95 About the same 252 No opinion 674

No answer: 31

10. Since our 1996 survey, LMA has championed 354' msl (mean sea level, elevation) as a minimum year around lake level that benefits most homeowners, businesses and other users. Since then, the Lake Murray development has increased greatly. What is the minimum lake level you need for year around safe lake use at your normal site or dock?

a. 353' msl _____ b. 354' msl _____ c. 355' msl _____ d. 356' msl _____ e. If other, what ___

The results are:

Cumulative Totals

353 msl or lower	110	10%	10%
354 msl	451	41%	51%
355 msl	252	23%	74%
356 msl	264	24%	98%
357 or higher	35	3%	100% (rounded down)

Number that did not answer 31

Total number of answers was 1113, including 538 LMA members.

Comments on question 10

Lake levels are tied into the security of the dam and should be heeded..
Keep the H2O up. Keep up your good work!

As long as I am not high & dry!
Why do lake levels have to be dropped in winter. My desire is to leave lake levels as high as possible. We have lived here 21 years.
It's OK to lower water in winter. Need a formal documented program for testing water quality by someone other than SCE&G. Test for pesticides, herbicides, heavy metals, organic chemicals, etc. Publish results & trends.
I enjoyed the lake even more when it was at its highest this summer.
Any level is fine.

11. SCE&G owns large areas of shoreline lands around the Lake. If some is sold there will be a 50 or 75 foot buffer from the 360' msl line. Some groups advocate that the buffer zone between the private property and the 360' msl should be public and useable by anyone. Should the general public be allowed use of the buffer between the homeowner's property and the 360' msl line?

- a. Yes _____ b. No _____ c. No opinion _____

The results are categorized according to the first 3 questions

Those who own lake front property:

	Total	LMA Members
No	783	462
Yes	56	26
No Opinion	31	17

Those who live on the lake or in a lakeside community:

No	690	401
Yes	46	23
No Opinion	25	13

Those who own a Lake Murray related business:

No	69
Yes	3
No Opinion	1

All other users:

No	90
Yes	56
No Opinion	25

No answer: 13

Comments on question 11:

Because I have a dock and a boat lift, the public would be using this. They could have campfires and over night parties- drinking/drugs etc.
Because of camp fires and fire hazards. They would be using this for overnight camping and parties

which might be noisy and could include drugs and drinking.
Absolutely do not want public use in front of homes to trash prop. Waters are often trashed & believe it is more lake users than lake homeowners.
The buffer zone should be removed
SCEG should pay the property taxes on buffer zones. They are crooks! And liars!
If it is opened to the public, it is no longer a buffer zone. Might as well be homeowners.
No, except in an emergency.
Nope - ATVs will use it. Need more no-wake markers.
Privacy issue. Would be trespass between homeowners door to shoreline which is only 1-2 ft away from our turf. Need sunbathing privacy. Keep us posted on future development especially private marinas with homes. Fear possible density issues with more condos.
That so called buffer would put the public in my front yard, that will not work.
Too great risk for abuse of privilege to use.
If there were no public access to the buffer zone, I expect the owner of the adjacent property would "house keep" the buffer zone. If public access is allowed environmental & house keeping problems will occur.
Absolutely not! Our property has the 75' buffer zone yet our tax rates are the same as property owners who do not have the setback. This does not seem fair. We have also made a fair investment in maintaining our property. We have a dock and gazebo. Do these groups also advocate the public's right to the use of my dock? I do not understand how this could be possible. Would the public be allowed to park in my driveway and use my bathrooms? You can count on my support to oppose this ruling..
I would need a diagram to accurately answer. Keep up your good work!
I would like to see SCE&G continue to own & not see a lot of development due to water quality.
NO! When SCE&G pays taxes on lake front property I feel that then it may be appropriate to ask this question!
Absolutely not! I already feel uncomfortable when I go down to swim and a bass boat is floating next to my dock watching me. I don't need squatters. After the drawdown, the water was smelly and very discolored red with weeds floating everywhere. What a change from when we moved here. And to think we have to go through it again.
How would you like it if the public used your yard as a public toilet or trash dump?
And if they do who will clean up the after they use said property. Who pays the taxes for this lake front property?
Same as above.
Public will not respect and keep area clean. Homeowner should have to pay for access to land - they should not view the buffer zone as their land.
Under brush should be cut.
Yes, in case of an emergency.
Opens door for too much controversy. If public, anyone can use it with limited restrictions. Wouldn't want partying beer drinkers in my back yard.

12. In the past, LMA has not opposed responsible shoreline development around Lake Murray. Our criteria has been that the development must be environmentally friendly to the immediate area and must not negatively impact the water quality of Lake Murray. Do you agree with this philosophy?

Yes 1016 **No** 127

If no, please give your recommendation(s):

Shoreline is getting to populated.
But roads are inadequate for increased traffic.

Sewer systems need to be available to more lake neighborhoods.
We are endangering a precious resource. Shoreline development must be curtailed.
For the beautiful jewel Lake Murray, I firmly believe that the development around LM has reached and probably passed its optimum percentage.
There needs to be a stopping point
Yes, but the total amount of development should be limited. Aquatic vegetation - primrose - is a problem. If it gets worse we need an effective way to curb the growth. Also, I don't support the release of any more grass carp.
LMA support sewer dev around lake. I think LMA should be politically active in a unified manner, for 1 maintaining 356, 2 improved environmental procedures ((no dumping, water & sewer sys all lake.3 push SCE&G to be more publicly responsible.
Including phasing out septic tanks. I think SCE&G should enforce the "no cutting" rule below the 360' level. They do not!
It should be very closely monitored. I see no reason for lowering the lake every winter. I've never heard a real reason for it and find it hard to believe much of what SCE&G says. I also think it is ludicrous that they are taking it down to 348' again.
However, as you know a body of water will support heavy traffic for a short time.
Yes for now, not much more development though.
As long as we don't overbuild.
I don't think there should be anymore development
I think someone must be a "watchdog" for the water quality and development. Some NC lakes are now suffering because of development
No new septic tanks.
The lake could use additional marinas/restaurants but we do not need anymore housing on the lake. We saw a bald eagle out at sandy beach yesterday. Doubt one will be seen there if it were developed.
This should be carefully checked.
Within reason.
Emphasis in water quality seems to be focusing upstream. That's a good start, however many older homes and entire communities have septic systems that are or will fail. These are all around the lake. I would hope that LMA in conjunction with the county
SCE&G is not consistent in enforcing the 360" line, as in removing trees, etc w/o permits/permission. Please contact me about membership in LMA.
They should make restrooms
Re: docks marinas 1 dock per 100' wf. People who bought on "seasonal" water & paid less for property than those who bought on "year-round" water should not be demanding that SCE&G allow them longer docks.
Our only concern is septic tank issues.
But, would like to see more use of green space.
LMA needs to support, develop and research the impacts of shoreline development on eco-systems

13. In your opinion, over recent years, has the water quality of Lake Murray:

Improved 83 Remained the same 380 Gotten worse 439 No opinion 191

Comments about question 13:

Hurray, no hydrilla & Illinois pond weed this year in our cove but the old pond weed roots are still a problem.
Due to growth of aquatic plants
Water is good. Plant/aquatic growth is worse since drawdown- water primrose.

Building, maintaining house around shoreline of lake and maintaining docks contaminates water.
Hard to tell with the level being so low the last 2 years.
All jurisdictions around the lake and/or feed into the lake accountable for; 1. chemicals & other hazmats flowing into the lake, 2. making it easier & less expensive (whatever) for older (or all) septic systems to be replaced by city sewer. Septic systems are failing even in "good" neighborhoods. Just imagine what's going on elsewhere.
Due to hydrilla.
Since the carp were introduced = less hydrilla.
Need more under water grass killed for boaters & homeowners.
Could not use too much over the past 2 yrs with the low level. Up now. It was not as clean due to rising water in areas dry for 2 years. Possibly the quality is better, I just can't see that yet.
Hydrilla has gotten worse.
Because of the weeds, water itself is OK.
Somewhat.
We need to stop poring chemicals into lake for weed control. We need to purchase and maintain a grass harvester. This is the only way to have control over what grass is removed and where it should be allowed to grow for fish habitat.
I really don't know but with so much traffic & usage I can't believe its gotten better.

14. Do you use the Lake Murray Association web site (Lakemurrayassociation.org or Lakemurrayassociation.com) for current Lake information?

Yes 272

Comments on question 14

Would like more info on lake events/activities.
I did not know LMA had a website. I will use now.
Look to see what's happening.

15. Other comments:

It's funny, my mother lives on the lake and she has only been on the water 2 times in 25 years. My in-laws have a place on the lake and they do not even come up there after labor day. So lake elevations between Sept and March are not that big of an Issue.
Lots of trash floats up to our shores and especially on holidays and weekends. Lake users are not concerned with throwing out trash and letting someone else worry about cleaning it up.
Please do not sanction overdevelopment of the lake. It's already getting dangerous from storm water runoff and jet skid.
Need more free public access sites with better amenities
I am worried about the "overdevelopment" of the shoreline with the number of condo developments being planned on the lake, specifically those around the marina in Timberlake and Crystal Lake.
The association does an excellent job in representing it's members. Future development and water quality are the two biggest issues we are facing.
Keep up your excellent work.
Maintain trees on shoreline
Need to set houses back – maintain shoreline trees so looks natural from lake!
I attended the LMA meeting on 9/20 and found it interesting and informative. Thank you for the work you do.
You can't stop development but you can control effluent going into the lake. Too many septic tanks drain

fields are not up to code as evident in aquatic growth around the shoreline.
Although the water quality appears to have remained the same, there have been times when hydrilla has limited or shut down boating and swimming in my cove.
Waters are often trashed & believe it is more lake users than lake homeowners.
The "grass" problem seems to be much better around the pine island area.
Maximum lake level 357.
The "grass" is better around the pine island area.
Keep an eye on lake weed growth to keep under control & monitor responsible use of lake & preserve its beauty.
Water quality is poorer than when I moved here, 1993.
Can LMA help with local governments to get sewerage to residents?
It would be a big help if LMA could help with sewerage around the lake
If I had my choice I would like to see the lake level stay more stable between 357 - 360 msl. More like the levels of all other lakes in SC. Build another nuclear plant or use steam.
Did not know web address
We appreciate the work of the Association and hope Lake Murray can continue to be a beautiful lake
Could our Association continue to encourage SCE&G to communicate better to the lake community? (dropping the lake without telling when it will happen, etc.)
Need better communications with homeowners & SCE&G about the lowering of lake levels. Tell us when they are changing lake levels and for how long.
Would like to see LMA involved in not letting some of the no wake zones getting bigger. The one in front of the Lake Murray Marina is too long.
I think SCE&G is an environmental disaster to taxpayers & residents. Duke power has maintained cleaner projects in NC & Tenn. SCE&G killed most of the strippers over 20 lbs as they stupidly ran turbine # 5 during the hot summer. Air lines, oxygenation, etc has to be in place.
If you have someone to keep up into SCE&G's plans for future lake level changes and draw downs, put the GT in the newsletter and web site (without responsibility for accuracy, however)
We love the lake.
Lake Murray Association does a good job informing the public about lake problems, activities, and things of interest.
Regulation of septic systems (Esp. old systems; make it easier and less expensive for neighborhoods on lake to go to sewer systems.
No septic tanks should be allowed around the lake. And, all old septic tanks should be removed in areas where city sewerage lines are available! Also, old rusty sheds and trailers should be outlawed.
South side residents almost 10 years.
Lived on lake one year. Not familiar prior to that time. Enjoy every moment.
Lake level is not an issue for us. Let the power company do what they need to do.
SCE&G should give more info on their website as to changes in lake levels, current & future, and reasons why.
The full stage of the lake is 360'. Why does SCE&G maintain a level of 358' in the summer? Most lakes in SC go down only 2 feet in winter. I live on the upper end of the lake and 356 is as low as the lake can be and most people here can still use their docks and ramp on their property.
Shoreline development inevitable. Must come about in an orderly, controlled responsible fashion.
Additional shoreline development should be halted.
How about policing litter bugs on the lake. We get so much trash that washes up on our beach cans, bait containers, hooks & lures, Styrofoam, lumber from new What a mess!! Inexcusable!! Probably the same crowd that flicks their cig butts out the window.
We are right back to unreasonably low water levels. Even with the backup dam complete, SCE&G continues to demonstrate their arrogance re: this issue. Property taxes go up and stay up but not the lake level.

Maximum lake level 357'.
Keep up the good work!
Water primrose is expanding! Nobody seems to be doing anything about it. Its demise upon rising water was a misconception!
We had a house on lake Wateree for about 30 yrs and Duke power Company would only draw down the lake for shoreline and dock repair about every other year, and this was for six weeks in January and February (only 4-5 feet). The LWHOA had a strong voice wit
We need to protect the lake. That means limit development & enforce current restrictions. Homes on the lake are an investment in the lake. I take mine seriously.
I have lived on the lake for 10+ years - water quality is worse than when I first moved onto the lake. I don't think anyone realizes the septic tank runoff that goes into the lake during wet weather.
LMA is very important. We sail on the lake occasionally, raft-up to spend 1 - 2 nights. There are fewer coves which provide secure anchorage that are not being developed. Keep a balance.
Would like to see more grass eating carp.
Too many docks within (100 feet of water)
Extremely noisy boats on the lake should be banned. High speed boats and boat racing should be limited to assigned areas.
I believe that SCE&G should use the waters of LM for "emergency electrical power generation". Say, when peak electrical loads exceed 93% of capacity they may energize the water turbines. When the load drops below 90% capacity they should cease using Lake Murray water. This is a similar program as used by industry for load shedding during an emergency period.
1. The huge developments along the shoreline will eventually destroy the lake, especially ones like crystal lake project with huge marinas 2. It sickens me to see what some of those trashy, filthy people have done to our lake islands. There are literally mounds of trash, cans, bottles, chairs, etc scattered on almost every one. People urinate and defecate all over the place and just leave it. Public access, Ha! We should do away with public access altogether.
I personally do not feel the so called "buffer zone" serves any useful purpose and the rules that apply to these areas are quite simply unfair and discriminatory toward property owners in these areas. These people paid premium monies for lake front property.
We live here year round. Are aged (83&79) so don't boat anymore. We have a water system, drink from the lake. We've lived here 30+ years.
Property taxes need to be lowered. Esp. for retirees on fixed incomes that have been on the lake for some time. They need to be grandfathered back several years.
I' m greatly concerned about the ever increasing voice of environmentalist and fishermen (many who don't live on the lake - no property tax, no significant investment in lake homes, etc). I do not want to see LM become a "fishing lake" only. We need more
We need to ban cigarette boats or have a noise ordinance. We also need to educate the bass boat people about "no wake" and avoiding diving flags.
We just moved here so we do not have much opinion at this time.
Like to see a noise ordinance on boats on the lake.
Keep us posted on future development esp. private marinas with homes. Fear possible density issues wit more condos
Stop large developments getting lake access thru small lake front footage ie Crystal Point!
Stop large developments getting lake access thru small shoreline footage. Ie Crystal point
We must develop a policy to prevent large developments large access to the lake thru very small common use access. NO 110 slip marinas!
The association is doing good work for residents of the lake.
Keep the water up!
Keep water up!
Would like to see summer pool between 359' & 360' msl.
The severe fluctuating lake levels over the last 10 years are impacting the ecology of the lake.

I believe the lake level should be maintained in the winter months at least at the 354' level. It appears that regardless of what the lake owners would like that SCE&G does what it wants.

Believe water quality will continue to decline if the lake is not allowed to stabilize. Quality of life has decreased due to noise from jet skis, and "Miami vice" cigarette boats, and too many people. Many have the mindset "let's go to the lake & raise hell

I suspect this doesn't apply to the licensing, but we really need to do something to get sewer lines put in around all the lake. The water quality is declining because of septic systems.

Sewer lines need to be placed at homes around the lake. Septic pollution is a problem.

Thank you for being an advocate for lake Murray recreation and responsible management.

In our opinion we need new members for the commission regulating SCE&G, They get the commission to approve everything they want to do.

In our opinion, we need new members for the commission regulating SCE&G. They get the commission to approve everything they want to do.

Please urge the FERC & SCE&G to wait to lower the lake until January! Jan is the coldest month & has the peak demand for elec. It would give us 4 more months of usage. The vegetation along the edge would freeze in Jan, Feb & March.

Keep water level at 355 msl all times (year around).

I am opposed to golf-course-like grass planted between houses and shoreline. Fertilizers, pesticides and petroleum products used on the grass are harmful. Plant the shore with native trees, shrubs and other plants (flowers). (Trees for fall color.) They don't have to block all the view. My son is a member of Lake Watch. I have owned property on Lake Murray since 1965.

We live on the lake and are not involved with lake management like we should be. This is in part due to feeling that SCANA will do whatever they want. Like drop the lake almost two feet overnight with no warning. Public opinion is that SCANA views all of us as pests. They will throw us a bone sometimes, or just ignore us. If we really have a voice, a real voice, then sign me up, but if it is just a club, sympathy group or support group, I do not have time for the pep-rallies.

Leave level at 356' year around.

We need more clean, sandy bottom areas for swimmers to swim if keep the people off ramps & docks for swimming access.

We are new to the LM area. I've put the LMA site on our favorites menu& plan to check it regularly. Thanks for informing us about the site's existence.

SCE&G should be encouraged to issue a monthly letter (newsletter) to all regarding their position and the status of all of the issues impacting on owners of lake front property.

We need some relief from primrose

What happens to one part of the lake affects all of us. Someday, somebody must seriously pursue a sewerage plan for the entire lake area. Sewerage disposal around and on the lake is a disaster waiting to be recognized which will be done when it erupts.

Would like to see the lake level kept at 358' - 360'

Water quality has gotten worse and will continue as long as no sewer system is installed around the lake living area.

SCE&G is not user friendly & does not have a reputation for veracity.

Do not allow anymore marinas. Require marinas to move docks that impair safe passage of other boat users.

Keep up your good work!

I have concerns about town of Lexington reluctance to run city sewer lines out to existing (older)developments where older systems are starting to fail. Hallmark Shores is a prime example. Water issues are not confined to the western end of the lake. Lexington is approving city sewer for new developments but ignoring requests from older developments.

Keep up the good work!

Most important issues, 1. Minimum 354' level, 2. Control of hydrilla & other aquatic weeds, 3. Convenience of fuel availability - regret the closing of Epting & Putnams landings.

LMA does a good job of balancing the needs of all stakeholders. Sound judgment and reasonable approach.
Keep up the good work LMA.
90% of our neighbors lose their boats at 354 thru 352 msl.
I feel that defoliant should not be used within 1 mile of the lake. They are currently being used in ditches and road R/Ws that drain into Lake Murray. I see evidence of this in some places.
I think the issue of the minimum year around lake level of 354+ should be advanced even more aggressively through the appropriate channels. I would be willing to assist in any way needed.
Put "no wake" signs in the most used coves (near dam) to slow down the ever growing number of speeding jet skiers.
I heartily support LMA & its' stated mission & appreciate those providing the numerous man hours to achieve success. Thank you.
In the 100 block of Country Lake Drive, Lexington, SC a lot has been cleared of large trees below the 360' mark. Workers are now in the process of building a large gazebo below the 360 line. Lake management has been notified, yet building continues.
I believe SCE&G should put smoke scrubbers on chimney exhausts. No study is needed. Check the companies that burn the same coal that they do. If they have scrubbers, why not SCE&G?
The water quality on the west end has deteriorated considerably since the drawdown. It is swamp like. When swimming the body is covered with a brownish substance. I suspect this may be from rotting vegetation. Now we are faced with another - SURPRISE! – draw down. Can we now expect more large masses of primrose and other vegetation to take over? I am so sick of this! I want my lake back!
I'm a new resident to the area. Questions were answered accordingly.
The condos at LM marina are just the beginning . Every boat landing is now a target for developers. They remove public boat slips then buy up the new marinas that try to provide the lost slips. Stop it now before it's too late. Even if we have to oppose new marinas; which the lake really needs.
LM is already overdeveloped - continued development harms the environment, pollutes the water, and will destroy what remains of a nice lake.
Thank you for your efforts. SCE&G needs control - both short term (re lake level) fresh water and long term (vision & development around the shore).
No more communal docks. With 2 more planned condo communities, we could have 500-600 more boats on the lake. Residents already don't go out on the lake very much on weekends. Too many boats = too much rough water. Too much wear & tear on docks & islands.
If we're not careful, development on LM will destroy this beautiful lake. I remember 40 years ago I'd come to the lake to fish and hardly any houses on this lake, Now you can't count the homes and everything else, look out!
We need no wake zones in some narrow coves to prevent skiing that damages our boats and docks.
Survey of LM users should be extended beyond LMA members, particularly to LM HOAs and responses, if in sufficient numbers, should be included with ours in lobbying for minimum year around lake level. There is a list of HOAs, contacts, in materials I turned over when giving uo membership chair.
Trash on the islands left by rude lake users needs to be addressed- stiffer fines, signs posted, more patrols looking for folks dumping. People should be more responsible for their litter.
Please send info on membership.
Can not trust SCE&G.
Other lake mangers allow covers over boat lifts and boat slips. Lake Gaston on the NC & Va border is a good example.
LM is a wonderful asset to the midlands & State. It should be maintained as a healthy environ for wildlife & human use. Commercial development should not be allowed on it's shores. Except for marinas, landings & restaurants & pub access currently in place
I'm tired of picking up trash on the islands! LMA & NSPS members should be trained to report offenders to the proper agencies. Penalties should be as sever as confiscating boat. I'm concerned about Number of high density developments being built. Silt & silt and storm runoff are a growing problem.
Hydrilla remains a concern.

I would like to see license requirements for boat owners. There are too many kids & adults operating pwc's or boats that do not know anything about water safety & the operation of them.

Carp are doing nice job in my area close to Pine Island. The large house boat near Pine Island needs to be moved. It's a commercial size vessel in residential area. I am concerned about it's discharge.

I am angry about SCE&G putting a deadline on dock flotation & then delaying it after I replaced mine!

We have recently moved to LM & didn't know that the LMA existed. Now that we do, we will read about you on the website and perhaps become more involved. Thank you for the survey.

We need to be vigilant about the marina operators (Windward point sail marina in particular) who have not replaced their old styrofoam and who will not return their docks to the pre draw down position 2 yrs ago. If we don't stay after him he won't. Because he increased the size of his marina by a large number of slips when he was allowed to move out toward the open water.

Moving the lake up and down more than 2 feet has a negative impact on yards, docks, boats, etc.

I would like to join the Association. Send application.

We would like to join the LMA.

I am new to the area. I moved from the Great Lakes (Ontario). It seems to me that SCE&G tries to micromanage the lake.

Taxes should be lowered drastically. If we don't own the lake why do we have to pay for it?

LM needs a mega-ramp to accommodate a large number of boats similar to Dorn facility on Clark Hill). Decent ramps around the lake are generally full during the spring & summers months. It would also attract major fishing tournaments bringing money into the area.

86 years old and not able to use the lake for recreation (occasional boat trip) but enjoys watching others on the water. Other family members enjoy the lake very much - since 1943.

The lake water quality and clarity was significantly deteriorated over the past 15 yrs. Development should be ceased immediately & prohibited from going further. Any more boats -lake safety is jeopardized, especially by occasional and untrained boaters using public docks.

Cannot trust SCE&G.

Water clarity & controlling hydrilla are very important to me. Definitely prefer grass carp instead of chemicals. Boat noise is also an important issue, there are too many loud speed boats! There should be a noise limit imposed & enforced.

The lower Saluda River should also be considered as it is a wonderful area for fishing & recreation. Although sudden fluctuations not only disrupt recreation they pose a threat of possible death.

It would be interesting to know what long term plans there are to permanently eradicate or control hydrilla. I am not satisfied that we are free of it.

Boat traffic has increased dramatically since I moved to the lake in 1980. Some weekends are not only congested but dangerous. Majority of users have not taken a boating course & have little knowledge of safe & proper boat handling. At some point the number of boats must be restricted by decals or special permit to use the lake. In addition the number of homes that have NO sewer service (septic tanks only) have also greatly multiplied. These septic systems will be or are now contaminating our lake. I also think the hydrilla is not under control?

The main concern that I have is that there is plenty of habitat for the water birds & wildlife. I am totally opposed to hunting on Lake Murray, and you should make this a priority. It is unsafe & inhumane - these are not wild birds but birds whose homes are here. It is extremely unsettling.

Thank you for providing me the opportunity to provide my input.

Thank you for all your time & work.

Really enjoy the lake's beauty & use of the lake. Thank you for keeping it clean!

Since moving here in 202, wee have noticed an increase in airplane traffic overhead - particularly around 4-6 am. We lived in an area that worked with the International AP to restrict hours over large homeowner property areas during the hours of 11pm-6am w

With the GP in the buffer zone, who is going to cleanup the garbage? How can the GP enjoy the buffer zone if the grass isn't cut? ** Whoever thought up #11 should get a life and really worry about something important like the war, gas prices, sex abusers,

I would like to see areas of the lake like Sandy Beach that are family, kid, pet & boat friendly.

Try to balance the needs of property owners and lake owner (SCE&G)
I do not live at Lake Murray but have a lakefront, second home in Newberry Shores. Even though we are not full time lake residents we enjoy our house, boats and the Lake.
Allow & promote more events such as hydroplane racing. Also encourage more boat accessible marinas, tournaments, etc.
For whatever its worth. . . It would be refreshing if SCE&G would be honest with us regarding the fall draw down. It is to bad that this is not the ocean and the lake level can be controlled by man. We are always at the mercy of SCE&G as to whether we can use our boats & boat lift from our own docks. On the other hand we have to pay the high property taxes for being on the lake. . and can't use it.
I have used the lake less due to excessive (and reckless/ignorant) boaters and to water quality. With repeated draw downs, I sold my boat this month and am without a boat for first time in 32 years. Ever increasing taxes on a place I've lived 24 yrs make me question my ability to live here if I retire.
I believe that the state should require a boating evaluation course and/or a boating license prior to operating a boat.
Need a formal documented program for testing water quality by someone other than SCE&G. Test for pesticides, herbicides, heavy metals, organic chemicals, etc. Publish results & trends.
Control of hydrilla.
Allow more bars on the lake and increase the fishability.
Disturbed about private land owners being able to remove all trees from the lake front of their property. Need all county code to prevent this.
Fishing & boating have suffered over the last 25 years that I have been active on the lake. Growth & development are the cause.
Keeping the lake at 354 (min) is very important to me.
The LMA is providing good communications and involvement in matters important to lake users & lake front homeowners. However, promotion of the lake to encourage more people to use it is not in the best interest of the lake. It only benefits those who make money off the lake. Most of us do not.
People = pollution in asphalt run off. The vision plan for LM paid for by tax \$ should be required to be followed by planning & zoning commissioners & county govts. Stop the big money developers from turning LM into a cesspool like Lake Lanier in Atlanta.
We have enough public access to the lake.
Better communications needed on lake plans, water levels, and damn improvements & dates. The lake is taken down too early and too fast each fall.
I appreciate the effort LMA has put forth concerning water issues, however we all know SCE&G is going to flex their muscle whenever they please. They do not own the water in LM, it is made up of navigable wat
This summer the lake actually smelled bad in August. It was terrible. I am a physician working in urgent care setting near the lake in Chapin. There was a huge increase in external ear infections this summer from LM use like I have never seen before. Water quality is unacceptable and getting worse every day!! <u>Save the Lake!</u>
No marinas No sleep aboard vessels.
We wish the water level would stay the same (as the summer) through September. Typically it seems to be lowered the day after labor day and for those who live in a cove that basically ends our summer. Keep up until first of October.
Same comment as above
The buffer zone should be eliminated. Homeowners who live on the lake should be able to do as they please on their own property. Replacing over grown vegetation with nice landscaping helps to build the beauty of the lake.
Need more navigation lights & shoal marker buoys. SCE&G should permit all dock requests as long as 100' on water & no interference with boat traffic & no harm to protected vegetation. General public should not be allowed to have access on fringe setback between 360 & owner's property.
Since gas prices have increased so much, I am reduced to fishing just on the weekend. Now that most

private landings are closed, I can't get a parking space at public landing (Larry Koon) close to the area I like to fish.

A major public access, similar to Dreher Island State park and at the dam, need to be established about mid-lake on the south shore. Koon landing can't handle weekend users during the summer and commercial ramps cater to pontoon boats & have inadequate parking.

High density development should not be allowed.

Need better placement & numbers of lighted navigation lights - more police patrols, better marking/repair of existing shoal/rock area- many not marked or markers damaged or gone.

Leave some grass in the lake.

It is good to have watchers.

Please publicize any drop that is predictable, done deliberately. Even a couple of inches makes a difference in our shallow cove. Thank You.

Run sewer lines out to end of roads they run sewer lines out.

Erosion on SCE&G property goes unchecked. SCE&G requires private property owners to use riprap.

We need state restrictions, requirements, verification of any boat with holding tank to prove appropriate pump out has been done. There are many people dumping human & other (toxic) waste directly into the lake.

I feel there needs to be better law enforcement during the summer months. Race boats pose threats, drug use that is occurring is unacceptable. Do not allow my young children (4&6) on the lake at certain times because of the above.

Please maintain the hydrilla grass. If not, it would absolutely hurt the lake and its' uses.

In my opinion there is not enough area at LM for the general public. This past summer we pulled up to a dock and an area that looked public. It was an area owned & operated by SCE&G. We were very rudely told to leave. The girl at the gate was very offensive. I think we pay enough to that wretched SCE&G to use their property. For that reason we will probably leave and head to Clarks Hill where there is several national parks.

I support: another state park near Rocking Creek Rd, grass carp, efforts of the USCG Aux & Power Squad, no license/permission to operate a watercraft for a person suspended for DUI.

I believe the "no mooring" law should be enforced. In our cove is a mooring that is never used, is styrofoam and, I believe, a hazard to boaters (installed by previous owners). Also in our cove is a sailboat moored right in the center that is not lit at night. This is a hazard too. This cove is between Spence's Point and Spence's Plantation off Mooring Lane

Kacie Jensen

From: Alison Guth
Sent: Friday, April 27, 2007 1:10 PM
To: Van Hoffman; Alan Stuart; Alison Guth; Bill Argentieri; George Duke; John Frick; Kim Westbury; Randy Mahan; Rhett Bickley; Ronald Scott; Roy Parker; Theresa Powers; Tommy Boozer; Tony Bebbler; Amanda Hill; David Hancock; Dick Christie; Jennifer O'Rourke; Joy Downs; Ron Ahle; Steve Bell; Suzanne Rhodes
Subject: Lake and Land Rebalancing Comparison Charts

Hello All,

Attached are the much anticipated land rebalancing scoring sheets. I have included in the Excel workbook both the Natural group and the Economics group scoring sheets, as well as a couple of charts that compare the results. It may take a while to figure out the charts due to the large amount of data being depicted, but feel free to contact me with any questions that you may have. I will be sending out an email in the next day or so proposing a new TWC meeting date to discuss the issue with Two Bird Cove and to hear some presentations on low impact shoreline projects and lake access. Thanks, Alison



Land Rebalancing
comparison ch...

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Kacie Jensen

From: Alison Guth
Sent: Wednesday, March 07, 2007 5:31 PM
To: 'cstiwinter@orbisinc.com'; 'Tommy Boozer'; 'ARGENTIERI, WILLIAM R'; Tony Bebber; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; David Hancock; Dick Christie; Jennifer O'Rourke; Joy Downs; Ron Ahle; Steve Bell; Suzanne Rhodes
Subject: Land Rebalancing Scoring Sheets

Hello All,

Attached are the scoring sheets that we completed during the rebalancing exercise last week. I have attached the original scoring sheet with the data that I entered, as well as a sheet that is sorted by highest scoring parcel. Thank you for all of your patience regarding this exercise. Take care, Alison



Scoring Card for
Land Rebalanc...



Scoring Card for
Land Rebalanc...

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