

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**SCE&G Training Center  
November 18, 2005**

Final acg 1-4-06

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**ATTENDEES:**

Alison Guth, Kleinschmidt Associates	Dave Anderson, Kleinschmidt Associates
Randy Mahan, SCANA Services, Inc.	Tommy Boozer, SCE&G
David Hancock, SCE&G	George Duke, LMHC
Van Hoffman, SCANA Services, Inc.	Jim Devereaux, SCE&G
Tim Vinson, SCDNR	Bill Marshall, SCDNR
Steve Bell, Lake Watch	Alan Axson, Columbia Fire
Gerrit Jobsis, American Rivers, CCL	Michael Waddell, Trout Unlimited
Dick Christie, SCDNR	Irvin Pitts, SCPRT
Tony Bebber, SCPRT	Joy Downs, LMA

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**HOMEWORK ITEMS:**

- Each entity will list the issues and goals they feel are valuable and important – forward to Dave Anderson
- Review the ICD and list of study requests
- Read about the SCORP through the online website

**AGENDA ITEMS FOR NEXT MEETING:**

- Tommy Boozer will give an update on recreation around Lake Murray and associated issues
- Tony Bebber will give a brief explanation on the SCORP
- The group will begin discussion on the issues and goals that were submitted to Dave Anderson

**DATE OF NEXT MEETING:**      **January 11, 2006 at 9:00 a.m.**  
**Located at the Lake Murray Training Center**

## **MEETING NOTES**

### **SOUTH CAROLINA ELECTRIC & GAS COMPANY SALUDA HYDRO PROJECT RELICENSING RECREATION RESOURCE GROUP**

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#### **MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Alan Stuart opened the meeting and gave a short recap of the previous resource conservation groups. He encouraged those who have not yet seen the Operations Presentation given by Lee Xanthakos to come to the January 12<sup>th</sup> quarterly public meeting. Alan noted that the RCG meetings were generally scheduled in the beginning of the month due to agency conflicts with other Relicensings, whose meetings are generally focused at the end of the month.

The group began discussion on the merging of the Recreation and Safety Resource groups. Randy Mahan noted that some concerns arose when joining these groups due to the fact that the Recreation group will potentially be discussing quite a few land use issues that may not directly tie in to safety. When posed a question about what he believed the groups would cover, Tommy Boozer answered that the recreation group would most likely be dealing with land issues and what entities were in charge with handling certain issues around the lake. Joy Downs noted that LMA would like to see the safety group meeting even after Relicensing to discuss safety related issues. The group concluded that it may be best to keep the groups separate and break up the Lake and River issues on the agenda into morning and afternoon sessions. If a combined meeting was necessary then it could be arranged for. Alan noted that it may be important for the Recreation RCG members to read the Safety meeting notes.

The group briefly discussed the need for more law enforcement personnel to attend. Dick Christie pointed out that the group should keep in mind that the Technical Working Committees (TWC) will include members of the DNR law enforcement who might not have time to attend RCG meetings.

Alan noted they had received the second set of comments on the Operating Procedures, and a revised set of the operating procedures will be sent out in the following weeks. Bill Marshall mentioned that the LSSRAC had a comment on the Operating procedures that was in reference to the time of the day during which the meetings were held. He noted that there were individuals who would like to be involved, but could not do so due to work conflicts. One individual then asked if it would be out of the question for agency personnel to come after hours. Dick Christie replied that although it was not completely out of the question, the group needed to remember that the agencies are juggling quite a few things and there is a need to keep the agency personnel involved in this process because their input is very important.

One suggestion that was made during the meeting was for group members to have the opportunity to add items to the meeting minutes after the meeting was over. The group decided that if you have

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any additional comments you can add it to a section at the end of the meeting minutes that was specified as "Additional Comments".

The group began to discuss the draft mission statement and add to it. A question arose as to what the SCORP was. Tony Bebbler noted that it was revised every five years and is a document used to allocated funds. He noted that it contained quite a bit of information that could help identify goals for the recreation group. Tony was asked to give a brief presentation on the SCORP at the next meeting.

One individual asked whether they could submit comments on issues that would then be posted on the website. Alan responded that comments on the milestone documents and such would be posted on the website, however, comments on particular issues need to expressed within the RCG, that it was in fact part of the purpose of the RCGs.

After a short lunch break, Alan passed out a list of study requests relating to recreation that were compiled from all of the requests that were received. A homework item included a review of the study requests in order to ensure that everyone's requests were properly covered and expressed. Alan also pointed out that if anyone feels a presentation is needed to educate the group on a particular issue then to please make that request. Tommy Boozer was asked to give an update on recreation, listing problems and issues. He noted that one of the things that they were doing was working with a landscape architect to look at the area on the Lexington side of the dam where the construction will be. He also added that they will have a recreation map that shows all the existing recreation sites and also lists future recreational sites and impromptu areas.

In closing, the group discussed some of the homework items for next time. Randy Mahan pointed out that it may be a good idea to go online and read about the SCORP. The group also decided that it would be good for each entity to prioritize their interests and have them ready for discussion by the next meeting. Dave Anderson noted that he would send out an email to group members regarding this following the meeting.

The group decided that the next Recreation meeting would occur on January 11, 2006 at 9:00 at the Training Center.

Meeting Adjourned

Attached below is the agenda for this meeting:

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**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**SCE&G Training Center  
November 18, 2005**

Final acg 1-4-06

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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**November 18, 2005  
9:30 AM  
Lake Murray Training Center**

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- **9:35 to 9:45** Introduction
    - SCE&G and KA Staff
    - Resource Agency Representatives
    - NGO Representatives
    - Individuals
  - **9:45 to 10:15** Purpose of Resource Groups and Discussion on Combining Recreation and Safety RCGs
  - **10:15 to 10:45** Discuss Recreation RCG Procedures
  - **10:45 to 11:45** Develop Recreation RCG Mission Statement
  - **11:45 to 12:45** Lunch
  - **12:45 to 1:30** Develop List of Homework Assignments
  - **1:30 to 2:00** Develop an Agenda for Next Meeting and Set Next Meeting Date
- Adjourn

## Cheryl Balitz

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**From:** Dave Anderson  
**Sent:** Monday, October 16, 2006 11:12 AM  
**To:** Alison Guth  
**Subject:** 10-25-06 Recreation RCG Agenda

Here is our agenda for next week's recreation rcg meeting.



2006-10-25  
recreation RCG Agen.

**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**October 25, 2006**

**9:30 AM**

**Lake Murray Training Center**

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- **9:30 to 10:00** Study Updates/Study Plan Questions (Dave Anderson)
  - **10:00 to 10:30** Presentation on Boat Density/Carrying Capacity Studies at FERC Projects (Marty Phillips)
  - **10:30 to 10:45** BREAK
  - **10:45 to 11:00** HEC-ResSim Model Discussion (Dave Anderson)
  - **11:00 to 12:00** Standard Process Questions – Questions 1 to 5 and 16 to 22 (Dave Anderson)
  - **12:00 to 1:00** LUNCH
  - **1:00 to 1:30** Lower Saluda River Corridor Plan (Bill Marshall)
  - **1:30 to 1:45** BREAK
  - **1:45 to 2:30** Communication System Needs (Dave Anderson)
  - **2:30 to 2:45** Develop an Agenda for Next Meeting and Set Next Meeting Date
- Adjourn

## Cheryl Balitz

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**From:** Dave Anderson  
**Sent:** Monday, November 20, 2006 11:52 AM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Brebner ; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Richard Mikell; Steve Bell; Suzanne Rhodes; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebbler  
**Subject:** Reminder: 10-25-06 Draft Recreation RCG Meeting Notes

I have received a few comments on these notes. Although they are scheduled to be finalized on Friday, due to the holidays, they will not be finalized until next Monday.



2006-10-25  
Meeting Notes - Rec.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER  
October 25, 2006**

draft dka 11-09-06

**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Alan Stuart	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Jeni Summerlin	Kleinschmidt Associates	Steve Bell	Lake Watch
Jenn O'Rourke	SCWF	Marty Phillips	Kleinschmidt Associates
Tony Bebbber	SCPRT	Richard Mikill	Adventure Carolina
Bill Brebner	YCOA	Joy Downs	LMA
Randy Mahan	SCANA Services	Bill Marshall	SCDNR, LSSRAC
Tim Vinson	SCDNR	Tom Eppink	SCANA Services
Tommy Boozer	SCE&G	David Hancock	SCE&G

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**HOMEWORK ITEMS:**

- Dave Anderson—revise the Recreation RCG Issues Matrix and send out to RCG members
- Dave Anderson—develop a Communication System Plan
- Dave Anderson—send out the Standard Process Form with track changes to RCG members
- [TWC—review draft responses to Work Plan items relating to reservoir levels in preparation for the next meeting](#)

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**

**February 7, 2006 at 9:30 a.m.  
Located at the Lake Murray Training Center**



MEETING NOTES

SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE CONSERVATION GROUP

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October 25, 2006

draft dka 11-09-06

**MEETING NOTES:**

These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.

Dave Anderson of Kleinschmidt Associates welcomed everyone and opened the meeting with a review of study updates for the Recreation RCG. He indicated that approximately 2,000 surveys were completed this summer for the Saluda Recreation Assessment. Dave A. noted that the Boat Density Study Plan was finalized and sent out to RCG members. He mentioned that SCE&G's 2001 aerial photographs will be used to estimate boat densities on Lake Murray. Dave also noted that the Downstream Flow Assessment Study Plan has been finalized. He then handed the floor over to Marty Phillips of Kleinschmidt Associates to present information on boat density/carrying capacity studies performed at other FERC projects.

**Presentation on Boat Density/Carrying Capacity Studies at FERC Projects**

Marty noted that the purpose of the presentation was to give committee members an overview of boat densities and carrying capacities. Marty noted that there was a difference between estimating boat densities and carrying capacities. Boat densities are the number of boats per unit area, which may include type of boat/activity, and may address shoreline configuration and availability of open water. Carrying capacity is defined as the type and level of visitor use that could be accommodated while sustaining the desired resource and social objectives. Boat densities illustrate how and where the lake is used, and may provide input to shoreline management decisions. Boat density is a building block used in the estimation of carrying capacity. She identified a variety of inputs that might be used for density and carrying capacity studies. The inputs chosen for any individual study should be selected to address the individual needs of a project's scope and with a clear understanding of how results will be used. There are multiple methods that can be used for estimating density or carrying capacity; each is generally tailored to the project at hand.

Marty explained that, similar to the entire relicensing process, it is important to balance the needs of the people who use the lake, when considering boat density information and carrying capacity studies. There is a significant amount of overlap between carrying capacity studies and shoreline management plans. Each may independently consider a multitude of resource areas, such as boat density, public access, fisheries, water quality, shoreline erosion, etc. Marty suggested that it is appropriate to consolidate research and management efforts – and avoid duplication of information gathering and analysis – by incorporating boat density information into a shoreline management plan, thereby balancing resource needs comprehensively.

Marty pointed out that, typically a licensee may be responsible for the provision of public access within the project boundary to a water body. Typically, state agencies are responsible for managing activity on the water at FERC licensed projects.

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October 25, 2006

draft dka 11-09-06

She provided a few examples of other projects that have conducted carrying capacity studies. She pointed out that most boat counts are based on a predetermined sampling schedule. She explained that mapping boat densities helps managers view areas of high use, where they may wish to discourage additional access, and areas of low use, where additional access might be appropriate. This can be important input for a shoreline management plan. She specifically noted that different user groups may use the resource differently. She noted that sometimes just boat counts are used and sometimes the counts are combined with on-the-ground survey research. In general, most studies show that different user groups will have different perceptions of crowding on weekdays, weekends, and holidays. Also that different user groups tend to have different characteristics and different needs, all of which need to be recognized by resource managers. Finally, Marty noted that because public preferences and resource conditions may evolve over time, management strategies should be flexible in order to accommodate changing conditions and resource needs.

The presentation can be viewed at the following link:

<http://www.saludahydrorelicense.com/documents/RECRCGPresentationOctober2006.ppt>

HEC-ResSim Model Discussion

Dave noted that the HEC-ResSim Model would be discussed at the Quarterly Public Meeting on October 26th located at Saluda Shoals Park.

Dave also verified with the group that we would be requesting the Operations TWC to analyze keeping the lake levels at 354' msl, 355' msl, and 356' msl.

Standard Process Questions – Questions 1 to 5 and 16 to 22

The group worked to finalize Standard Process Questions 1 through 5 and 16 through 22 of the Work Plan. The group was reminded that the purpose of this exercise is to track the progress of the Recreation TWC/RCG. It was noted that the third sentence of the first answer should be changed to “Maintain a balance between public/private recreational access.” Joy Downs noted that “Maintaining and/or improving the water quality of Lake Murray” should be added to the end of the first paragraph. It was noted that the third sentence in the second paragraph should be changed to “The quality of amenities and access should be improved for recreational users: and an “s” needed to be added to the word “standard” in the fifth sentence in the second paragraph. The last sentence in the first question should read: “The Project should also continue to provide reasonably affordable, reliable energy to SCE&G’s service area.”

Dave A. then read the second question and asked if anything needed to be changed. It was noted that the word “managed” should be added in the second sentence after the word “access.” It was

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**Deleted:** Dave noted that the Work Plan has been finalized and that the group should be able to finalize Standard Process Questions 1 through 5 and questions on reservoir levels (16 through 22) today. Dave noted that he changed the answers in the standard process document to paragraph form. He noted that the answers in the previous document were in bullet format. Dave reminded the group

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noted that the third sentence should read, "This may be to the amount of project lands." It was also noted that "striped bass fishery" should be added to the second paragraph of Question Two.

Dave A. read Question Three and no comments were made. He then read Question Four and asked for comments. It was noted that "bald eagles, wood storks, and purple martins" should be added to the end of the second paragraph. Dave A. noted that he would send the standard process form out to committee members with the track changes included.

Bill Argentieri drafted responses to the Work Plan questions on reservoir levels. These were provided to and reviewed with the TWC. It was agreed to modify the eighth bullet to read as follows: "Power generation is increased to allow SCE&G to meet their obligations of contingency reserve as part of our VACAR agreement with neighboring utilities." TWC members will review the document more thoroughly in preparation for discussion at the next meeting.

Lower Saluda River Corridor Plan

Dave introduced Bill Marshall and noted that he serves on the Lower Saluda Scenic River Advisory Council with the South Carolina Department of Natural Resources (SCDNR). Bill M. opened his presentation by explaining the South Carolina Scenic Rivers Act. He noted that the act has enabled the SCDNR to create a cooperative, non-regulatory program, which involves landowners, river users, community interests, and the SCDNR working for conservation on eight State Scenic Rivers, which are designated through state legislation. He explained that for each scenic river a local advisory council is created to put together a scenic river management plan, which sets river conservation and management objectives for the advisory council.

Bill M. explained that the Lower Saluda Scenic River begins at the old railroad pilings below the Lake Murray Dam and ends at the confluence of the Lower Saluda River (LSR) and Broad River. Presenting a series of photographs, he pointed out popular locations along the LSR, including Mill Race Rapids, the confluence with the Broad, Ocean Boulevard and Oh Brother Rapids.

Bill M. explained that the Lower Saluda Scenic River Advisory Council consists of 16 members. He noted that the objectives of the Advisory Council are to protect/conserv natural, cultural, and scenic qualities of the river corridor and improve water quality, public access, and river-user safety. These general objectives are expanded upon in the 1990 Lower Saluda River Corridor Plan and the 2000 Corridor Plan Update; which serve as management plans for the Scenic River. He explained that the 1990 Corridor Plan process lead to the LSR being designated a State Scenic River in 1991.

Bill explained why and how a Task Force of local community leaders and interests created the 1990 Lower Saluda River Corridor Plan. The Task Force and its committees addressed issues, such as access and facilities, historic and archeological sites, law enforcement, resource protection, river-user safety, tourism, and litter. Bill presented conceptual plans and park opportunities from the

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1990 Corridor Plan. Saluda Shoals Park and Riverbanks Botanical Garden are the only concepts that were realized from the 1990 plan. A Twelvemile Creek Park concept was proposed in the 1990 plan; and this site may still present an opportunity for a future public park or preserve.

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Bill M. then reviewed the 2000 LSR Corridor Plan Update. He explained that this plan was produced from a community-based planning process convened by the Advisory Council and focused on recreational access issues; and a primary feature of this plan is the proposal of a LSR Greenway Trail along the north bank of the Saluda to connect Lake Murray, Saluda Shoals Park, Gardendale Landing, and Riverbanks Zoo. The first section consisted of designing a trail that starts at the Lake Murray Dam, which will then run through Saluda Shoals Park. The next section extends from Saluda Shoals Park down to Gardendale Landing. The third section consists of extending the trail from Gardendale down to the I-26 bridge to connect with the Three River's Greenway. He mentioned that this third section would be challenging as it requires getting through the asphalt plant and sewer lagoon, which are located in between Gardendale and the I-26 bridge. He then explained that the Three River's Greenway will run from the I-26 bridge to the Broad River. In closing, Bill noted the Advisory Council's desired outcomes for the hydro relicensing process and these included finding ways to support the LSR Greenway Trail through the relicensing process.

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The PowerPoint presentation may be viewed at the following link:

<http://www.saludahydrorelicense.com/documents/SaludaRiverCorridorPlans.ppt>

Communication System Needs

The TWC was provided a list of communication-related systems that were discussed in the October 24th Safety RCG meeting.

**Communication System Needs**

Information Needed

- Recreation Sites
- Lake Levels (Rule Curve)
- Generation Schedule
  - Lake Level Management/Normal Operations
  - Reserve Calls
  - Special Releases
  - Special Drawdowns
    - Maintenance
  - Minimum Flow
- Identification of Shoals at Different Lake Levels
- Education About

How To Get Information

- Word of mouth\*
- Signage
- Internet\*
- Newspaper\*
- Tourism Department
- University South Carolina 101
- High Schools
- Local Outfitters\*
- Call Down System\*
- Marinas/Parks
- Brochures

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What to do in an Emergency

How To Get Information

Billboards

Real Estate Agents

Conservation Group

Low Frequency AM Radio\*\*

Electronic Info Boards\*\*

Newsletter\*\*

Emails\*\*

\* Determined to be those sources of information that can be updated more frequently

\*\* Added by Recreation RCG

The group expanded on a number of items. SCE&G indicated they are examining providing information on "Lake Level Management/Normal Operations" on a two day rotating window, i.e., they will provide scheduled releases for two days in advance. The group indicated it would be nice to know the dates, times and range of expected flows for the "Reserve Calls," "Special Releases," and "Special Drawdowns."

There was a brief discussion about warnings the difference between a communication system and warning system. It was suggested that some of these listings could be updated daily. David Hancock noted and the group agreed that it would be beneficial to explain why SCE&G is increasing flows in the LSR. Dave A. agreed to draft a Communication Systems Plan for future review.

Develop an Agenda for Next Meeting and Set Next Meeting Date

Dave A. will update the Issues Matrix and submit it to the TWC for comment. Joy D. noted that the effects of docks on water quality in Lake Murray should be addressed in the Issues Matrix.

The next meeting date is tentatively scheduled for February 7, 2007.

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*MEETING NOTES*

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*LAKE MURRAY TRAINING CENTER  
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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**October 25, 2006  
9:30 AM**

**Lake Murray Training Center**

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- **9:30 to 10:00** Study Updates/Study Plan Questions (Dave Anderson)
- **10:00 to 10:30** Presentation on Boat Density/Carrying Capacity Studies at FERC Projects (Marty Phillips)
- **10:30 to 10:45** BREAK
- **10:45 to 11:00** HEC-ResSim Model Discussion (Dave Anderson)
- **11:00 to 12:00** Standard Process Questions – Questions 1 to 5 and 16 to 22 (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 1:30** Lower Saluda River Corridor Plan (Bill Marshall)
- **1:30 to 1:45** BREAK
- **1:45 to 2:30** Communication System Needs (Dave Anderson)
- **2:30 to 2:45** Develop an Agenda for Next Meeting and Set Next Meeting Date

Adjourn



## Cheryl Balitz

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**From:** Dave Anderson  
**Sent:** Monday, November 27, 2006 3:34 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Brebner ; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Richard Mikell; Steve Bell; Suzanne Rhodes; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebber  
**Subject:** 10-25-06 Final Recreation RCG Meeting Notes

Here are the final meeting notes from our October 25th meeting.



2006-10-25  
Meeting Notes - Rec.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER  
October 25, 2006**

final dka 11-27-06

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**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Alan Stuart	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Jeni Summerlin	Kleinschmidt Associates	Steve Bell	Lake Watch
Jenn O'Rourke	SCWF	Marty Phillips	Kleinschmidt Associates
Tony Bebbler	SCPRT	Richard Mikill	Adventure Carolina
Bill Brebner	YCOA	Joy Downs	LMA
Randy Mahan	SCANA Services	Bill Marshall	SCDNR, LSSRAC
Tim Vinson	SCDNR	Tom Eppink	SCANA Services
Tommy Boozer	SCE&G	David Hancock	SCE&G

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**HOMEWORK ITEMS:**

- Dave Anderson—revise the Recreation RCG Issues Matrix and send out to RCG members
- Dave Anderson—develop a Communication System Plan
- Dave Anderson—send out the Standard Process Form with track changes to RCG members
- TWC—review draft responses to Work Plan items relating to reservoir levels in preparation for the next meeting

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**

**February 7, 2006 (tentative) at 9:30 a.m.  
Located at the Lake Murray Training Center**



**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER  
October 25, 2006**

final dka 11-27-06

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Dave Anderson of Kleinschmidt Associates welcomed everyone and opened the meeting with a review of study updates for the Recreation RCG. He indicated that approximately 2,000 surveys were completed this summer for the Saluda Recreation Assessment. Dave A. noted that the Boat Density Study Plan was finalized and sent out to RCG members. He mentioned that SCE&G's 2001 aerial photographs will be used to estimate boat densities on Lake Murray. Dave also noted that the Downstream Flow Assessment Study Plan has been finalized. He then handed the floor over to Marty Phillips of Kleinschmidt Associates to present information on boat density/carrying capacity studies performed at other FERC projects.

**Presentation on Boat Density/Carrying Capacity Studies at FERC Projects**

Marty noted that the purpose of the presentation was to give committee members an overview of boat densities and carrying capacities. Marty noted that there was a difference between estimating boat densities and carrying capacities. Boat densities are the number of boats per unit area, which may include type of boat/activity, and may address shoreline configuration and availability of open water. Carrying capacity is defined as the type and level of visitor use that could be accommodated while sustaining the desired resource and social objectives. Boat densities illustrate how and where the lake is used, and may provide input to shoreline management decisions. Boat density is a building block used in the estimation of carrying capacity. She identified a variety of inputs that might be used for density and carrying capacity studies. The inputs chosen for any individual study should be selected to address the individual needs of a project's scope and with a clear understanding of how results will be used. There are multiple methods that can be used for estimating density or carrying capacity; each is generally tailored to the project at hand.

Marty explained that, similar to the entire relicensing process, it is important to balance the needs of the people who use the lake, when considering boat density information and carrying capacity studies. There is a significant amount of overlap between carrying capacity studies and shoreline management plans. Each may independently consider a multitude of resource areas, such as boat density, public access, fisheries, water quality, shoreline erosion, etc. Marty suggested that it is appropriate to consolidate research and management efforts – and avoid duplication of information gathering and analysis – by incorporating boat density information into a shoreline management plan, thereby balancing resource needs comprehensively.

Marty pointed out that, typically a licensee may be responsible for the provision of public access within the project boundary to a water body. Typically, state agencies are responsible for managing activity on the water at FERC licensed projects.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
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October 25, 2006**

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She provided a few examples of other projects that have conducted carrying capacity studies. She pointed out that most boat counts are based on a predetermined sampling schedule. She explained that mapping boat densities helps managers view areas of high use, where they may wish to discourage additional access, and areas of low use, where additional access might be appropriate. This can be important input for a shoreline management plan. She specifically noted that different user groups may use the resource differently. She noted that sometimes just boat counts are used and sometimes the counts are combined with on-the-ground survey research. In general, most studies show that different user groups will have different perceptions of crowding on weekdays, weekends, and holidays. Also that different user groups tend to have different characteristics and different needs, all of which need to be recognized by resource managers. Finally, Marty noted that because public preferences and resource conditions may evolve over time, management strategies should be flexible in order to accommodate changing conditions and resource needs.

The presentation can be viewed at the following link:

<http://www.saludahydrorelicense.com/documents/CarryingCapacityPresentation.ppt>

HEC-ResSim Model Discussion

Dave noted that the HEC-ResSim Model would be discussed at the Quarterly Public Meeting on October 26th located at Saluda Shoals Park.

Dave also verified with the group that we would be requesting the Operations TWC to analyze keeping the lake levels at 354' msl, 355' msl, and 356' msl.

Standard Process Questions – Questions 1 to 5 and 16 to 22

The group worked to finalize Standard Process Questions 1 through 5 and 16 through 22 of the Work Plan. The group was reminded that the purpose of this exercise is to track the progress of the Recreation TWC/RCG. It was noted that the third sentence of the first answer should be changed to “Maintain a balance between public/private recreational access.” Joy Downs noted that “Maintaining and/or improving the water quality of Lake Murray” should be added to the end of the first paragraph. It was noted that the third sentence in the second paragraph should be changed to “The quality of amenities and access should be improved for recreational users: and an “s” needed to be added to the word “standard” in the fifth sentence in the second paragraph. The last sentence in the first question should read: “The Project should also continue to provide reasonably affordable, reliable energy to SCE&G’s service area.”

Dave A. then read the second question and asked if anything needed to be changed. It was noted that the word “managed” should be added in the second sentence after the word “access.” It was

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
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noted that the third sentence should read, "This may be to the amount of project lands." It was also noted that "striped bass fishery" should be added to the second paragraph of Question Two.

Dave A. read Question Three and no comments were made. He then read Question Four and asked for comments. It was noted that "bald eagles, wood storks, and purple martins" should be added to the end of the second paragraph. Dave A. noted that he would send the standard process form out to committee members with the track changes included.

Bill Argentieri drafted responses to the Work Plan questions on reservoir levels. These were provided to and reviewed with the TWC. It was agreed to modify the eighth bullet to read as follows: "Power generation is increased to allow SCE&G to meet their obligations of contingency reserve as part of our VACAR agreement with neighboring utilities." TWC members will review the document more thoroughly in preparation for discussion at the next meeting.

Lower Saluda River Corridor Plan

Dave introduced Bill Marshall and noted that he serves on the Lower Saluda Scenic River Advisory Council with the South Carolina Department of Natural Resources (SCDNR). Bill M. opened his presentation by explaining the South Carolina Scenic Rivers Act. He noted that the act has enabled the SCDNR to create a cooperative, non-regulatory program, which involves landowners, river users, community interests, and the SCDNR working for conservation on eight State Scenic Rivers, which are designated through state legislation. He explained that for each scenic river a local advisory council is created to put together a scenic river management plan, which sets river conservation and management objectives for the advisory council.

Bill M. explained that the Lower Saluda Scenic River begins at the old railroad pilings below the Lake Murray Dam and ends at the confluence of the Lower Saluda River (LSR) and Broad River. Presenting a series of photographs, he pointed out popular locations along the LSR, including Mill Race Rapids, the confluence with the Broad, Ocean Boulevard, and Oh Brother Rapids.

Bill M. explained that the Lower Saluda Scenic River Advisory Council consists of 16 members. He noted that the objectives of the Advisory Council are to protect/conservate natural, cultural, and scenic qualities of the river corridor and improve water quality, public access, and river-user safety. These general objectives are expanded upon in the 1990 Lower Saluda River Corridor Plan and the 2000 Corridor Plan Update; which serve as management plans for the Scenic River. He explained that the 1990 Corridor Plan process lead to the LSR being designated a State Scenic River in 1991.

Bill explained why and how a Task Force of local community leaders and interests created the 1990 Lower Saluda River Corridor Plan. The Task Force and its committees addressed issues such as access and facilities, historic and archeological sites, law enforcement, resource protection, river-user safety, tourism, and litter. Bill presented conceptual plans and park opportunities from the

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
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1990 Corridor Plan. Saluda Shoals Park and Riverbanks Botanical Garden are the only concepts that were realized from the 1990 plan. A Twelvemile Creek Park concept was proposed in the 1990 plan; and this site may still present an opportunity for a future public park or preserve.

Bill M. then reviewed the 2000 LSR Corridor Plan Update. He explained that this plan was produced from a community-based planning process convened by the Advisory Council and focused on recreational access issues; and a primary feature of this plan is the proposal of a LSR Greenway Trail along the north bank of the Saluda to connect Lake Murray, Saluda Shoals Park, Gardendale Landing, and Riverbanks Zoo. The first section consisted of designing a trail that starts at the Lake Murray Dam, which will then run through Saluda Shoals Park. The next section extends from Saluda Shoals Park down to Gardendale Landing. The third section consists of extending the trail from Gardendale down to the I-26-bridge to connect with the Three River's Greenway. He mentioned that this third section would be challenging as it requires getting through the asphalt plant and sewer lagoon, which are located in between Gardendale and the I-26 bridge. He then explained that the Three River's Greenway will run from the I-26 bridge to the Broad River. In closing, Bill noted the Advisory Council's desired outcomes for the hydro relicensing process and these included finding ways to support the LSR Greenway Trail through the relicensing process.

The PowerPoint presentation may be viewed at the following link:

<http://www.saludahydrorelicense.com/documents/SaludaRiverCorridorPlans.ppt>

Communication System Needs

The TWC was provided a list of communication-related systems that were discussed in the October 24th Safety RCG meeting.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
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**Communication System Needs**

<u>Information Needed</u>	<u>How To Get Information</u>
Recreation Sites	Word of mouth*
Lake Levels (Rule Curve)	Signage
Generation Schedule	Internet*
Lake Level Management/Normal Operations	Newspaper*
Reserve Calls	Tourism Department
Special Releases	University South Carolina 101
Special Drawdowns	High Schools
Maintenance	Local Outfitters*
Minimum Flow	Call Down System*
Identification of Shoals at Different Lake Levels	Marinas/Parks
Education About	Brochures
What to do in an Emergency	Billboards
<u>How To Get Information</u>	Real Estate Agents
	Conservation Group
	Low Frequency AM Radio**
	Electronic Info Boards**
	Newsletter**
	Emails**

\* Determined to be those sources of information that can be updated more frequently

\*\* Added by Recreation RCG

The group expanded on a number of items. SCE&G indicated they are examining providing information on “Lake Level Management/Normal Operations” on a two day rotating window, i.e., they will provide scheduled releases for two days in advance. The group indicated it would be nice to know the dates, times and range of expected flows for the “Reserve Calls,” “Special Releases,” and “Special Drawdowns.”

There was a brief discussion about warnings the difference between a communication system and warning system. It was suggested that some of these listings could be updated daily. David Hancock noted and the group agreed that it would be beneficial to explain why SCE&G is increasing flows in the LSR. Dave A. agreed to draft a Communication Systems Plan for future review.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER  
October 25, 2006**

final dka 11-27-06

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Develop an Agenda for Next Meeting and Set Next Meeting Date

Dave A. will update the Issues Matrix and submit it to the TWC for comment. Joy D. noted that the effects of docks on water quality in Lake Murray should be addressed in the Issues Matrix.

The next meeting date is tentatively scheduled for February 7, 2007.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**October 25, 2006  
9:30 AM  
Lake Murray Training Center**

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- **9:30 to 10:00** Study Updates/Study Plan Questions (Dave Anderson)
- **10:00 to 10:30** Presentation on Boat Density/Carrying Capacity Studies at FERC Projects (Marty Phillips)
- **10:30 to 10:45** BREAK
- **10:45 to 11:00** HEC-ResSim Model Discussion (Dave Anderson)
- **11:00 to 12:00** Standard Process Questions – Questions 1 to 5 and 16 to 22 (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 1:30** Lower Saluda River Corridor Plan (Bill Marshall)
- **1:30 to 1:45** BREAK
- **1:45 to 2:30** Communication System Needs (Dave Anderson)
- **2:30 to 2:45** Develop an Agenda for Next Meeting and Set Next Meeting Date

Adjourn



**Danielle Fitzpatrick**

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**From:** Patrick Moore [PatrickM@scccl.org]  
**Sent:** Monday, November 13, 2006 4:43 PM  
**To:** Alison Guth  
**Subject:** FW: Clarification on Meeting Notes Comments

Patrick Moore Esq.  
Water Quality Associate  
Coastal Conservation League  
2231 Devine St. Suite 100  
Columbia, S.C. 29205  
803.771.7750

Want to learn more about Coastal Conservation League issues?

sign up at [www.coastalconservationleague.org](http://www.coastalconservationleague.org)

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

**From:** Alison Guth [mailto:Alison.Guth@KleinschmidtUSA.com]  
**Sent:** Monday, November 13, 2006 3:28 PM  
**To:** Patrick Moore  
**Cc:** Dave Anderson; Alan Stuart; Bill Argentieri  
**Subject:** Clarification on Meeting Notes Comments

Patrick,

As has been stated many times, the purpose of the meeting notes is to provide general summaries of the nature and direction of discussions. The relicensing team has also pointed out that if an individual has a comment that they believe is critical to the content of the meeting notes, they need to alert the note-taker that what they have to say needs to be copied down verbatim, so that it can be recorded as such. The meeting notes are not intended to be in the style of the Congressional Record or a verbatim transcript. I do not have time to write, nor do I believe that any of us have time to read, 30 pages of "he said/she said." Furthermore, I believe that verbatim recordings of discussions take away from the open and free flow of discussions in the meetings. This being said, the goal for the RCG and TWC members in this process is to correct or clarify any points or discussions that took place during the meeting and subsequently recorded in the meeting notes. I have included Bill Marshall's comments on the Recreation meeting notes as a good example to follow when providing corrections/clarifications to meeting notes.

Remember, the notes are provided as a courtesy/luxury to each of the group members so that individuals can concentrate on providing input rather than taking their own individual notes. The RCG and TWC members are in no way tasked to judge or ridicule the meeting notes. If this becomes a problem, the individual will be removed from the process. Please take this into account when providing future comments on meeting notes to Dave, myself, or any of the coordinators in this process.

Alison

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

**From:** Patrick Moore [mailto:PatrickM@scccl.org]  
**Sent:** Friday, November 10, 2006 10:55 AM



**To:** Dave Anderson  
**Subject:** RE: 10-24-2006 Draft Safety RCG Meeting Notes

Dave,  
Changes included.

The minutes are a poor reflection of what people actually say.

Patrick

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

**From:** Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]

**Sent:** Friday, November 10, 2006 11:44 AM

**To:** Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; turnerle@dhec.sc.gov; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink

**Subject:** 10-24-2006 Draft Safety RCG Meeting Notes

Here are the draft meeting notes from our October 24th Safety RCG meeting. Please have any comments/changes back to me by November 24th.

<<2006-10-24 Meeting Notes - Safety (DRAFT).doc>>

**Danielle Fitzpatrick**

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**From:** Bill Marshall [MarshallB@dnr.sc.gov]  
**Sent:** Thursday, November 09, 2006 3:37 PM  
**To:** Dave Anderson; Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bill Brebner ; Charlene Coleman; Charlie Rentz; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; ipitts@scprt.com; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; turnerle@dhec.sc.gov; Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; RMAHAN@scana.com; rparsons12@alltel.net; Richard Mikell; Steve Bell; Suzanne Rhodes; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebbler  
**Subject:** RE: 10-25-06 Draft Recreation RCG Meeting Notes

Hello Dave and others,

I am providing edits in the attached meeting notes to clarify points made during my presentation of LSR Corridor Plans

Thanks,

Bill

Bill Marshall  
S.C. Department of Natural Resources  
1000 Assembly Street, Suite 354  
Columbia, SC 29201  
(803) 734-9096  
[marshallb@dnr.sc.gov](mailto:marshallb@dnr.sc.gov)

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**From:** Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]  
**Sent:** Thursday, November 09, 2006 12:08 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Brebner ; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; ipitts@scprt.com; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; turnerle@dhec.sc.gov; Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; rparsons12@alltel.net; Richard Mikell; Steve Bell; Suzanne Rhodes; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebbler  
**Subject:** 10-25-06 Draft Recreation RCG Meeting Notes

Here are the draft meeting notes from our October 25th Recreation RCG meeting. Please have any comments/changes back to me by November 24th. I have also attached the Working Documents with the "track changes" we did in the meeting for your reference.

<<2006-10-25 Meeting Notes - Recreation (DRAFT).doc>> <<Recreation RCG Working Documents (2006-10-25).doc>>

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER  
October 25, 2006**

draft dka 11-09-06

**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Alan Stuart	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Jeni Summerlin	Kleinschmidt Associates	Steve Bell	Lake Watch
Jenn O'Rourke	SCWF	Marty Phillips	Kleinschmidt Associates
Tony Bebbler	SCPRT	Richard Mikill	Adventure Carolina
Bill Brebner	YCOA	Joy Downs	LMA
Randy Mahan	SCANA Services	Bill Marshall	SCDNR, LSSRAC
Tim Vinson	SCDNR	Tom Eppink	SCANA Services
Tommy Boozer	SCE&G	David Hancock	SCE&G

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**HOMEWORK ITEMS:**

- Dave Anderson—revise the Recreation RCG Issues Matrix and send out to RCG members
- Dave Anderson—develop a Communication System Plan
- Dave Anderson—send out the Standard Process Form with track changes to RCG members

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**

**February 7, 2006 at 9:30 a.m.  
Located at the Lake Murray Training Center**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
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*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

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**Presentation on Boat Density/Carrying Capacity Studies at FERC Projects**

Marty noted that the purpose of the presentation was to give committee members an overview of boat densities and carrying capacities. Marty noted that there was a difference between estimating boat densities versus carrying capacities. Boat densities are the number of boats per unit area, which may include type of boat/activity, and may address shoreline configuration and availability of open water. Marty then explained carrying capacity is defined as the type and level of visitor use that can be accommodated while sustaining the desired resource and social objectives. Marty mentioned that boat densities illustrate how and where the lake is used, where people are boating, and may provide information for shoreline management decisions. She noted that it is best to think of boat densities as a building block used to estimate carrying capacities. She briefly compared boat density and carrying capacity and explained what each may include. She specifically noted that it not only depend on the scope of these studies, but also how the results will be used and the methods that are chosen. There are numerous methods that can be used, and each method is tailored to a specific project.

Marty explained that it is important to balance the needs of the people that use the lake. She noted that the licensee typically has limits on managing recreational use and related development within the project boundary. She then noted that state agencies are usually responsible for managing activity on the water at FERC licensed projects. The project license is a balancing act and includes all or most of the topic areas. She noted that it is better to incorporate everything into one plan, such as developing boat densities in the shoreline management plan. She briefly gave a few examples of other projects that conducted carrying capacity studies. She noted that methods include boat counts, which are conducted based on a predetermined sampling schedule. She explained that mapping boat densities helps managers view areas of high use and areas where additional use could be encouraged. She specifically noted that different user groups may use the resource differently. She noted that sometimes just boat counts are used and sometimes the counts are combined with on

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the ground survey research. In addition, user groups may have different perceptions of crowding on weekdays, weekends, and holidays. She noted that these studies identify areas of unique uses, crowding, where use can be spread out, input in the shoreline management plan, information needs, and needed expansions of facilities. Marty noted that because public preferences evolve over time, management strategies should be adjusted.

The presentation can be viewed at the following link:

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**HEC-ResSim Model Discussion**

Dave noted that the HEC-ResSim Model would be discussed at the Quarterly Public Meeting on October 26th located at Saluda Shoals Park.

Dave also verified with the group that we would be requesting the Operations TWC to analyze keeping the lake levels at 354' msl, 355' msl, and 356' msl.

**Standard Process Questions – Questions 1 to 5 and 16 to 22**

Dave noted that the Work Plan has been finalized and that the group should be able to finalize Standard Process Questions 1 through 5 and questions on reservoir levels (16 through 22) today. Dave noted that he changed the answers in the standard process document to paragraph form. He noted that the answers in the previous document were in bullet format. Dave reminded the group that the purpose of this document is to track the progress of the Recreation TWC/RCG. It was noted that the third sentence of the first answer should be changed to "Maintain a balance between public/private recreational access." Joy Downs noted that "Maintaining and/or improving the water quality of Lake Murray" should be added to the end of the first paragraph. It was noted that the third sentence in the second paragraph should be changed to "The quality of amenities and access should be improved for recreational users: and an "s" needed to be added to the word "standard" in the fifth sentence in the second paragraph. The last sentence in the first question should read, "The Project should also continue to provide reasonably affordable, reliable energy to SCE&G's service area.

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The group agreed to review these questions and be prepared to discuss them at the next meeting.

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**MEETING NOTES**

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SALUDA HYDRO PROJECT RELICENSING  
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October 25, 2006**

draft dka 11-09-06

Bill M. then reviewed the 2000 LSR Corridor Plan Update. He explained that this plan was produced from a community-based planning process convened by the Advisory Council and focused on recreational access issues; and a primary feature of this plan is the proposal of a LSR Greenway Trail along the north bank of the Saluda to connect Lake Murray, Saluda Shoals Park, Gardendale Landing, and Riverbanks Zoo. The first section, consisted of designing a trail that starts at the Lake Murray Dam, which will then run through Saluda Shoals Park. The next section extends from Saluda Shoals Park down to Gardendale Landing. The third section consists of extending the trail from Gardendale down to the I-26 bridge to connect with the Three River's Greenway. He mentioned that this third section would be challenging as it requires getting through the asphalt plant and sewer lagoon, which are located in between Gardendale and the I-26 bridge. He then explained that the Three River's Greenway will run from the I-26 bridge to the Broad River. In closing, Bill noted the Advisory Council's desired outcomes for the hydro relicensing process, and these included finding ways to support the LSR Greenway Trail through the relicensing process.

The PowerPoint presentation may be viewed at the following link:

Communication System Needs

Dave A. noted that the following list of communication systems was discussed in the October 24th Safety RCG meeting.

**Communication System Needs**

Information Needed

Recreation Sites  
Lake Levels (Rule Curve)  
Generation Schedule  
    Lake Level Management/Normal Operations  
    Reserve Calls  
    Special Releases  
    Special Drawdowns  
    Maintenance  
    Minimum Flow  
Identification of Shoals at Different Lake Levels  
Education About  
What to do in an Emergency

How To Get Information

Word of mouth\*  
Signage  
Internet\*  
Newspaper\*  
Tourism Department  
University South Carolina 101  
High Schools  
Local Outfitters\*  
Call Down System\*  
Marinas/Parks  
Brochures  
Billboards  
Real Estate Agents  
Conservation Group

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**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER  
October 25, 2006**

draft dka 11-09-06

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Low Frequency AM Radio\*\*  
Electronic Info Boards\*\*  
Newsletter\*\*  
Emails\*\*

- \* Determined to be those sources of information that can be updated more frequently
- \*\* Added by Recreation RCG

The group expanded on a number of items. SCE&G indicated they are examining providing information on "Lake Level Management/Normal Operations" on a two day rotating window, i.e., they will provide scheduled releases for two days in advance. The group indicated it would be nice to know the dates, times and range of expected flows for the "Reserve Calls," "Special Releases," and "Special Drawdowns."

There was a brief discussion about warnings and Dave A. noted that there was a difference between a communication system and warning system. It was noted that some of these listings could be updated daily. David Hancock noted and the group agreed that it would be beneficial to explain why SCE&G is increasing flows in the LSR. Dave A. noted that he would begin drafting a Communication Systems Plan.

Develop an Agenda for Next Meeting and Set Next Meeting Date

Dave A. noted that he would update the Issues Matrix and send it out to all committee members for comment. Joy D. noted that the effects of docks on water quality in Lake Murray should be addressed in the Issues Matrix. The group agreed to set February 7, 2007 as the next tentative meeting date.



*MEETING NOTES*

*SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE CONSERVATION GROUP*

*LAKE MURRAY TRAINING CENTER  
October 25, 2006*

draft dka 11-09-06

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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**October 25, 2006  
9:30 AM**

**Lake Murray Training Center**

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- **9:30 to 10:00** Study Updates/Study Plan Questions (Dave Anderson)
- **10:00 to 10:30** Presentation on Boat Density/Carrying Capacity Studies at FERC Projects (Marty Phillips)
- **10:30 to 10:45** BREAK
- **10:45 to 11:00** HEC-ResSim Model Discussion (Dave Anderson)
- **11:00 to 12:00** Standard Process Questions – Questions 1 to 5 and 16 to 22 (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 1:30** Lower Saluda River Corridor Plan (Bill Marshall)
- **1:30 to 1:45** BREAK
- **1:45 to 2:30** Communication System Needs (Dave Anderson)
- **2:30 to 2:45** Develop an Agenda for Next Meeting and Set Next Meeting Date

Adjourn



## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Friday, October 20, 2006 12:14 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Brebner ; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Richard Mikell; Steve Bell; Suzanne Rhodes; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebber  
**Subject:** 09-20-06 Final Downstream Flows TWC Meeting Notes

Here are the final meeting notes from the September 20th meeting.



2006-09-20 DFTWC  
Meeting Notes...

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**SCDNR HEADQUARTERS  
September 20, 2006**

*final dka 10-20-06*

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**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Tom Eppink	SCANA	Malcolm Leaphart	TU
Bill Marshall	SCDNR and LSSRAC	Dave Anderson	Kleinschmidt Associates
Patrick Moore	AR/SCCCL	Jennifer Summerlin	Kleinschmidt Associates
Mary Crockett	SCDNR	Alan Stuart	Kleinschmidt Associates
Kelly Maloney (by phone)	Kleinschmidt Associates		

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**ACTION ITEMS:**

- Dave Anderson – contact Hal Beard about creel surveys
- Dave Anderson – send out study plan to committee members and finalize

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**                      **TBA**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**SCDNR HEADQUARTERS  
September 20, 2006**

*final dka 10-20-06*

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**MEETING NOTES:**

*These notes serve as a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Dave welcomed the Downstream Flow TWC (DFTWC) members and noted the purpose of the meeting was to discuss and finalize the Downstream Recreation Flow Assessment Study Plan (attached). Dave noted that he would like to go through each section so all committee members have the opportunity to comment on the study plan.

Dave briefly summarized the introduction of the study plan and no comments were made. Dave further explained the purpose of the study is to assess recreational flows for the lower Saluda River (LSR) for different types of recreation at different river reaches under different flow conditions. Malcolm asked how a rate of change will be determined. Dave noted that rate of change will be estimated from the tailrace to the confluence using level loggers. He explained that level loggers will measure down to a tenth of a foot. He added that all flows will be investigated to examine how the river rises differently. Dave noted that the locations of level loggers coincide with the HEC Res-Sim model and cross sections were chosen according to river habitats (riffle, run, pool).

The group continued to review the study plan and Dave briefly discussed the goals of the study plan. There were no comments provided on Goals One and Two. Dave read Goal Three and it was noted that "public" should be inserted before the word "ingress" for Objective Three of Goal Three. Dave then briefly reviewed the locations the level loggers will be placed in the lower Saluda River. He noted that rate of change will be estimated between each location. There was some discussion about where the level loggers will be placed in the LSR and the group agreed that a second level logger should be added to Oh Brother Rapids and Ocean Boulevard locations.

Dave then began to discuss the three phases of methodology. He noted that the first phase will include hydrologic data, creel surveys, and the IFIM study. Dave then explained that Phase Two will include a downstream flows focus group and a land based reconnaissance. There was some discussion about the benefits of doing a water-based reconnaissance. The group also felt flow ranges should be provided in order to assess actual flows rather than collect opinions on flows. At the end of the reconnaissance, members will fill out a questionnaire about the flows for that day. There was a brief discussion about what flow ranges should be evaluated. Kelly Maloney noted that Phase One will help identify the specifics of the flows. The group decided that flow ranges will be determined by the DFTWC based on the results from Phase One. There was further discussion about the use of video documentation to capture a rate of change of event. The group decided to include this option in the study plan as part of the Phase Two work.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**SCDNR HEADQUARTERS  
September 20, 2006**

*final dka 10-20-06*

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Dave briefly reviewed Phase Three and asked the group to provide comments. It was noted that “minimum of 180 days” should be deleted and replaced with “deployed long enough to capture the full range of flow releases necessary to complete the study.” The group also agreed that the first two bullets should be removed from Phase Three (overall and daily average flow). It was suggested the comment matrix should be added to the appendix of the study plan. Dave noted that questionnaires will be drafted once Phase One is complete. Dave mentioned that he would send out the study plan to committee members so everyone can review changes made.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

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September 20, 2006**

*final dka 10-20-06*

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**Comments from Bill Marshall:** Folks, more food for thought...I was thinking this morning about some ideas which have been expressed about understanding rate-of-change and even experiencing rate-of-change.

I'm not sure what we concluded yesterday about the use of video, but I'm thinking now that we may want to consider trying to capture video or time-lapsed photography of certain rates of change in order to better document the (call it what you will) surge/bubble/wave/wall-of-water experience in the river. Since we are relying upon expert assessments of river conditions, visual information when combined with the water level logger data could be more effective than logger data alone in documenting and evaluating what happens in the river. Perhaps a video component could be accomplished quickly if we were able to schedule one rapid high-flow release event and have cameras deployed at selected points.

This idea could be an option for later consideration under Phase 2 (expert recon) of the study. What do you all think?

**Comments from Malcolm Leaphart:** The draft, including the comments and replies, has evolved to an accurate document of the scope and intentions for the Downstream Flow study as discussed at the past meetings. The disposition of the major issue of future recreational needs is still of key concern. Would you please clarify in the Recreational Flows Plan, exactly what the 'Saluda Recreation Assessment' is, who will be doing it, and when? This is the phrase from the answer you provided to several questions about future recreational needs in the table of comments and responses:

"Future use will be addressed in the Saluda Recreation Assessment"

The concern is that future recreation needs are a major issue because of the inadequate current sites, especially on the lower Saluda, but also on Lake Murray where marinas are closing or have been converted to private use. Most of the stakeholders would have preferred this issue be a starting point for committee efforts, rather than it still not being addressed to date. So, we would appreciate you stating the intentions for an assessment at some future time with some level of certainty and with as much level of detail as you can at this time as to how it will be dealt ultimately in the relicensing. It is certainly much too important an issue to fail to cover or to lose track of...

**Reply from Dave Anderson:** The Recreation Assessment is currently being conducted. The study plan is on the web site:

<http://www.saludahydrorelicense.com/documents/001-SaludaRecreationAssessmentStudyPlanFINAL.pdf>

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**SCDNR HEADQUARTERS  
September 20, 2006**

*final dka 10-20-06*

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**Reply from Malcolm Leaphart:** My request was not for the study details, but to clearly state that the issue of future recreation needs are highlighted as the important issue it is in the draft. So, let me re-state my request and be more specific... The following paragraph from the Downstream Flows does not include any reference to future recreation needs (except the term 'opportunities' which is too vague to infer future needs from). Please add a reference to this paragraph that states that future recreation needs is one of the goals of the Assessment as documented.  
Thanks.

“The 2006 Saluda Project Recreation Assessment is currently being conducted under the Recreation RCG. This study utilizes vehicle counts and on-site interviews of individuals at Project recreation sites to ascertain opportunities, patterns, and levels of use along the lower Saluda River. These data will be reviewed and analyzed to determine what recreation activities are currently supported by access sites along the lower Saluda River, what recreation activities are being participated in by individuals at these sites, how much use the lower Saluda River receives, and any specific comments made by respondents pertaining to safety, river flows, and barriers to access.”

**Reply from Kelly Maloney:** I would agree that future recreation use levels and needs on the lower Saluda River should be addressed in the relicensing process and the Saluda Recreation Assessment (the study plan of which was distributed by Dave) should address all of the concerns that you have raised. Because we are not considering future uses or needs in the Downstream Recreation Flow Assessment Study Plan, however, I do not believe that the flow study is the most appropriate forum to discuss the goals and objectives of Saluda Recreation Assessment. I'm not clear on the reason why we would want to specifically highlight a goal of another study for an issue that is not a part of the study plan at hand.

Future uses are not included as part of the goals of the flow study plan because we are attempting to determine the appropriateness of certain flow levels for certain activities. Irrespective of how use levels increase or change in the future, the flows most appropriate for certain activities would not change. Though use distributions may shift and other access locations utilized in the future, the capacity and condition of existing access sites, as well as the potential for additional sites and improvements which would support recreational use of the lower Saluda River, are wholly addressed in the Recreation Assessment.

As you pointed out, there are two places in the flow study plan that reference the Saluda Recreation Assessment: Section 2.1 and Appendix C. Section 2.1 discusses the aspects of the Saluda Recreation Assessment that will be utilized as part of the Phase I investigation for the flow study. Because the flow study is not considering future uses, I believe it would confuse the issue to discuss details of the Recreation Assessment that are not being used or considered here in the flow study.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**SCDNR HEADQUARTERS  
September 20, 2006**

*final dka 10-20-06*

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Likewise, I do not believe that Appendix C is the forum to outline the goals and objectives of the Saluda Recreation Assessment. If an issue was raised that we believed to be out of the scope of the flow study but addressed by the Saluda Recreation Assessment, we referenced that document in Appendix C. If you feel it would be helpful to include a hyperlink to the Saluda Recreation Assessment Study Plan (such as the one forwarded by Dave) in Appendix C, we can certainly do that.

**Reply from Malcolm Leaphart:** The reason to expand the statement as I suggested is because it is incomplete in listing all of the goals of the Recreation Assessment that is being summarized by the statement. However, I have no major objection in leaving it as it is since the Recreation Assessment includes the goal of identifying future recreational needs, and the point has been made in our exchanges of the importance of that. Please include our exchanges, including this one, as an addendum to the last meeting summary for the Recreation Flow Assessment TWC.

It is evidently important to further clarify why I made this simple request: There is a concern that the critical issues identified at the beginning of the relicensing process, including in ICD comments from stakeholders, are not the focus and organizational point for the process. Tracking of issues is very difficult as a result, as is keeping up with all the inter-relations between the many issues being dealt with in separate groups. Also, a promised issues spreadsheet for tracking has not been communicated to date and will soon become a moot point. So, any opportunity to emphasize key issues is looked for, such as for the future recreation needs issue which is a very sensitive one. It was originally not even included in the first drafts of the Recreation Assessment, and only added after stakeholder requests. To many of the stakeholders, identifying future recreation needs is a much more important issue and goal worthy of a separate TWC when compared to identifying possible site upgrades which could be done outside of the relicensing process as a maintenance item - much like the recent upgrade to the Hilton boat landing. Will continue to try to participate positively as SCE&G manages the relicensing process, and appreciate the opportunity to express concerns and to try to keep the focus on critical issues.



# **SOUTH CAROLINA ELECTRIC & GAS COMPANY**

**SALUDA HYDROELECTRIC PROJECT**  
*(FERC NO. 516)*

**DOWNSTREAM RECREATION FLOW ASSESSMENT  
STUDY PLAN**

**DRAFT**

*SEPTEMBER, 2006*

*Prepared by:*

***Kleinschmidt***  
*Energy & Water Resource Consultants*

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SALUDA HYDROELECTRIC PROJECT  
(FERC NO. 516)

DOWNSTREAM RECREATION FLOW ASSESSMENT STUDY PLAN

DRAFT

SEPTEMBER, 2006

Prepared by:

***Kleinschmidt***  
*Energy & Water Resource Consultants*

**SOUTH CAROLINA ELECTRIC & GAS COMPANY**

**SALUDA HYDROELECTRIC PROJECT  
(FERC NO. 516)**

**DOWNSTREAM RECREATION FLOW ASSESSMENT STUDY PLAN**

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- Appendix A: Downstream Flows Technical Working Committee
- Appendix B: Lower Saluda River Focus Group Survey
- Appendix C: Lower Saluda River Land-based Reconnaissance Survey

# **SOUTH CAROLINA ELECTRIC & GAS COMPANY**

## **SALUDA HYDROELECTRIC PROJECT (FERC NO. 516)**

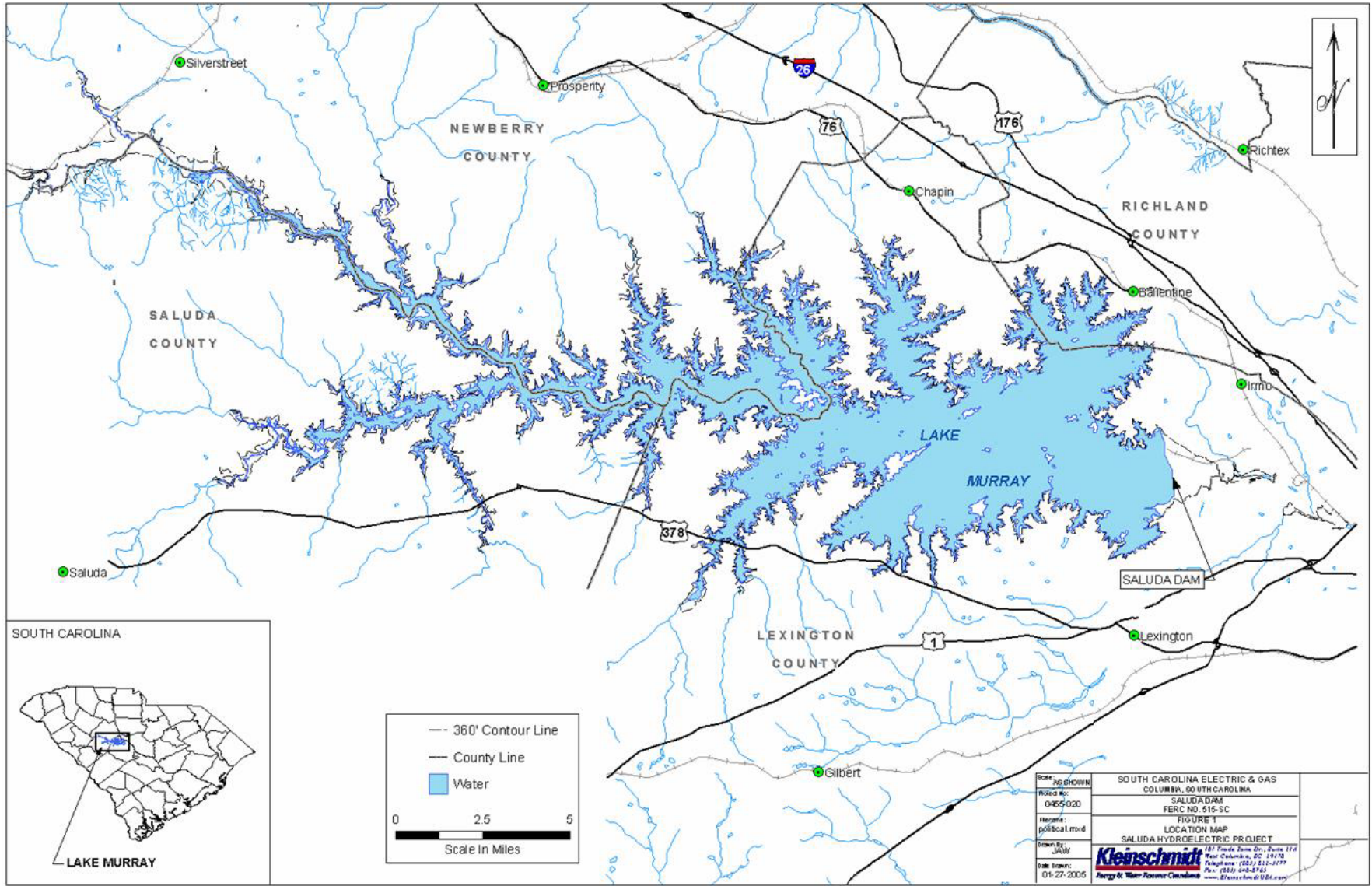
### **DOWNSTREAM RECREATION FLOW ASSESSMENT STUDY PLAN**

#### ***1.0 INTRODUCTION***

The Saluda Hydroelectric Project (Project), is a Federal Energy Regulatory Commission (FERC) licensed project (FERC No. 516), owned and operated by South Carolina Electric & Gas Company (SCE&G), pursuant to the license issued by the FERC in 1984. The Project is located on the Saluda River within Richland, Lexington, Saluda, and Newberry Counties, South Carolina, and situated within proximity of the towns of Irmo, Chapin, and Lexington and within the metropolitan area of the City of Columbia, South Carolina, which is approximately 10 miles east of the Project (Figure 1). The Saluda Project includes Lake Murray, the Saluda Dam and Spillway, the Saluda Berm, Saluda Powerhouse, intake towers, and associated penstocks.

SCE&G is in the process of relicensing the Saluda Project as the current operating license expires on August 31, 2010. This relicensing process involves cooperation and collaboration with a variety of stakeholders, including state and federal resource agencies, state and local government, non-governmental organizations (NGO), and interested individuals, in order to identify and address any operational, economic, and environmental issues associated with a new operating license for the Project. The Downstream Flows Technical Working Committee (TWC) is comprised of interested stakeholders (Appendix A) who are collaborating with SCE&G to identify and make recommendations related to public safety and recreational opportunities associated with downstream project flows to the lower Saluda River. The Downstream Flows TWC has requested that a study be designed and implemented that would assess flows, identify preferred flows for recreational activities, and determine safety issues associated with river flows that may need to be addressed through the work of the Safety Resource Conservation Group (RCG).

**Figure 1: Project Location**



## 1.1 Study Area

SCE&G currently operates the Saluda Project in order to provide reserve capacity for the company's utility obligations, a mode of operation that the company proposes to continue under the new license. Project generators are typically offline, *i.e.*, not operating, but can be started and synchronized to the electrical grid and can increase output immediately in response to a generator or transmission outage on SCE&G's system or in response to a call for reserve power from neighboring utilities, with which the company has reserve agreements and obligations. As a result, flows from the Saluda Project are generally unscheduled. Although there is no minimum flow requirement for the Project, SCE&G has an informal agreement with the South Carolina Department of Health and Environmental Control (SCDHEC) to provide a minimum of 180 cfs at the Project to enhance downstream water quality<sup>1</sup>. The average annual flow from the Saluda Dam to the lower Saluda River is 2,595 acre feet with a minimum average daily flow of 285 cfs. For the purposes of this study, the geographic scope will be from the base of the dam to the confluence with the Broad River (Figure 2).

## 1.2 Purpose and Content of the Study

The Downstream Flows TWC has requested an assessment of recreational flows for the lower Saluda River for different types of recreation at different river reaches under different flow conditions. The assessment is designed to provide information pertinent to optimum and preferred flows for particular recreation activities and any public safety issues associated with recreational use of the river. This study encompasses the following goals and objectives:

*Goal 1: Characterize currently available recreation opportunities on the lower Saluda River. This will be accomplished by meeting the following objectives:*

- i. Utilize the information collected during the Saluda Project Recreation Assessment to identify sites providing recreational access to the lower Saluda River and the recreation activities supported by these sites.

---

<sup>1</sup> At certain times of the fall season, SCE&G can not utilize a full range of operations due to dissolved oxygen concerns.

- ii. Utilize the information collected during the Saluda Project Recreation Assessment to identify the patterns of use on the lower Saluda River by type, location, and volume.
- iii. Estimate preferred flows associated with reasonable and safe recreational use of the lower Saluda River for specified activities to serve as input constraints to the HEC Res-Sim model being developed by the Operations RCG.

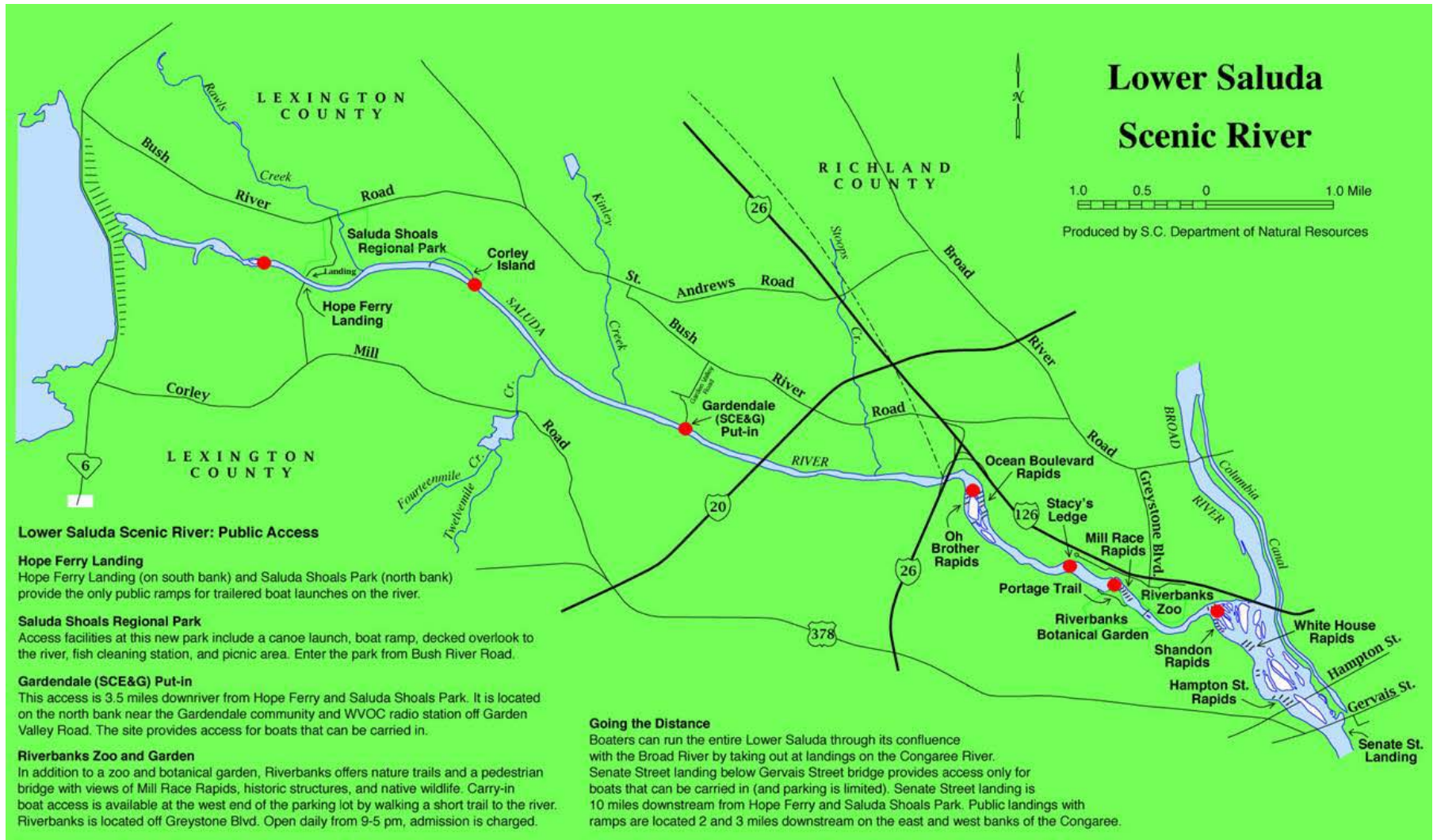
Goal 2: *Understand the “rate of change” of the lower Saluda River at various flows at various river reaches. This will be accomplished by meeting the following objectives:*

- i. Identify and characterize water level changes at predetermined intervals, encompassing the various river channel types (pools, runs, shoals) along the lower Saluda River from the dam to the confluence with the Broad River, capturing the full range of project operation flow scenarios.

Goal 3: *Identify potential public safety issues associated with lower Saluda River flows. This will be accomplished by meeting the following objectives:*

- i. Identify potential safety issues and barriers on the lower Saluda River.
- ii. Identify potential locations for additional flow release warning systems such as sirens, strobes, and signage on the lower Saluda River.
- iii. Identify locations for ingress and egress on the lower Saluda River as related to the safety of river users.

**Figure 2: Study Area for Downstream Flow Assessment and Approximate Locations for Level Loggers (Source: South Carolina Department of Natural Resources, as modified by Kleinschmidt)**





## **2.0 METHODOLOGY**

Information gathered for this study will be used to examine the suitability of the lower Saluda River for several types of recreation activities as a function of variations in flow levels. This study will take a three-phase approach to meet the goals of the study through the objectives identified above. Phase I will involve a desktop analysis of the recreation opportunities, patterns of use, physical characteristics, and hydrology of the lower Saluda River. Phase II will involve structured surveys and on-site reconnaissance of an expert panel of experienced boaters, recreationists, NGO's, and agency staff familiar with the river to assess the feasibility and potential quality of particular flow ranges for on-water activities. Phase III will involve the deployment of water level data loggers at various predetermined intervals along the lower Saluda River from the dam to the confluence with the Broad River.

### **2.1 Phase 1 – Literature Review and Desktop Analysis**

This task involves compilation and review of existing information about river channel characteristics, hydrology, current and planned recreational opportunities, and flow data for the lower Saluda River.

Literature searches will be conducted via the web, libraries, and SCE&G and agency collections. Consultation may include local paddling clubs, the Irmo Chapin Recreation Commission (ICRC), American Rivers (AR), American Whitewater (AW), Saluda Chapter of Trout Unlimited/Federation of Fly Fishers, the River Alliance, and others to determine if there are current or recent river recreational studies or data pertinent to this effort. South Carolina whitewater, fishing, and outdoor recreation tourism guidebooks will be reviewed in an effort to identify potential boating, angling, and other recreational opportunities on the lower Saluda River. Other relevant documents may include the Three Rivers Greenway plan, South Carolina Statewide Comprehensive Outdoor Recreation Plan (SCORP), and the Lower Saluda Scenic River Corridor Plan and Update.

Relevant summary hydrology data, from SCE&G, United States Geological Survey (USGS), South Carolina Department of Natural Resources (SCDNR), and other state agencies will be collected. In addition, any existing studies on instream flow and

creel surveys will also be reviewed. Historic records of minimum, maximum, and average flow rates will be reviewed and seasonal variations will be noted. These data will be examined to determine the number of days the lower Saluda River may be available for each identified primary recreation activity.

The 2006 Saluda Project Recreation Assessment is currently being conducted under the Recreation RCG. This study utilizes vehicle counts and on-site interviews of individuals at Project recreation sites to ascertain opportunities, patterns, and levels of use along the lower Saluda River. These data will be reviewed and analyzed to determine what recreation activities are currently supported by access sites along the lower Saluda River, what recreation activities are being participated in by individuals at these sites, how much use the lower Saluda River receives, and any specific comments made by respondents pertaining to safety, river flows, and barriers to access.

## 2.2 Phase 2 – Focus Group and Land-Based Reconnaissance

An expert panel will be compiled to collect and disseminate information regarding recreation opportunities and potential flow effects on recreation on the lower Saluda River. The expert panel will consist of the experienced recreational users and resource experts that make up the Downstream Flows TWC and others as needed. A survey (Appendix B) and focus group discussion panel will be conducted to document characteristics of the lower Saluda River with respect to the nature and seasonal distribution of on-water activities; the locations and flows for wading, swimming holes, velocity refuges, rapids and eddies; existing and potential ingress and egress locations; potential locations for additional safety lights/sirens; and any potential safety hazards.

The expert panel will also conduct an on-site reconnaissance. The purpose will be to augment existing information on flows, opportunities, and safety concerns. This will involve a facilitated expert panel site visit led by a principal researcher. The expert panel will observe and assess the lower Saluda at predetermined geographic intervals. Ideally, the land-based reconnaissance will be scheduled when flows are provided in the river reach within an estimated recreational flow range. The expert panel will complete a land-based reconnaissance survey (Appendix C) similar to the focus group survey, which will

solicit additional information on locations and flows for select recreation activities and potential safety hazards.

River flows identified by the expert panel during these efforts will serve as input constraints for the HEC Res-Sim model. The purpose of this model is to determine effects of downstream flows on various resources, based on flow constraints provided by the focus group. The model will determine a series of operational regimes which target the diverse interests of the various resource groups and identify a balance between these interests and project operations with respect to lake levels, generation needs, and project outflows.

### 2.3 Phase 3 – Field Data Collection

To accurately assess the effect of Project generation on water levels in the lower Saluda River, water level data loggers will be deployed at predetermined intervals correlated with the HEC Res-Sim cross-sections along the River from the Saluda Dam to the confluence of the Broad River (Figure 2). Water level loggers will record the barometric pressure, water depth, and temperature once per minute and will be deployed for a total minimum of 180 days. These data will be correlated with hydrologic data (such as from USGS gaging stations) to determine (for the study time period):

- the overall average flow (in cfs);
- daily average flow (in cfs);
- overall average river depth (in feet) for each water level data logger location;
- daily average river depth (in feet) for each water level data logger location;
- average maximum river depth (in feet) for each water level data logger location;
- average time to maximum river depth for each water level data logger location;
- average time to recession for each water level data logger location;
- average rate of change in water level for each water level data logger location;
- maximum river depth (in feet) for each water level data logger location by flow;
- minimum time to maximum river depth for each water level data logger location by flow;
- maximum time to recession for each water level data logger location by flow ; and

- minimum, average, and maximum rate of change in water level for each water level data logger location by flow level.

The information gathered through field reconnaissance, literature review, flow and hydrologic data analysis, and the expert panel will provide a basis by which to identify preferred flows for the lower Saluda River that target particular recreation activities at appropriate locations. These flows will be provided as input constraints to the HEC Res-Sim model to determine the feasibility, suitability, and availability of such flows. Recommendations for special recreational flow releases may be developed from the HEC Res-Sim model analysis of recreational flow inputs.

Likewise, any existing and potential safety issues associated with typical and preferred flows will be identified and recommendations for safety measures to be considered by the Safety RCG will be provided. In particular, the location of the level loggers will assist in determining which sections of the river may be in need of additional safety and protection measures such as additional warning lights/sirens, formal ingress/egress sites, and determine which areas of the river may be suitable as velocity refuges.

### ***3.0 DELIVERABLES***

The Draft and Final Report will be prepared for this effort. The Draft Report will be reviewed internally by the Downstream Flows TWC and Recreation RCG. Comments and edits from the Downstream Flows TWC will be incorporated into a Final Report for Saluda Hydro Relicensing Group. The report will include an executive summary, an introduction, objectives, methods, and results. It will also include recommendations for optimal recreation flows and flow schedules for use as HEC Res-Sim model inputs. The report will also outline safety concerns, including rate of change, and potential measures to enhance public safety.

#### **4.0 SCHEDULE**

The proposed schedule for completion of the Recreation Flow Assessment Study is as follows:

<b>TASK</b>	<b>DATE</b>
Literature Review and Desktop Analysis	Winter 2006
Focus Group and Expert Panel Land-Based Reconnaissance	Spring 2007
Field Data Collection	Fall 2006 – Summer 2007
Submit Draft Report	Fall 2007
Client and TWC Review	Fall 2007
Submit Final Report	Winter 2007

## **5.0 REFERENCES**

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APPENDIX A

DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE



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<b>Name</b>	<b>Contact Information</b>	<b>Affiliation</b>
Bill Marshall	marshallb@dnr.sc.gov	Lower Saluda Scenic River Advisory Council, DNR
Charlene Coleman	cheetahrk@yahoo.com	American Whitewater
Dave Anderson	dave.anderson@kleinschmidtusa.com	Kleinschmidt Associates
Guy Jones	guyjones@sc.rr.com	River Runner Outdoor Center
Jennifer Summerlin	jennifer.summerlin@kleinschmidtusa.com	Kleinschmidt Associates
Karen Kustafik	kakustafik@columbiasc.net	City of Columbia Parks and Recreation
Malcolm Leaphart	malcolml@mailbox.sc.edu	Trout Unlimited
Patrick Moore	patrickm@scccl.org	SCCCL AR
Tom Eppink	teppink@scana.com	SCANA Services, Inc.

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APPENDIX B

LOWER SALUDA RIVER FOCUS GROUP SURVEY

APPENDIX C

LOWER SALUDA RIVER LAND-BASED RECONNAISSANCE SURVEY

**Response to Comments Submitted to Draft Downstream Recreation Flow Assessment Study Plan**

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Patrick Moore	1) The study should address all types of recreation, from the perspective of different skill levels at the full range of operation flows.	The study will cover on-water activities and solicit input on the range of flows appropriate for specific on-water activities. Information on appropriateness of flows for varying skill levels will be captured during focus group discussions and the land-based reconnaissance.
Patrick Moore	2) The study should look at different types of river, i.e. pool, riffle, shoal etc. in its rate of change analysis	These will be captured by the locations of the level loggers, the on-site reconnaissance (some locations of the river better than others for certain activities), etc.
Patrick Moore	The study should address all types of recreation at the full range of operation flows.	The study will address the range of flows experienced during the deployment of the level loggers. The expert panel will be providing information based on their experience with flows in the full range of operation, as appropriate.
Patrick Moore	3) The study should look at different types of river in its rate of change analysis	Expected to be addressed by level logger locations.
Patrick Moore	The study should look at prospective use and associated issues.	This will be addressed by the Saluda Recreation Assessment and is not a component of this study.
Patrick Moore	(the predetermined intervals should be representative of and not just be limited to “rec flow ranges”, this is the only way to capture the impact of actual project operations on the existing and beneficial uses)	The predetermined intervals in this context are spatial intervals, not temporal intervals. The range of flows that are experienced during the deployment of the level loggers are the full range of flows that will be assessed.

**Response to Comments Submitted to Draft Downstream Recreation Flow Assessment Study Plan**

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Tony Bebber	i. Identify and characterize potential/anticipated recreation areas on the lower Saluda River. <ol style="list-style-type: none"> <li>1. Identify activities that may be supported by these areas.</li> <li>2. Identify anticipated patterns of use of these areas by type and volume.</li> <li>3. Estimate preferred flows associated with reasonable and safe recreational use.</li> <li>4. Understand the “rate of change” at various flows at these areas.</li> </ol>	With exception of the rate of change and preferred flows, these will be addressed by the Saluda Recreation Assessment.
Patrick Moore	i.e. if it goes to 20,000 unannounced, you need access points much more frequently than if there is an operational ramping, otherwise, you could be forcing people to handle conditions they are not comfortable with or trespass.	This will be taken into consideration in the assessment of ingress, egress, and safety warning devices.
Tony Bebber	Red dots are insufficient areas to consider. These appear to be major kayaking areas. You must consider other recreational activities – wade fishing, bank fishing, swimming, tubing, rock use, sunbathing, picnicking, walking, bicycling, etc.	Red dots correlate with the HEC Res-Sim model cross sections that will be used for assessment of recreational flows and provide a range of hydrological conditions (pools, riffle, shoals). Red dots also correlate with or are within proximity of recreation access sites. Recreational activities are likely concentrated in areas in proximity of these access sites (for example, rock use, sunbathing, etc. occurs frequently at Mill Race, which is also considered a kayaking area).

**Response to Comments Submitted to Draft Downstream Recreation Flow Assessment Study Plan**

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Tony Bebber	What about anglers and other users?	<p>Opinions on appropriate flows for anglers will be solicited during focus group discussions and the land-based reconnaissance. However, flows for anglers, for the most part, will likely be determined by the most suitable and appropriate flows for fish habitat. TU advocates for the best flows to be set based on scientific studies for the fish, not for the fishermen or other recreationists. Fish habitat suitability would generally be the limiting factor for optimal flows for any kind of angling (from a canoe, bank angling, wading, etc.). SCDNR has already identified optimum flows for fish habitat on the lower Saluda River.</p> <p>The flow assessment will target on-water activities only. The focus group discussion and land-based reconnaissance will provide information on appropriate flows for other uses. For example, it would seem to me that the optimum flows for rock people are any flows where the rocks are exposed and easily accessible. Likewise, for picnickers, sunbathers, mountain bikers etc. who utilize exposed rocks in the river bed for recreational activities. For swimming, any flow, including no flow, could be appropriate. Individuals have opportunities to swim in eddies at different flows, for example.</p>

**Response to Comments Submitted to Draft Downstream Recreation Flow Assessment Study Plan**

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Tony Bebber	What about inexperienced users?	Issues associated with recreational use by inexperienced individuals are expected to be addressed by “optimal” flow recommendations and identification of safety issues provided by the expert panel. Inexperienced users will not be included in the focus group discussions or land-based reconnaissance as these efforts require experience and familiarity to adequately assess flow needs for various activities.
Bill Marshall	The following use of terms needs clarification... sounds like the writer is wanting to understand how rapids and river conditions change with flows???	The focus group discussion and land-based reconnaissance should provide information on what rapids, eddies, etc. are produced under what flows which will contribute to the analysis of preferred flow inputs for the HEC Res-Sim model.
Tony Bebber	How will you anticipate future use associated with Three Rivers Greenway, ICRC greenway extension, park at 12 mile Creek, etc. Also, be aware that much of the recreational activity occurs from private property, such as the Rivers Edge subdivision (near Oh Brother Rapids) and Cornerstone Church.	Future use will be addressed in the Saluda Recreation Assessment.
Patrick Moore	Since operations are required to protect everyone and not just experts, we should get a range of experiences as needed. Liability waivers are an option. The panel should observe the rate of change, if not experience it.	The field reconnaissance will be targeted to observe varying flow conditions on the river. This may or may not encompass a “rate of change” event.

**Response to Comments Submitted to Draft Downstream Recreation Flow Assessment Study Plan**

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Patrick Moore	All operational ranges should be evaluated. This study should evaluate real world operations on recreation, not just limit itself to predetermined “recreational flow ranges”. All recreators currently have to recreate in the full 180-18,000cfs range and the study should reflect that.	The focus group discussion and land-based reconnaissance is expected to provide information on the optimum flows, between 180 and 18,000 cfs, for various recreation activities. The level loggers will provide rate of change information.
Patrick Moore	Part of the study must include assessment of the quality of the recreational experience by people actually boating, tubing, swimming, fishing (wading and from boats and banks), not just stream-side observations	An assessment of crowdedness, condition of recreation facilities, what recreation activities people are participating in, why they chose the site that they did, recommendations for additional facilities and improvements, and an assessment of on-water safety issues will be provided by the Saluda Recreation Assessment.
Bill Marshall	Will water depth (stage as it is termed below) be measured in tenths of feet?? The units need to be detailed, down to 0.25-foot increments or better seems desirable...????)...	Level loggers will measure to 0.10 foot.
Bill Marshall	This time frame (180 days) certainly seems adequate to capture the a normal range of hydro flows under the various power-production demands; however, the last six-months have been abnormal and to my knowledge there have been very few rapid, high-flow release event for hydropower production. We need to capture data for the normal, expected hydro release scenarios or this study will be of little use to us.)	The TWC will determine the schedule for level logger deployment.



**Response to Comments Submitted to Draft Downstream Recreation Flow Assessment Study Plan**

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Tony Bebber	Group needs to decide which 6 month period is best.	The TWC will determine the schedule for level logger deployment.
Bill Marshall	the event specific information I am describing above is needed to meet what I think is the main objective behind Goal 2 of this study ... Goal 2: Understand the “rate of change” of the lower Saluda River at various flows at various river reaches. We are trying to better understand an identified safety issue and that issue is connected to specific types of events. The above list of “average” statistics is not very useful to the question in my mind. We need water level change data for distinct hydro operation events (or types of events) that present the potential threat to public safety.	This comment is addressed in the revised study plan. Minimums and maximum rates of change, etc. for different flow releases were added to the bullet list.
Tony Bebber	Be aware that AVERAGE FLOW is not the issue. High flows and sudden rises are of great concern to anglers, sunbathers, tubers, inexperienced paddlers, and others. Low flows are of concern to paddlers.	Included bullets accordingly – see above.
Patrick Moore	The location of ingress egress is intimately related to being on the river when the water begins to rise and figuring out how long different users have to get off before they are out of their league.	This will be taken into consideration in the assessment of ingress, egress and safety warning devices.
Patrick Moore	Rephrase - The study must provide an assurance that specific conditions/flows/rates of change will be observed and a flow schedule will be developed to create these conditions.	Recommendations developed for this study will provide input into the HEC Res-Sim model. This study can not assure that specific flow recommendations will be implemented, but must be balanced with other uses.

**Response to Comments Submitted to Draft Downstream Recreation Flow Assessment Study Plan**

Author	Comment	Response
Patrick Moore	I do not understand the idea that specific conditions/flows/rates of change cannot be intentionally created for us to experience for liability purposes. We are being asked to sign off on these same unannounced releases for the next 30-50 years? It is common for applicants to release water for studies and activities like canoeing for kids and rescue training	Rather than depend on water availability, this study provides the opportunity for all flow ranges be considered. It is felt that the expert panel can provide recommendations/observations based on their experiences on the river. These recommendations/observations will be considered equal to the results of a full blown recreational flow study.
Tony Bebber	The study plan seems to be skewed toward recreational boating (primarily paddling) and generally ignores wade fishing, bank fishing, swimming/sunbathing/rock use, tubing, and other uses along the river.	The flow assessment will target on-water activities only. The focus group discussion and land-based reconnaissance will provide information on appropriate flows for other uses.
Tony Bebber	The study plan does not address potential recreation use associated with anticipated new recreation venues (Three Rivers Greenway, Lower Saluda Greenway/Saluda Shoals extension, potential new park at 12 mile creek, etc.) or residential recreational use (Rivers Edge Subdivision and others).	Future use will be addressed in the Saluda Recreation Assessment.
Tony Bebber	I assume the red dots on the map are the locations for testing. These all appear to be paddling areas and have little to do with other activities. You must consider other recreational activities - wade fishing, bank fishing, swimming, tubing, rock use, sunbathing, picnicking, walking, bicycling, etc. Shouldn't the shoreline along Saluda Shoals Park be a prime spot to be considered?	Red dots correlate with the HEC Res-Sim model cross sections that will be used for assessment of recreational flows and provide a range of hydrological conditions (pools, riffle, shoals). Red dots also correlate with or are within proximity of recreation access sites. Recreational activities are likely concentrated in areas in proximity of these access sites (for example, rock use, sunbathing, etc. occurs frequently at Mill Race, which is also considered a kayaking area).

**Response to Comments Submitted to Draft Downstream Recreation Flow Assessment Study Plan**

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Tony Bebbber	You must also be aware that all current and future users are not "experts" or familiar with the dangers presented by the hydro project river.	These issues are expected to be addressed by “optimal” flow recommendations and identification of safety issues provided by the expert panel.
Bill Marshall	The main concern expressed in my comments is related to the purpose behind Goal 2 ... to understand the “rate of change” of the lower Saluda River at various flows at various river reaches. To better understand the safety issues associated with rapidly rising water, we need to characterize water level change for specific types of hydro events. As the plan currently reads, it appears to miss the specificity needed to really understand this public safety issue. Therefore, I have supplied suggestions for more specific language.	This comment is addressed in the revised study plan. Minimums and maximum rates of change, etc. for different flow releases were added to the bullet list.
Malcolm Leaphart	I endorse and 'second' all of the comments from Tony Bebbber listed below and in his redline comments in his response to you of August 18 on the proposed 'Downstream Recreation Flow Assessment Study'. In fact, the draft study as noted could be more appropriately titled a 'Downstream Paddlers Flow Assessment Study'. The inclusions that Tony noted are critical to ensure that other recreation uses are not left out.	The flow assessment will target on-water activities only. The focus group discussion and land-based reconnaissance will provide information on appropriate flows for other uses.
Malcolm Leaphart	Also, the realization of the tremendous increase in usage because of the new river parks and greenways is extremely significant. As the tv ad goes, “This is not your father’s Buick”	Future use will be addressed in the Saluda Recreation Assessment.

**Response to Comments Submitted to Draft Downstream Recreation Flow Assessment Study Plan**

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Patrick Moore	River flows <a href="#">and rates of change</a> identified by the focus group during these efforts will serve as input constraints for the HEC Res-Sim model.	The HEC Res-Sim model will not to model the rates of change. These will be analyzed separate from the model.
Patrick Moore	The purpose of this model is to determine effects of downstream flows on various resources, based on flow constraints provided <a href="#">by the focus group, which will be derived from an analysis of the full range of flows and intended to protect designated and existing uses in a safe manner.</a>	The expert panel will be providing information on the optimum flows based on their experience of the full range of flows but the full range of flows will not likely be provided for observation.

## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Wednesday, October 04, 2006 3:27 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Brebner ; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Richard Mikell; Steve Bell; Suzanne Rhodes; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebbler  
**Subject:** 09-20-06 Downstream Flows TWC Meeting Notes

Please have any comments/edits to me by October 18th. Note I have included the version of the study plan we discussed at the meeting and the comment matrix that was provided to the DFTWC prior to the meeting. While we have finalized this study plan since the meeting (a final version will be distributed later today), I thought providing the documents we discussed would provide some perspective for the meeting notes.



2006-09-20 DFTWC  
Meeting Note ...



Draft Flow  
assessment Study Pl.



Response to  
omments on Draft .

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**SCDNR HEADQUARTERS  
September 20, 2006**

*draft dka 10-04-06*

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**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Tom Eppink	SCANA	Malcolm Leaphart	TU
Bill Marshall	SCDNR and LSSRAC	Dave Anderson	Kleinschmidt Associates
Patrick Moore	AR/SCCCL	Jennifer Summerlin	Kleinschmidt Associates
Mary Crockett	SCDNR	Alan Stuart	Kleinschmidt Associates
Kelly Maloney (by phone)	Kleinschmidt Associates		

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**ACTION ITEMS:**

- Dave Anderson – contact Hal Beard about creel surveys
- Dave Anderson – send out study plan to committee members and finalize

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:** TBA

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**SCDNR HEADQUARTERS  
September 20, 2006**

*draft dka 10-04-06*

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**MEETING NOTES:**

*These notes serve as a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Dave welcomed the Downstream Flow TWC (DFTWC) members and noted the purpose of the meeting was to discuss and finalize the Downstream Recreation Flow Assessment Study Plan (attached). Dave noted that he would like to go through each section so all committee members have the opportunity to comment on the study plan.

Dave briefly summarized the introduction of the study plan and no comments were made. Dave further explained the purpose of the study is to assess recreational flows for the lower Saluda River (LSR) for different types of recreation at different river reaches under different flow conditions. Malcolm asked how a rate of change will be determined. Dave noted that rate of change will be estimated from the tailrace to the confluence using level loggers. He explained that level loggers will measure down to a tenth of a foot. He added that all flows will be investigated to examine how the river rises differently. Dave noted that the locations of level loggers coincide with the HEC Res-Sim model and cross sections were chosen according to river habitats (riffle, run, pool).

The group continued to review the study plan and Dave briefly discussed the goals of the study plan. There were no comments provided on Goals One and Two. Dave read Goal Three and it was noted that "public" should be inserted before the word "ingress" for Objective Three of Goal Three. Dave then briefly reviewed the locations the level loggers will be placed in the lower Saluda River. He noted that rate of change will be estimated between each location. There was some discussion about where the level loggers will be placed in the LSR and the group agreed that a second level logger should be added to Oh Brother Rapids and Ocean Boulevard locations.

Dave then began to discuss the three phases of methodology. He noted that the first phase will include hydrologic data, creel surveys, and the IFIM study. Dave then explained that Phase Two will include a downstream flows focus group and a land based reconnaissance. There was some discussion about the benefits of doing a water-based reconnaissance. The group also felt flow ranges should be provided in order to assess actual flows rather than collect opinions on flows. At the end of the reconnaissance, members will fill out a questionnaire about the flows for that day. There was a brief discussion about what flow ranges should be evaluated. Kelly Maloney noted that Phase One will help identify the specifics of the flows. The group decided that flow ranges will be determined by the DFTWC based on the results from Phase One. There was further discussion about the use of video documentation to capture a rate of change of event. The group decided to include this option in the study plan as part of the Phase Two work.

**MEETING NOTES**

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SALUDA HYDRO PROJECT RELICENSING  
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*draft dka 10-04-06*

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Dave briefly reviewed Phase Three and asked the group to provide comments. It was noted that “minimum of 180 days” should be deleted and replaced with “deployed long enough to capture the full range of flow releases necessary to complete the study.” The group also agreed that the first two bullets should be removed from Phase Three (overall and daily average flow). It was suggested the comment matrix should be added to the appendix of the study plan. Dave noted that questionnaires will be drafted once Phase One is complete. Dave mentioned that he would send out the study plan to committee members so everyone can review changes made.



**MEETING NOTES**

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SALUDA HYDRO PROJECT RELICENSING  
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*draft dka 10-04-06*

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**Comments from Bill Marshall:** Folks, more food for thought...I was thinking this morning about some ideas which have been expressed about understanding rate-of-change and even experiencing rate-of-change.

I'm not sure what we concluded yesterday about the use of video, but I'm thinking now that we may want to consider trying to capture video or time-lapsed photography of certain rates of change in order to better document the (call it what you will) surge/bubble/wave/wall-of-water experience in the river. Since we are relying upon expert assessments of river conditions, visual information when combined with the water level logger data could be more effective than logger data alone in documenting and evaluating what happens in the river. Perhaps a video component could be accomplished quickly if we were able to schedule one rapid high-flow release event and have cameras deployed at selected points.

This idea could be an option for later consideration under Phase 2 (expert recon) of the study. What do you all think?

**Comments from Malcolm Leaphart:** The draft, including the comments and replies, has evolved to an accurate document of the scope and intentions for the Downstream Flow study as discussed at the past meetings. The disposition of the major issue of future recreational needs is still of key concern. Would you please clarify in the Recreational Flows Plan, exactly what the 'Saluda Recreation Assessment' is, who will be doing it, and when? This is the phrase from the answer you provided to several questions about future recreational needs in the table of comments and responses:

"Future use will be addressed in the Saluda Recreation Assessment"

The concern is that future recreation needs are a major issue because of the inadequate current sites, especially on the lower Saluda, but also on Lake Murray where marinas are closing or have been converted to private use. Most of the stakeholders would have preferred this issue be a starting point for committee efforts, rather than it still not being addressed to date. So, we would appreciate you stating the intentions for an assessment at some future time with some level of certainty and with as much level of detail as you can at this time as to how it will be dealt ultimately in the relicensing. It is certainly much too important an issue to fail to cover or to lose track of...

**Reply from Dave Anderson:** The Recreation Assessment is currently being conducted. The study plan is on the web site:

<http://www.saludahydrorelicense.com/documents/001-SaludaRecreationAssessmentStudyPlanFINAL.pdf>

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
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September 20, 2006**

*draft dka 10-04-06*

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**Reply from Malcolm Leaphart:** My request was not for the study details, but to clearly state that the issue of future recreation needs are highlighted as the important issue it is in the draft. So, let me re-state my request and be more specific... The following paragraph from the Downstream Flows does not include any reference to future recreation needs (except the term 'opportunities' which is too vague to infer future needs from). Please add a reference to this paragraph that states that future recreation needs is one of the goals of the Assessment as documented.  
Thanks.

“The 2006 Saluda Project Recreation Assessment is currently being conducted under the Recreation RCG. This study utilizes vehicle counts and on-site interviews of individuals at Project recreation sites to ascertain opportunities, patterns, and levels of use along the lower Saluda River. These data will be reviewed and analyzed to determine what recreation activities are currently supported by access sites along the lower Saluda River, what recreation activities are being participated in by individuals at these sites, how much use the lower Saluda River receives, and any specific comments made by respondents pertaining to safety, river flows, and barriers to access.”

**Reply from Kelly Maloney:** I would agree that future recreation use levels and needs on the lower Saluda River should be addressed in the relicensing process and the Saluda Recreation Assessment (the study plan of which was distributed by Dave) should address all of the concerns that you have raised. Because we are not considering future uses or needs in the Downstream Recreation Flow Assessment Study Plan, however, I do not believe that the flow study is the most appropriate forum to discuss the goals and objectives of Saluda Recreation Assessment. I'm not clear on the reason why we would want to specifically highlight a goal of another study for an issue that is not a part of the study plan at hand.

Future uses are not included as part of the goals of the flow study plan because we are attempting to determine the appropriateness of certain flow levels for certain activities. Irrespective of how use levels increase or change in the future, the flows most appropriate for certain activities would not change. Though use distributions may shift and other access locations utilized in the future, the capacity and condition of existing access sites, as well as the potential for additional sites and improvements which would support recreational use of the lower Saluda River, are wholly addressed in the Recreation Assessment.

As you pointed out, there are two places in the flow study plan that reference the Saluda Recreation Assessment: Section 2.1 and Appendix C. Section 2.1 discusses the aspects of the Saluda Recreation Assessment that will be utilized as part of the Phase I investigation for the flow study. Because the flow study is not considering future uses, I believe it would confuse the issue to discuss details of the Recreation Assessment that are not being used or considered here in the flow study. Likewise, I do not believe that Appendix C is the forum to outline the goals and objectives of the

**MEETING NOTES**

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*draft dka 10-04-06*

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Saluda Recreation Assessment. If an issue was raised that we believed to be out of the scope of the flow study but addressed by the Saluda Recreation Assessment, we referenced that document in Appendix C. If you feel it would be helpful to include a hyperlink to the Saluda Recreation Assessment Study Plan (such as the one forwarded by Dave) in Appendix C, we can certainly do that.

**Reply from Malcolm Leaphart:** The reason to expand the statement as I suggested is because it is incomplete in listing all of the goals of the Recreation Assessment that is being summarized by the statement. However, I have no major objection in leaving it as it is since the Recreation Assessment includes the goal of identifying future recreational needs, and the point has been made in our exchanges of the importance of that. Please include our exchanges, including this one, as an addendum to the last meeting summary for the Recreation Flow Assessment TWC.

It is evidently important to further clarify why I made this simple request: There is a concern that the critical issues identified at the beginning of the relicensing process, including in ICD comments from stakeholders, are not the focus and organizational point for the process. Tracking of issues is very difficult as a result, as is keeping up with all the inter-relations between the many issues being dealt with in separate groups. Also, a promised issues spreadsheet for tracking has not been communicated to date and will soon become a moot point. So, any opportunity to emphasize key issues is looked for, such as for the future recreation needs issue which is a very sensitive one. It was originally not even included in the first drafts of the Recreation Assessment, and only added after stakeholder requests. To many of the stakeholders, identifying future recreation needs is a much more important issue and goal worthy of a separate TWC when compared to identifying possible site upgrades which could be done outside of the relicensing process as a maintenance item - much like the recent upgrade to the Hilton boat landing. Will continue to try to participate positively as SCE&G manages the relicensing process, and appreciate the opportunity to express concerns and to try to keep the focus on critical issues.

# **SOUTH CAROLINA ELECTRIC & GAS COMPANY**

## **SALUDA HYDROELECTRIC PROJECT** *(FERC NO. 516)*

### **DOWNSTREAM RECREATION FLOW ASSESSMENT STUDY PLAN**

**DRAFT**

*SEPTEMBER, 2006*

*Prepared by:*

***Kleinschmidt***  
*Energy & Water Resource Consultants*

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SALUDA HYDROELECTRIC PROJECT  
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(FERC NO. 516)**

**DOWNSTREAM RECREATION FLOW ASSESSMENT STUDY PLAN**

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## **SOUTH CAROLINA ELECTRIC & GAS COMPANY**

### **SALUDA HYDROELECTRIC PROJECT (FERC NO. 516)**

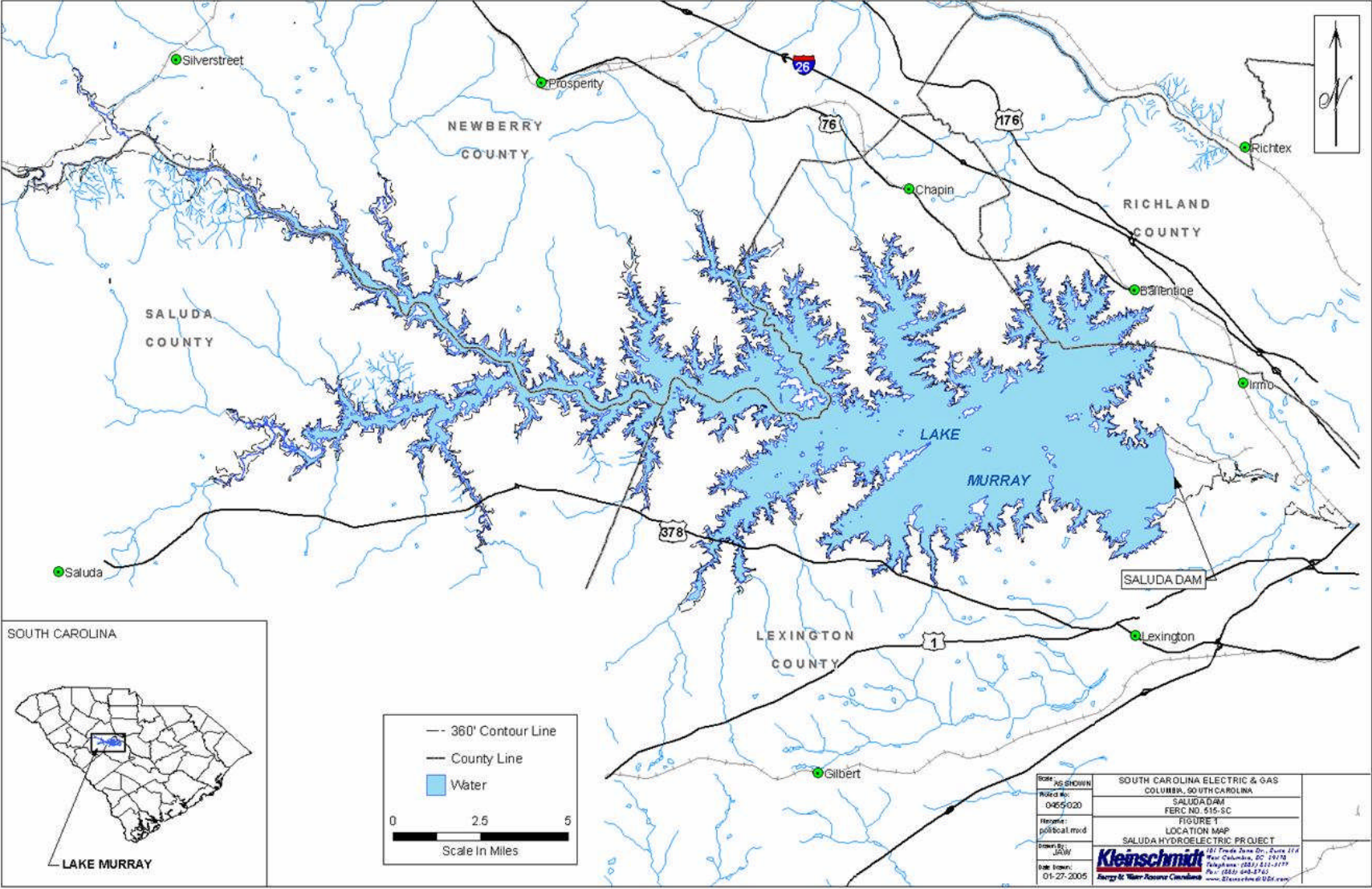
#### **DOWNSTREAM RECREATION FLOW ASSESSMENT STUDY PLAN**

##### ***1.0 INTRODUCTION***

The Saluda Hydroelectric Project (Project), is a Federal Energy Regulatory Commission (FERC) licensed project (FERC No. 516), owned and operated by South Carolina Electric & Gas Company (SCE&G), pursuant to the license issued by the FERC in 1984. The Project is located on the Saluda River within Richland, Lexington, Saluda, and Newberry Counties, South Carolina, and situated within proximity of the towns of Irmo, Chapin, and Lexington and within the metropolitan area of the City of Columbia, South Carolina, which is approximately 10 miles east of the Project (Figure 1). The Saluda Project includes Lake Murray, the Saluda Dam and Spillway, the Saluda Berm, Saluda Powerhouse, intake towers, and associated penstocks.

SCE&G is in the process of relicensing the Saluda Project as the current operating license expires on August 31, 2010. This relicensing process involves cooperation and collaboration with a variety of stakeholders, including state and federal resource agencies, state and local government, non-governmental organizations (NGO), and interested individuals, in order to identify and address any operational, economic, and environmental issues associated with a new operating license for the Project. The Downstream Flows Technical Working Committee (TWC) is comprised of interested stakeholders (Appendix A) who are collaborating with SCE&G to identify and make recommendations related to public safety and recreational opportunities associated with downstream project flows to the lower Saluda River. The Downstream Flows TWC has requested that a study be designed and implemented that would assess flows, identify preferred flows for recreational activities, and determine safety issues associated with river flows that may need to be addressed through the work of the Safety Resource Conservation Group (RCG).

**Figure 1: Project Location**





## 1.1 Study Area

SCE&G currently operates the Saluda Project in order to provide reserve capacity for the company's utility obligations, a mode of operation that the company proposes to continue under the new license. Project generators are typically offline, *i.e.*, not operating, but can be started and synchronized to the electrical grid and can increase output immediately in response to a generator or transmission outage on SCE&G's system or in response to a call for reserve power from neighboring utilities, with which the company has reserve agreements and obligations. As a result, flows from the Saluda Project are generally unscheduled. Although there is no minimum flow requirement for the Project, SCE&G has an informal agreement with the South Carolina Department of Health and Environmental Control (SCDHEC) to provide a minimum of 180 cfs at the Project to enhance downstream water quality<sup>1</sup>. The average annual flow from the Saluda Dam to the lower Saluda River is 2,595 acre feet with a minimum average daily flow of 285 cfs. For the purposes of this study, the geographic scope will be from the base of the dam to the confluence with the Broad River (Figure 2).

## 1.2 Purpose and Content of the Study

The Downstream Flows TWC has requested an assessment of recreational flows for the lower Saluda River for different types of recreation at different river reaches under different flow conditions. The assessment is designed to provide information pertinent to optimum and preferred flows for particular recreation activities and any public safety issues associated with recreational use of the river. This study encompasses the following goals and objectives:

*Goal 1: Characterize currently available recreation opportunities on the lower Saluda River. This will be accomplished by meeting the following objectives:*

- i. Utilize the information collected during the Saluda Project Recreation Assessment to identify sites providing recreational access to the lower Saluda River and the recreation activities supported by these sites.

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<sup>1</sup> At certain times of the fall season, SCE&G can not utilize a full range of operations due to dissolved oxygen concerns.

- ii. Utilize the information collected during the Saluda Project Recreation Assessment to identify the patterns of use on the lower Saluda River by type, location, and volume.
- iii. Estimate preferred flows associated with reasonable and safe recreational use of the lower Saluda River for specified activities to serve as input constraints to the HEC Res-Sim model being developed by the Operations RCG.

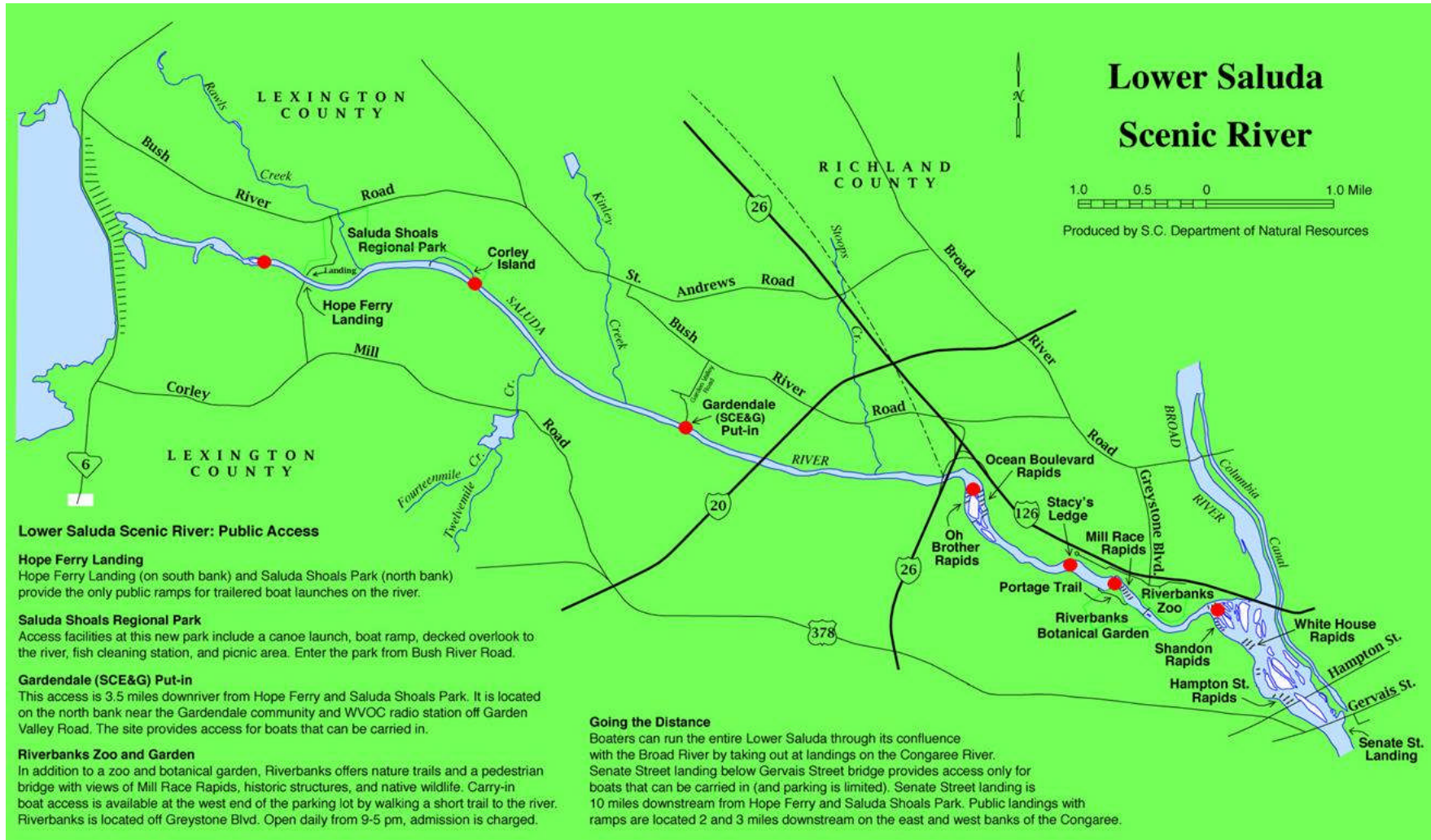
Goal 2: *Understand the “rate of change” of the lower Saluda River at various flows at various river reaches. This will be accomplished by meeting the following objectives:*

- i. Identify and characterize water level changes at predetermined intervals, encompassing the various river channel types (pools, runs, shoals) along the lower Saluda River from the dam to the confluence with the Broad River, capturing the full range of project operation flow scenarios.

Goal 3: *Identify potential public safety issues associated with lower Saluda River flows. This will be accomplished by meeting the following objectives:*

- i. Identify potential safety issues and barriers on the lower Saluda River.
- ii. Identify potential locations for additional flow release warning systems such as sirens, strobes, and signage on the lower Saluda River.
- iii. Identify locations for ingress and egress on the lower Saluda River as related to the safety of river users.

**Figure 2: Study Area for Downstream Flow Assessment and Approximate Locations for Level Loggers**  
 (Source: South Carolina Department of Natural Resources, as modified by Kleinschmidt)



## **2.0 METHODOLOGY**

Information gathered for this study will be used to examine the suitability of the lower Saluda River for several types of recreation activities as a function of variations in flow levels. This study will take a three-phase approach to meet the goals of the study through the objectives identified above. Phase I will involve a desktop analysis of the recreation opportunities, patterns of use, physical characteristics, and hydrology of the lower Saluda River. Phase II will involve structured surveys and on-site reconnaissance of an expert panel of experienced boaters, recreationists, NGO's, and agency staff familiar with the river to assess the feasibility and potential quality of particular flow ranges for on-water activities. Phase III will involve the deployment of water level data loggers at various predetermined intervals along the lower Saluda River from the dam to the confluence with the Broad River.

### **2.1 Phase 1 – Literature Review and Desktop Analysis**

This task involves compilation and review of existing information about river channel characteristics, hydrology, current and planned recreational opportunities, and flow data for the lower Saluda River.

Literature searches will be conducted via the web, libraries, and SCE&G and agency collections. Consultation may include local paddling clubs, the Irmo Chapin Recreation Commission (ICRC), American Rivers (AR), American Whitewater (AW), Saluda Chapter of Trout Unlimited/Federation of Fly Fishers, the River Alliance, and others to determine if there are current or recent river recreational studies or data pertinent to this effort. South Carolina whitewater, fishing, and outdoor recreation tourism guidebooks will be reviewed in an effort to identify potential boating, angling, and other recreational opportunities on the lower Saluda River. Other relevant documents may include the Three Rivers Greenway plan, South Carolina Statewide Comprehensive Outdoor Recreation Plan (SCORP), and the Lower Saluda Scenic River Corridor Plan and Update.

Relevant summary hydrology data, from SCE&G, United States Geological Survey (USGS), South Carolina Department of Natural Resources (SCDNR), and other state agencies will be collected. In addition, any existing studies on instream flow and

creel surveys will also be reviewed. Historic records of minimum, maximum, and average flow rates will be reviewed and seasonal variations will be noted. These data will be examined to determine the number of days the lower Saluda River may be available for each identified primary recreation activity.

The 2006 Saluda Project Recreation Assessment is currently being conducted under the Recreation RCG. This study utilizes vehicle counts and on-site interviews of individuals at Project recreation sites to ascertain opportunities, patterns, and levels of use along the lower Saluda River. These data will be reviewed and analyzed to determine what recreation activities are currently supported by access sites along the lower Saluda River, what recreation activities are being participated in by individuals at these sites, how much use the lower Saluda River receives, and any specific comments made by respondents pertaining to safety, river flows, and barriers to access.

## 2.2 Phase 2 – Focus Group and Land-Based Reconnaissance

An expert panel will be compiled to collect and disseminate information regarding recreation opportunities and potential flow effects on recreation on the lower Saluda River. The expert panel will consist of the experienced recreational users and resource experts that make up the Downstream Flows TWC and others as needed. A survey (Appendix B) and focus group discussion panel will be conducted to document characteristics of the lower Saluda River with respect to the nature and seasonal distribution of on-water activities; the locations and flows for wading, swimming holes, velocity refuges, rapids and eddies; existing and potential ingress and egress locations; potential locations for additional safety lights/sirens; and any potential safety hazards.

The expert panel will also conduct an on-site reconnaissance. The purpose will be to augment existing information on flows, opportunities, and safety concerns. This will involve a facilitated expert panel site visit led by a principal researcher. The expert panel will observe and assess the lower Saluda at predetermined geographic intervals. Ideally, the land-based reconnaissance will be scheduled when flows are provided in the river reach within an estimated recreational flow range. The expert panel will complete a land-based reconnaissance survey (Appendix C) similar to the focus group survey, which will

solicit additional information on locations and flows for select recreation activities and potential safety hazards.

River flows identified by the expert panel during these efforts will serve as input constraints for the HEC Res-Sim model. The purpose of this model is to determine effects of downstream flows on various resources, based on flow constraints provided by the focus group. The model will determine a series of operational regimes which target the diverse interests of the various resource groups and identify a balance between these interests and project operations with respect to lake levels, generation needs, and project outflows.

### 2.3 Phase 3 – Field Data Collection

To accurately assess the effect of Project generation on water levels in the lower Saluda River, water level data loggers will be deployed at predetermined intervals correlated with the HEC Res-Sim cross-sections along the River from the Saluda Dam to the confluence of the Broad River (Figure 2). Water level loggers will record the barometric pressure, water depth, and temperature once per minute and will be deployed for a total minimum of 180 days. These data will be correlated with hydrologic data (such as from USGS gaging stations) to determine (for the study time period):

- the overall average flow (in cfs);
- daily average flow (in cfs);
- overall average river depth (in feet) for each water level data logger location;
- daily average river depth (in feet) for each water level data logger location;
- average maximum river depth (in feet) for each water level data logger location;
- average time to maximum river depth for each water level data logger location;
- average time to recession for each water level data logger location;
- average rate of change in water level for each water level data logger location;
- maximum river depth (in feet) for each water level data logger location by flow;
- minimum time to maximum river depth for each water level data logger location by flow;
- maximum time to recession for each water level data logger location by flow ; and

- minimum, average, and maximum rate of change in water level for each water level data logger location by flow level.

The information gathered through field reconnaissance, literature review, flow and hydrologic data analysis, and the expert panel will provide a basis by which to identify preferred flows for the lower Saluda River that target particular recreation activities at appropriate locations. These flows will be provided as input constraints to the HEC Res-Sim model to determine the feasibility, suitability, and availability of such flows. Recommendations for special recreational flow releases may be developed from the HEC Res-Sim model analysis of recreational flow inputs.

Likewise, any existing and potential safety issues associated with typical and preferred flows will be identified and recommendations for safety measures to be considered by the Safety RCG will be provided. In particular, the location of the level loggers will assist in determining which sections of the river may be in need of additional safety and protection measures such as additional warning lights/sirens, formal ingress/egress sites, and determine which areas of the river may be suitable as velocity refuges.

### **3.0 DELIVERABLES**

The Draft and Final Report will be prepared for this effort. The Draft Report will be reviewed internally by the Downstream Flows TWC and Recreation RCG. Comments and edits from the Downstream Flows TWC will be incorporated into a Final Report for Saluda Hydro Relicensing Group. The report will include an executive summary, an introduction, objectives, methods, and results. It will also include recommendations for optimal recreation flows and flow schedules for use as HEC Res-Sim model inputs. The report will also outline safety concerns, including rate of change, and potential measures to enhance public safety.



#### **4.0 SCHEDULE**

The proposed schedule for completion of the Recreation Flow Assessment Study is as follows:

<b>TASK</b>	<b>DATE</b>
Literature Review and Desktop Analysis	Winter 2006
Focus Group and Expert Panel Land-Based Reconnaissance	Spring 2007
Field Data Collection	Fall 2006 – Summer 2007
Submit Draft Report	Fall 2007
Client and TWC Review	Fall 2007
Submit Final Report	Winter 2007

## **5.0 REFERENCES**

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APPENDIX A

DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE

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<b>Name</b>	<b>Contact Information</b>	<b>Affiliation</b>
Bill Marshall	marshallb@dnr.sc.gov	Lower Saluda Scenic River Advisory Council, DNR
Charlene Coleman	cheetahtrk@yahoo.com	American Whitewater
Dave Anderson	dave.anderson@kleinschmidtusa.com	Kleinschmidt Associates
Guy Jones	guyjones@sc.rr.com	River Runner Outdoor Center
Jennifer Summerlin	jennifer.summerlin@kleinschmidtusa.com	Kleinschmidt Associates
Karen Kustafik	kakustafik@columbiasc.net	City of Columbia Parks and Recreation
Malcolm Leaphart	malcolml@mailbox.sc.edu	Trout Unlimited
Patrick Moore	patrickm@scccl.org	SCCCL AR
Tom Eppink	teppink@scana.com	SCANA Services, Inc.

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APPENDIX B

LOWER SALUDA RIVER FOCUS GROUP SURVEY

APPENDIX C

LOWER SALUDA RIVER LAND-BASED RECONNAISSANCE SURVEY

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Patrick Moore	1) The study should address all types of recreation, from the perspective of different skill levels at the full range of operation flows.	The study will cover on-water activities and solicit input on the range of flows appropriate for specific on-water activities. Information on appropriateness of flows for varying skill levels will be captured during focus group discussions and the land-based reconnaissance.
Patrick Moore	2) The study should look at different types of river, i.e. pool, riffle, shoal etc. in its rate of change analysis	These will be captured by the locations of the level loggers, the on-site reconnaissance (some locations of the river better than others for certain activities), etc.
Patrick Moore	The study should address all types of recreation at the full range of operation flows.	The study will address the range of flows experienced during the deployment of the level loggers. The expert panel will be providing information based on their experience with flows in the full range of operation, as appropriate.
Patrick Moore	3) The study should look at different types of river in its rate of change analysis	Expected to be addressed by level logger locations.
Patrick Moore	The study should look at prospective use and associated issues.	This will be addressed by the Saluda Recreation Assessment and is not a component of this study.
Patrick Moore	(the predetermined intervals should be representative of and not just be limited to “rec flow ranges”, this is the only way to capture the impact of actual project operations on the existing and beneficial uses)	The predetermined intervals in this context are spatial intervals, not temporal intervals. The range of flows that are experienced during the deployment of the level loggers are the full range of flows that will be assessed.

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Tony Bebber	<p>i. Identify and characterize potential/anticipated recreation areas on the lower Saluda River.</p> <ol style="list-style-type: none"> <li>1. Identify activities that may be supported by these areas.</li> <li>2. Identify anticipated patterns of use of these areas by type and volume.</li> <li>3. Estimate preferred flows associated with reasonable and safe recreational use.</li> <li>4. Understand the “rate of change” at various flows at these areas.</li> </ol>	<p>With exception of the rate of change and preferred flows, these will be addressed by the Saluda Recreation Assessment.</p>
Patrick Moore	<p>i.e. if it goes to 20,000 unannounced, you need access points much more frequently than if there is an operational ramping, otherwise, you could be forcing people to handle conditions they are not comfortable with or trespass.</p>	<p>This will be taken into consideration in the assessment of ingress, egress, and safety warning devices.</p>
Tony Bebber	<p>Red dots are insufficient areas to consider. These appear to be major kayaking areas. You must consider other recreational activities – wade fishing, bank fishing, swimming, tubing, rock use, sunbathing, picnicking, walking, bicycling, etc.</p>	<p>Red dots correlate with the HEC Res-Sim model cross sections that will be used for assessment of recreational flows and provide a range of hydrological conditions (pools, riffle, shoals). Red dots also correlate with or are within proximity of recreation access sites. Recreational activities are likely concentrated in areas in proximity of these access sites (for example, rock use, sunbathing, etc. occurs frequently at Mill Race, which is also considered a kayaking area).</p>



<b>Author</b>	<b>Comment</b>	<b>Response</b>
Tony Bebbber	What about anglers and other users?	<p>Opinions on appropriate flows for anglers will be solicited during focus group discussions and the land-based reconnaissance. However, flows for anglers, for the most part, will likely be determined by the most suitable and appropriate flows for fish habitat. TU advocates for the best flows to be set based on scientific studies for the fish, not for the fishermen or other recreationists. Fish habitat suitability would generally be the limiting factor for optimal flows for any kind of angling (from a canoe, bank angling, wading, etc.). SCDNR has already identified optimum flows for fish habitat on the lower Saluda River.</p> <p>The flow assessment will target on-water activities only. The focus group discussion and land-based reconnaissance will provide information on appropriate flows for other uses. For example, it would seem to me that the optimum flows for rock people are any flows where the rocks are exposed and easily accessible. Likewise, for picnickers, sunbathers, mountain bikers etc. who utilize exposed rocks in the river bed for recreational activities. For swimming, any flow, including no flow, could be appropriate. Individuals have opportunities to swim in eddies at different flows, for example.</p>

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Tony Bebber	What about inexperienced users?	Issues associated with recreational use by inexperienced individuals are expected to be addressed by “optimal” flow recommendations and identification of safety issues provided by the expert panel. Inexperienced users will not be included in the focus group discussions or land-based reconnaissance as these efforts require experience and familiarity to adequately assess flow needs for various activities.
Bill Marshall	The following use of terms needs clarification... sounds like the writer is wanting to understand how rapids and river conditions change with flows???	The focus group discussion and land-based reconnaissance should provide information on what rapids, eddies, etc. are produced under what flows which will contribute to the analysis of preferred flow inputs for the HEC Res-Sim model.
Tony Bebber	How will you anticipate future use associated with Three Rivers Greenway, ICRC greenway extension, park at 12 mile Creek, etc. Also, be aware that much of the recreational activity occurs from private property, such as the Rivers Edge subdivision (near Oh Brother Rapids) and Cornerstone Church.	Future use will be addressed in the Saluda Recreation Assessment.
Patrick Moore	Since operations are required to protect everyone and not just experts, we should get a range of experiences as needed. Liability waivers are an option. The panel should observe the rate of change, if not experience it.	The field reconnaissance will be targeted to observe varying flow conditions on the river. This may or may not encompass a “rate of change” event.

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Patrick Moore	All operational ranges should be evaluated. This study should evaluate real world operations on recreation, not just limit itself to predetermined “recreational flow ranges”. All recreators currently have to recreate in the full 180-18,000cfs range and the study should reflect that.	The focus group discussion and land-based reconnaissance is expected to provide information on the optimum flows, between 180 and 18,000 cfs, for various recreation activities. The level loggers will provide rate of change information.
Patrick Moore	Part of the study must include assessment of the quality of the recreational experience by people actually boating, tubing, swimming, fishing (wading and from boats and banks), not just stream-side observations	An assessment of crowdedness, condition of recreation facilities, what recreation activities people are participating in, why they chose the site that they did, recommendations for additional facilities and improvements, and an assessment of on-water safety issues will be provided by the Saluda Recreation Assessment.
Bill Marshall	Will water depth (stage as it is termed below) be measured in tenths of feet?? The units need to be detailed, down to 0.25-foot increments or better seems desirable...????)...	Level loggers will measure to 0.10 foot.
Bill Marshall	This time frame (180 days) certainly seems adequate to capture the a normal range of hydro flows under the various power-production demands; however, the last six-months have been abnormal and to my knowledge there have been very few rapid, high-flow release event for hydropower production. We need to capture data for the normal, expected hydro release scenarios or this study will be of little use to us.)	The TWC will determine the schedule for level logger deployment.
Tony Bebbler	Group needs to decide which 6 month period is best.	The TWC will determine the schedule for level logger deployment.

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Bill Marshall	the event specific information I am describing above is needed to meet what I think is the main objective behind Goal 2 of this study ... Goal 2: Understand the “rate of change” of the lower Saluda River at various flows at various river reaches. We are trying to better understand an identified safety issue and that issue is connected to specific types of events. The above list of “average” statistics is not very useful to the question in my mind. We need water level change data for distinct hydro operation events (or types of events) that present the potential threat to public safety.	This comment is addressed in the revised study plan. Minimums and maximum rates of change, etc. for different flow releases were added to the bullet list.
Tony Bebber	Be aware that AVERAGE FLOW is not the issue. High flows and sudden rises are of great concern to anglers, sunbathers, tubers, inexperienced paddlers, and others. Low flows are of concern to paddlers.	Included bullets accordingly – see above.
Patrick Moore	The location of ingress egress is intimately related to being on the river when the water begins to rise and figuring out how long different users have to get off before they are out of their league.	This will be taken into consideration in the assessment of ingress, egress and safety warning devices.
Patrick Moore	Rephrase - The study must provide an assurance that specific conditions/flows/rates of change will be observed and a flow schedule will be developed to create these conditions.	Recommendations developed for this study will provide input into the HEC Res-Sim model. This study can not assure that specific flow recommendations will be implemented, but must be balanced with other uses.

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Patrick Moore	I do not understand the idea that specific conditions/flows/rates of change cannot be intentionally created for us to experience for liability purposes. We are being asked to sign off on these same unannounced releases for the next 30-50 years? It is common for applicants to release water for studies and activities like canoeing for kids and rescue training	Rather than depend on water availability, this study provides the opportunity for all flow ranges be considered. It is felt that the expert panel can provide recommendations/observations based on their experiences on the river. These recommendations/observations will be considered equal to the results of a full blown recreational flow study.
Tony Bebber	The study plan seems to be skewed toward recreational boating (primarily paddling) and generally ignores wade fishing, bank fishing, swimming/sunbathing/rock use, tubing, and other uses along the river.	The flow assessment will target on-water activities only. The focus group discussion and land-based reconnaissance will provide information on appropriate flows for other uses.
Tony Bebber	The study plan does not address potential recreation use associated with anticipated new recreation venues (Three Rivers Greenway, Lower Saluda Greenway/Saluda Shoals extension, potential new park at 12 mile creek, etc.) or residential recreational use (Rivers Edge Subdivision and others).	Future use will be addressed in the Saluda Recreation Assessment.
Tony Bebber	I assume the red dots on the map are the locations for testing. These all appear to be paddling areas and have little to do with other activities. You must consider other recreational activities - wade fishing, bank fishing, swimming, tubing, rock use, sunbathing, picnicking, walking, bicycling, etc. Shouldn't the shoreline along Saluda Shoals Park be a prime spot to be considered?	Red dots correlate with the HEC Res-Sim model cross sections that will be used for assessment of recreational flows and provide a range of hydrological conditions (pools, riffle, shoals). Red dots also correlate with or are within proximity of recreation access sites. Recreational activities are likely concentrated in areas in proximity of these access sites (for example, rock use, sunbathing, etc. occurs frequently at Mill Race, which is also considered a kayaking area).

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Tony Bebbber	You must also be aware that all current and future users are not "experts" or familiar with the dangers presented by the hydro project river.	These issues are expected to be addressed by “optimal” flow recommendations and identification of safety issues provided by the expert panel.
Bill Marshall	The main concern expressed in my comments is related to the purpose behind Goal 2 ... to understand the “rate of change” of the lower Saluda River at various flows at various river reaches. To better understand the safety issues associated with rapidly rising water, we need to characterize water level change for specific types of hydro events. As the plan currently reads, it appears to miss the specificity needed to really understand this public safety issue. Therefore, I have supplied suggestions for more specific language.	This comment is addressed in the revised study plan. Minimums and maximum rates of change, etc. for different flow releases were added to the bullet list.
Malcolm Leaphart	I endorse and 'second' all of the comments from Tony Bebbber listed below and in his redline comments in his response to you of August 18 on the proposed 'Downstream Recreation Flow Assessment Study'. In fact, the draft study as noted could be more appropriately titled a 'Downstream Paddlers Flow Assessment Study'. The inclusions that Tony noted are critical to ensure that other recreation uses are not left out.	The flow assessment will target on-water activities only. The focus group discussion and land-based reconnaissance will provide information on appropriate flows for other uses.
Malcolm Leaphart	Also, the realization of the tremendous increase in usage because of the new river parks and greenways is extremely significant. As the tv ad goes, “This is not your father’s Buick”	Future use will be addressed in the Saluda Recreation Assessment.

<b>Author</b>	<b>Comment</b>	<b>Response</b>
Patrick Moore	River flows <u>and rates of change</u> identified by the focus group during these efforts will serve as input constraints for the HEC Res-Sim model.	The HEC Res-Sim model will not to model the rates of change. These will be analyzed separate from the model.
Patrick Moore	The purpose of this model is to determine effects of downstream flows on various resources, based on flow constraints provided <u>by</u> the focus group, <u>which will be derived from an analysis of the full range of flows and intended to protect designated and existing uses in a safe manner.</u>	The expert panel will be providing information on the optimum flows based on their experience of the full range of flows but the full range of flows will not likely be provided for observation.

## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Monday, August 14, 2006 12:15 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Brebner ; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Michalec; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Richard Mikell; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebbler  
**Subject:** 07-21-06 Final Recreation RCG Meeting Notes

Here are the final notes from our July 21st meeting.



2006-07-21  
Meeting Notes - Rec.



**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
July 21, 2006**

final dka 08-14-06

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**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Alison Guth	Kleinschmidt Associates	Tim Vinson	SCDNR
Dave Anderson	Kleinschmidt Associates	John Frick	landowner
Bill Argentieri	SCE&G	Steve Bell	Lake Watch
Alan Stuart	Kleinschmidt Associates	Regis Parsons	landowner
Tom Eppink	SCANA Services	Tony Bebber	SCPRT
Tommy Boozer	SCE&G	Joy Downs	LMA
David Hancock	SCE&G	Richard Mikell	Adventure Carolina
George Duke	LMHC		

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**HOMEWORK ITEMS:**

- Tony Bebber – check on combining data for the Recreation Participation & Preference Study for four counties around Lake Murray
- Dave Anderson – email web link on Recreation Participation & Preference Study to group
- Entire Group – review and prioritize issues

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**

**October 25, 2006 at 9:30 a.m.  
Located at the Lake Murray Training Center**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
July 21, 2006**

final dka 08-14-06

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Dave Anderson welcomed the group and noted that the purpose of the meeting would be to finalize the Work Plan, Vision Statement, Solution Principles, and begin discussion on the Recreation Plan (attached, dated July 14, 2006). After passing out the working documents, Dave noted that they would begin an interactive session of reviewing each section and make changes as needed. The group began this exercise by separating possible solutions from the Identified Issues in the Work Plan. During this discussion, Tim Vinson noted that he would like to see additional boating access sites on the Lexington side of Lake Murray. David Hancock replied and noted this issue would be covered with the possible creation of a state park on the south side of the reservoir. Tim agreed that this would sufficiently address his issue. The group continued through the document and modified items to ensure that they correctly covered all the issues.

The group briefly discussed whether to cover the issue of Two Bird Cove in the Work Plan. Regis Parsons, a landowner in the cove, was concerned about the recent classification of the cove to a special recreation area. The group decided that since this issue overlapped between the Recreation and Lake and Land Management RCGs, they would mention the item in the Recreation Work Plan, but deal with it primarily in the Lake and Land Management RCG.

As the group progressed through the Work Plan, Dave noted that he had included all of the comments and issues in the draft and, because of this, several items were repeated in the document. The group agreed to remove a few items that were already noted in the document.

After complete review of the Work Plan, the group moved on to discuss the Vision Statement. Dave noted that the Vision Statement can be explained as the over-arching image of the Project in fifty years that guides the group through the tasks set out in the Work Plan.

During discussions on the Vision Statement, John Frick noted that he believed there needed to be an item included that encouraged low density development around the lake, as well as ensuring back property owners access to the lake. The group noted that this was not an issue that pertained to the Recreation Vision Statement and the issue was placed in the Parking Lot for the Lake and Land Management RCG. There were no additional comments on the Vision Statement and the group moved to Solution Principles and made a few changes. All changes made during the meeting are attached (document dated July 21, 2006).

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
July 21, 2006**

final dka 08-14-06

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After a short break, the group began to discuss the Recreation Plan “straw man” (attached). Dave noted that the Recreation Plan is the primary deliverable from the Recreation RCG. Dave reviewed each item in the document. During discussions, it was noted that the new Recreation Participation & Preference Study is available; however, the report does not group the data into the four counties surrounding the Project. Tony Bebbler will check on combining data for the Recreation Participation & Preference Study for the four counties as a homework item.

There was brief discussion regarding the prioritization of recreation sites that were at capacity and looking into expanding existing sites. Dave explained there will be an implementation schedule because, budget-wise, not all improvements could be done at one time. It was also noted that SCE&G and the agencies will meet on a regular basis to discuss the schedule and any priority adjustments. Alan suggested that the meetings be scheduled after the implementation schedule was developed. The group agreed. The group voiced no objections to the direction that the Recreation Plan was headed.

Dave gave a brief update as to the status of the TWCs. He noted the Recreation Assessment Study was started this past spring. He explained that the interviewers have been hired and in place since Memorial Day. Dave also noted that the inventory of existing SCE&G recreation sites has been completed and the database will be ready by the end of the year. Dave also pointed out that as of June 30, they have completed 173 of the 600 sample days and have completed approximately 660 questionnaires. Dave also noted that the TWC recently had discussions regarding the Boat Density Study Plan and the group is going to move forward with this study. He added that both studies will be using the new Recreation Participation & Preference Study funded by SCPRT and noted he would send the web link to the group.

Finally, Dave explained that there was a study plan currently under internal review that will be submitted to the Downstream Flows TWC for approval. Dave asked the group if there were questions on any of the studies mentioned. George Duke noted that he was a little concerned with the use of a 1977 study as a baseline for the Boat Density Study. Dave replied the 1977 procedures are generally used throughout FERC relicensings when performing a boat density study. He noted that they use the values for water skiing when applying values to jet skis because jet skis were not around in 1977. Dave also added that they have an idea of the number of jet skis from the interviews at the recreation sites. George also expressed concern that since 2006 was a drought year, accurate boat counts would not be attained. Dave noted that they would be using 2001 photography to obtain the counts.

Dave concluded the meeting and reviewed the homework assignments. He noted that before the next meeting the group should review and prioritize those issues that do not need the results of the studies currently taking place. The next Recreation RCG meeting was set for October 25<sup>th</sup>, 2006.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
July 21, 2006**

final dka 08-14-06

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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**July 21, 2006  
9:30 AM**

**Lake Murray Training Center**

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- **9:30 to 10:30** Finalize Recreation RCG Work Plan (Dave Anderson)
- **10:30 to 10:45** BREAK
- **11:00 to 12:00** Finalize Recreation Vision Statement (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 1:30** Finalize Solution Principles (Dave Anderson)
- **1:30 to 2:00** Discussion of Recreation Plan Straw Man (Dave Anderson)
- **2:00 to 2:10** BREAK
- **2:10 to 2:30** Update on TWCs (Dave Anderson)
- **2:30 to 2:45** Develop an Agenda for Next Meeting and Set Next Meeting Date

Adjourn



# Recreation Resource Conservation Group

## Working Documents

July 14, 2006



## Recreation Resource Conservation Group Work Plan

DRAFT

<b>Facilitator:</b>		
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com
<b>Members:</b>		
Name	Organization	E-mail
Alan Axson	Columbia Fire Department	cfdwaxson@columbiasc.net
Alan Stuart	KA	alan.stuart@kleinschmidtusa.com
Alison Guth	KA	alison.guth@kleinschmidtusa.com
Amanda Hill	USFWS	amanda_hill@fws.gov
Bill Argentieri	SCE&G	bargentieri@scana.com
Bill Marshall	Lower Saluda Scenic River Advisory Council, DNR	marshallb@dnr.sc.gov
Charlene Coleman	American Whitewater	cheetahtrk@yahoo.com
Charles (Charlie) Rentz		flyhotair@greenwood.net
David Hancock	SCE&G	dhancock@scana.com
Dick Christie	SCDNR	dchristie@infoave.net
George Duke	LMHC	kayakduke@bellsouth.net
Gerrit Jobsis	Coastal Conservation League & American Rivers	gerritj@sccl.org; gjobsis@americanrivers.org
Guy Jones	River Runner Outdoor Center	guyjones@sc.rr.com
Irvin Pitts	SCPRT	ipitts@scprt.com
James A. Smith	LMA	bkawasi@sc.rr.com
Jeff Duncan	National Park Service	jeff_duncan@nps.gov
Jennifer O'Rourke	South Carolina Wildlife Federation	jenno@scwf.org
Jennifer Summerlin	Kleinschmidt Associates	jennifer.summerlin@kleinschmidtusa.com
Jim Devereaux	SCE&G	jdevereaux@scana.com
JoAnn Butler	resident	jbutler@scana.com
Joy Downs	Lake Murray Assn.	elymay2@aol.com
Karen Kustafik	City of Columbia Parks and Recreation	kakustafik@columbiasc.net
Keith Ganz-Sarto		keith_ganz_sarto@hotmail.com
Kelly Maloney	Kleinschmidt Associates	kelly.maloney@kleinschmidtusa.com
Larry Michalec	Lake Murray Homeowners Coalition	lmichalec@aol.com
Larry Turner	SCDHEC	turnerle@dhec.sc.gov
Leroy M. Barber Jr.	LMA	lbarber@sc.rr.com
Malcolm Leaphart	Trout Unlimited	malcolml@mailbox.sc.edu
Mark Leao	USFWS	mark_leao@fws.gov
Marty Phillips	Kleinschmidt Associates	marty.phillips@kleinschmidtusa.com
Michael Waddell	TU - Saluda River Chapter	mwaddell@esri.sc.edu
Miriam S. Atria	Capitol City Lake Murray Country	miriam@lakemurraycountry.com
Norman Ferris	Trout Unlimited	norm@sc.rr.com
Patricia Wendling	LMA	wwending@sc.rr.com
Patrick Moore	SCCCL AR	patrickm@sccl.org
Ralph Crafton	LMA	crafton@usit.net
Randy Mahan	SCANA	rmahan@scana.com
Richard Mikell	Adventure Carolina	adventurec@mindspring.com
Stanley Yalicki	LMA	joyyalicki@aol.com
Steve Bell	Lake Murray Watch	bellsteve9339@bellsouth.net
Suzanne Rhodes	SC Wildlife Federation	suzrhodes@juno.com
Tim Vinson	SCDNR	vinson@dnr.sc.gov
Tom Brooks	Newberry Co.	tbrooks@newberrycounty.net
Tommy Boozer	SCE&G	tboozr@scana.com
Tony Bebbber	SCPRT	tbebbber@scprt.com
Van Hoffman	SCANA Land Mgt.	vhoffman@scana.com

# Recreation Resource Conservation Group Work Plan

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## Mission Statement

The mission of the Recreation RCG is to ensure adequate and environmentally-balanced public recreational access and opportunities related to the Saluda Hydroelectric Project for the term of the new license. The objective is to assess the recreational needs associated with the lower Saluda River and Lake Murray and to develop a comprehensive recreation plan to address the recreation needs of the public for the term of the new license. This will be accomplished by collecting and developing necessary information, understanding interests and issues and developing consensus-based recommendations.

## Identified Issues

- ~~ensure that recreational facilities and opportunities are protected and enhanced for current and future users, on and near the lake and river~~
  - ~~support creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on north bank of river connecting Saluda Shoals Park to Gardendale Landing and to Riverbanks Zoo; and a park/preserve on the south side of river at Twelve-mile Creek~~
  - ~~access site above the Mill Race rapids (encompassed within LSR Corridor Plan item, above)~~
  - creation of a state park on the south side of the reservoir
  - creation of a multi-lane boating facility that can accommodate large tournaments
  - ~~boating access~~
  - non-boating access
  - paddling access
  - expansion of existing ~~SCE&G and public commercial~~ facilities to accommodate future growth
  - security at recreation facilities
  - ~~sufficient egress points on lower Saluda River~~
  - ~~fishing opportunities for non-boaters~~
  - ~~A riverfront greenway trail is wanted by the community as expoused by the River Alliance. Assistance by SCE&G will in making this trail a reality will also help by opening up many areas of the river now only reached by boat, or by trespassing. The River Alliance has proposed a trail to extend up the north shore of the Saluda from the Riverbanks Zoo to I26. Continuation of the trail to Saluda Shoals, connecting the Gardendale site and an additional access area between I20 and I26 is also envisioned by the LSRAC and Saluda Shoals. Also, there is no legal access except by boat to the stretch of river upstream of the rapids above Saluda Shoals which should be remedied with a riverfront trail connection if possible, or through seperate access. The trail should parallel the river and not disturb the scenic integrity of the riverbank, but should allow for sufficient viewsapes and even water access by foot, especially to the popular, shallower riffle areas.~~

**Deleted:** the need for better public access

## Recreation Resource Conservation Group Work Plan

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- consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.
- public access with parking and trails on the Lexington (south) side such as the public park at the confluence of 12 Mile Creek and the Saluda River proposed in the Corridor Plan by SC PRT and the SC DNR (Lower Saluda River Advisory Council).
- safe recreational opportunities should be available on the Saluda below the lake through daily flow release schedules, and with release rates deemed to be not life threatening through a controlled study using river experts and stakeholders.
- conservation of lands to protect the scenic integrity of the Project and to provide wildlife habitat areas
- using the concept of adaptive management in future recreation planning
- creation of a communication system that would encompass information to better inform the public of existing and projected conditions regarding lake levels and river flows as related to anticipated hydro operations and maintenance Deleted: on
- protection of the cold water fishery on the lower Saluda River Deleted: Lower
- identification of flows needed for the lower Saluda River to support a variety of recreational uses
- creation of scheduled recreation flows for the lower Saluda River Deleted: Lower
- identification of a reliable lake level that will provide year round access for a majority of lake users
- consideration of The Lower Saluda River Corridor Plan and the Lower Saluda Scenic River Corridor Plan Update and their related public access sites and greenway-trail concepts
- identification and conservation of undeveloped shoreline and adjacent land for recreational use
- management of river flows to improve safety for river users (coordinate with Safety RCG)
- minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)

### RCG Tasks and Responsibilities

- Utilizing and modifying the Standard Process for evaluating and addressing recreation management and access issues specific to the Saluda Project, including developing a vision statement for the Project.
- Identifying specific areas where lake and river levels, river flows, and/or lake and river level fluctuations may be adversely affecting recreation including the nature and timing of the effect (e.g., access to sections of water, access to facilities, and aesthetics). Deleted: level Deleted: at the lake,
- Identifying specific areas where river flow changes may be adversely affecting recreation along the river, including the nature and timing of the effect (e.g., access to and safe use of sections of river).
- Working with the Operations Resource Conservation Group to identify “reasonable” (based on hydrologic, structural, and other limitations identified) changes in Project operations that would benefit recreation. Deleted: and alternatives for modifying project operations, including



## Recreation Resource Conservation Group Work Plan

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- Working with the Safety RCG and the Fish and Wildlife RCG to coordinate actions on issues of mutual interests such as river flows, lake levels, and the siting and management recreational facilities.
- Identifying any studies, if applicable, that need to be performed for identifying and/or evaluating (1) changes to Project operations, (2) enhancements to existing facilities, and (3) creation of new facilities to provide for public recreational access and opportunities.
- Make recommendations to the Lake and Land Management RCG to ensure adequate project lands are retained to meet recreational needs.
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding modifications to facilities or current Project operations, needs for additional future access and facilities, and provide recommendations for recreation access, facilities, and use.

### Work Scope and Product

- **Task 1** – Utilize the stepwise process diagram and solution principles to guide the planning process for addressing recreation management issues at the Saluda Project.
- **Task 2** – Develop a Vision Statement for the Saluda Project.
- **Task 3** – Review the operational constraints and current operations of the Saluda Project (see Initial Consultation Document).
- **Task 4** – Answer the list of questions on the Standard Process Form in order to characterize the existing and potential future condition of access and lake levels and river flows – from a recreation setting perspective.
- **Task 5** – Review stakeholder requests for particular studies and/or enhancement measures to ensure that these are incorporated into study planning, if applicable
- **Task 6** – Develop and recommend operation scenarios to the Operations RCG for analysis. These scenarios should reflect initial thinking on potential solutions and be designed to narrow the focus of Task 10 below. Analysis by the Operations RCG will focus on an assessment of potential recreational impacts associated with any suggested changes to operations.
- **Task 7** – Discuss results of the Operations RCG analyses.
- **Task 8** – Develop study designs/methods/plans and review agreed upon studies, literature reviews, etc.
- **Task 9** – Check the solution principles to ensure proposed study plans are consistent.
- **Task 10** – Provide recommendations for Project operations and recreation access, facilities, and use to be considered in conjunction with all ecological (including water quality), recreational, and safety issues.
- **Task 11** – Develop a consensus based Recreation Plan for the Saluda Project that addresses all of the issues and tasks identified above.

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## Recreation Resource Conservation Group Work Plan

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### Schedule

**Late 2005/Early 2006**—Finalize Mission Statement, Standard Process Form, Solution Principles, and Work Plan

**Mid-2006**—Complete identification of studies, literature reviews, etc. that need to be completed to address issues and tasks identified in the Work Plan

**Late 2006**—Begin compilation of existing information, review preliminary study results, and draft an outline of the Recreation Plan

**2007**—Complete any studies identified in Task 8 and review results; draft recommendations to SHRG, complete draft Recreation Plan

**2008**—Finalize Recreation Plan and provide comments on Draft License Application

## Recreation Vision Statement for the Saluda Project

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The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, aesthetic values, cultural resources, and public recreational opportunities on the reservoir and the Lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of Lake Murray and the lower Saluda River, and ensure adequate facilities and public access are provided. Given the size of the reservoir/hydro-project area, it is felt that it can continue to support a diversity of recreation opportunities. Recognizing that needs and demands will change, recreational uses will be monitored and managed to balance access/uses with the protection of natural resources and environmental quality; and planning for new facilities and management schemes will remain adaptive to changes.

Deleted: the reservoir

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Recreational opportunities for Lake Murray and the lower Saluda River over the next 30 to 50 years of the pending new FERC license for SCE&G should incorporate the following attributes:

- Recreational sites access areas on the lake and the river should be adequate to allow for the continued rapid population growth in the midlands over the term of the new license based on surveys of the public and input from the stakeholders and public.
- Sites should be spaced around the lake and along the river corridor to provide legal public access to the different geographic sections of both.
- Uncrowded conditions should be available most of the time at the sites, with natural viewscapes and provisions for most of the current and anticipated popular recreational activities incorporated into the overall provisions.
- Patrols and/or assistance for emergencies should be provided, though not necessarily manned, such as adequate phone boxes.
- Safe recreational opportunities should be available for boaters on the lake with adequate lake levels for the navigational markers, and on the river with release levels that are not life-threatening to the average person.
- The recommendations of the Lower Saluda Scenic River Advisory Council should be implemented to reflect the broad community-based consensus for river access, with consideration of additional river access to areas where trespassing is now the only way to enter an area.

Improvements to be considered at the Saluda Project include:

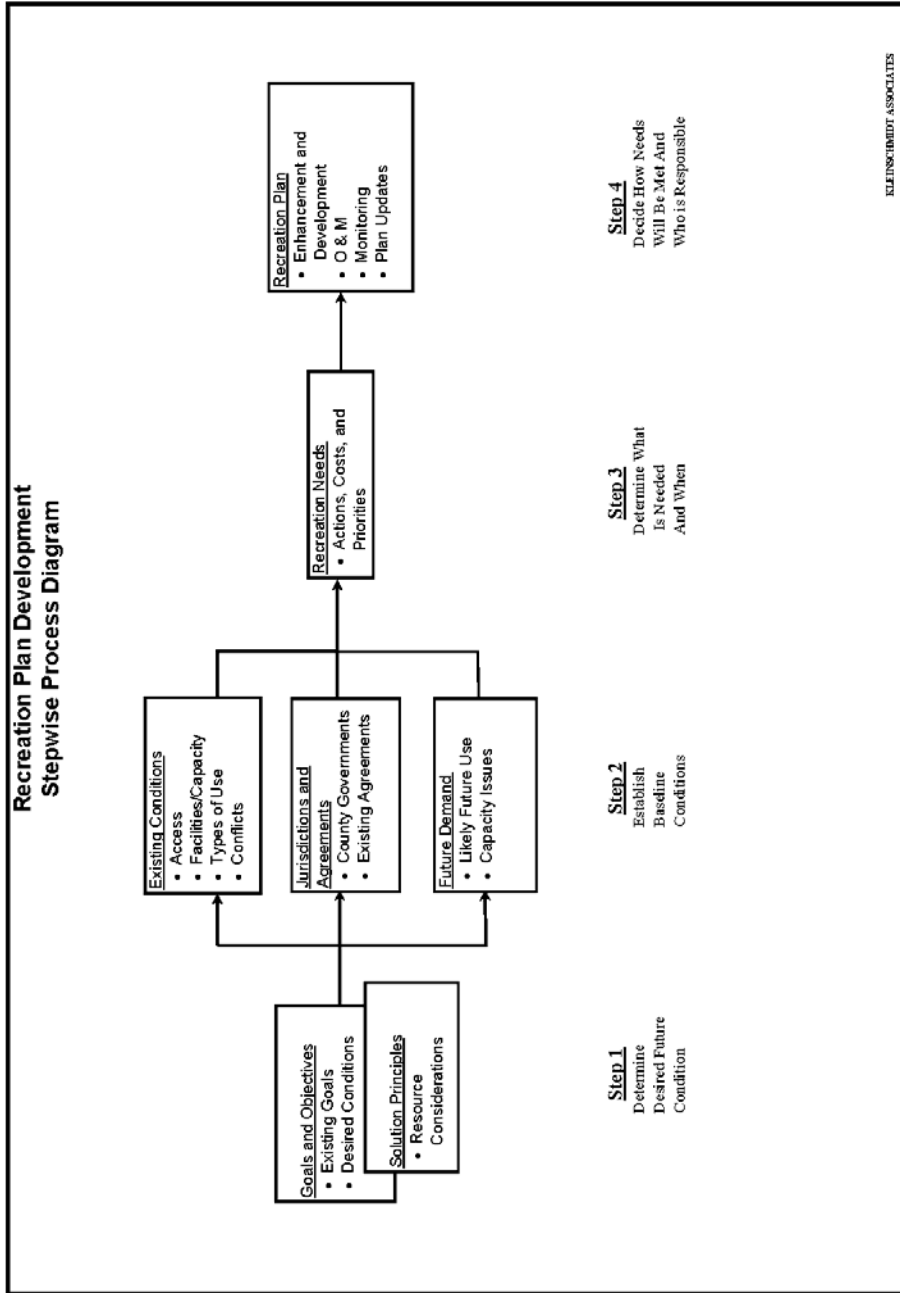
- Evaluation of SCE&G-owned Project lands for possible reclassification for recreation activities.
- Providing appropriate operations and maintenance of public recreation facilities.
- Optimizing the capacity of existing public recreation facilities to accommodate existing and future demand.

## Recreation Vision Statement for the Saluda Project

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- Improving access and safety in the public waters below the dam and minimizing impacts of project operations on downstream recreation, recognizing the need to meet power generation, and downstream flow responsibilities at Saluda. Deleted: ly  
Deleted: accessible
- Managing lake level drawdowns so as to optimize safety and recreational opportunities. Deleted: minimize the occurrence of surface elevations lower than 354' in the late summer and early fall
- Managing river flows so as to optimize safety and recreational opportunities.
- Ensuring public access areas for the non-boating public remain available along the lake and river shorelines.
- Development of new facilities in accordance with the comprehensive plan as the need arises. Deleted: if a proven

Stepwise Process Diagram



### Solution Principles

Consideration of new recreational facilities should be based on demonstrated need and the potential impact on existing facilities.

1. Priority should be given to demonstrated need within the FERC project boundary.
2. Priority should be given to recreational proposals where multiple stakeholders offer significant participation.
3. Recreational facilities should appeal to a broad public.
4. Reasonable access for the disabled should be provided.
5. Recreational needs should be prioritized for the project.
6. The improvement or expansion of existing recreational facilities should be considered first.
7. Additional recreational studies (if needed) should be only of sufficient scope and duration to provide necessary information to develop issue solutions.
8. Consensus based solutions are preferred over studies, unless solutions cannot be developed with existing information.
9. A schedule of proposed improvements should be considered so that all costs are not in the first few years of the new license.
10. A process should be developed to adjust proposed improvements over the 30+ year time frame approximately every 7 to 10 years to account for changing needs. This should include the ability to trade a new needed facility for a proposed (but not built) facility of approximately the same cost.
11. Sufficient “future recreational” land should be set aside now to handle the recreational needs of 30+ years.

Preferred consideration will be given to ideas that:

- do not promote facilities that would adversely impact existing commercial operations;
- identify actual recreational needs that are not filled by existing facilities;
- receive broad public support;
- expand existing recreational facilities prior to developing green field sites;

## Recreation Plan Development

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- require doing recreational studies only if consensus cannot be reached with existing information (It is preferred to put financial resources into recreational facilities and opportunities that benefit the overall Project, rather than fund unnecessary/subjective studies).

Standard Process Form

The following is a list of standard questions designed to help characterize existing recreation resources and aid in development of an appropriate recreation plan for the Saluda Project. Questions pertaining to recreation management are categorized according to the four-step recreation plan stepwise process diagram developed for the project. Questions pertaining to reservoir levels and downstream flows are listed following the facility management material.

**STEP 1 – DETERMINE DESIRED FUTURE CONDITION**

1. Identify Lake Murray and/or Lower Saluda River (LSR) qualities important to keep and any qualities that need changes.

Change:

Relative water level stability

Predictability – desire flows in river to be more predictable; desire advanced notice of flows to be available to public

Accessibility and amenities (boardwalk accessible from land and water)

Water quality – desire to resolve DO problems in the tailrace and in the reservoir

Minimum flow – desire minimum flow standards that will protect aquatic health in river

Management of flow increases – desire slower rates for increasing flows in river to increase margin of safety for downstream river users

Keep:

Water quality

Natural shoreline and riverbanks

Undeveloped lands remain undeveloped

Aesthetics

Fishing opportunities

Hunting opportunities

Wildlife watching

Living on lake/river

Solitude

Keep islands natural

Safety/security

Public-private balance

Shoreline Management Program

Contingency reserve capacity

2. Are there unique characteristics of Lake Murray and/or the LSR relative to other reservoirs/tailraces in the area?

Location – near and within metropolitan area

Size

Uninterrupted by bridges

Amount of land owned by SCE&G



Extensive shoreline  
Usable/accessible shoreline  
Purple Martin habitat  
Whitewater paddling in river  
Cold water fisheries in river

3. What is the overall vision for Lake Murray and/or the LSR, in terms of recreation experiences and opportunities?

Insert Final Vision Statement

4. Are there sensitive biological or cultural resources associated with the Project that need to be considered? Where are these resources located and are there seasonal sensitivities (e.g., nesting or spawning times, etc.)?

ESA  
Lands that support wildlife habitat  
See Cultural RCG  
Rocky shoals spider lily; Saluda River  
Spawning, migrating fishes; lower Saluda and Congaree River  
Trout; lower Saluda

5. Identify specific goals and objectives for managing recreation at Lake Murray and/or in the LSR.

Lake levels  
River levels and flows  
Minimum flows to support aquatic community health and recreational uses in the river  
Recreational flows  
Management of flow changes from the hydro to improve safety for downstream river users  
Scheduled recreational releases  
Knowledge of current and anticipated generation releases made accessible to the public  
Park on Lexington side of lake  
Park/preserve on Lexington side of river at Twelve-mile Creek as describe in LSR Corridor Plan  
Provide takeout point above Zoo at Millrace Rapids  
LSR greenway trail described in LSSR Corridor Plan Update (involves River Alliance/City of Columbia and ICRC/Saluda Shoals Park)  
Assure long term stability of Billy Dreher Island, Flotilla Island, and Saluda Shoals Park  
Large tournament facility  
Reasonable avoid negatively impacting commercial facilities  
Conservation of existing project lands for wildlife and scenic values  
Estimate current and future recreational use of reservoir and river  
Year-round access for recreation sites

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**STEP 2 – ESTABLISH BASELINE CONDITIONS**

## Recreation Plan Development

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6. What is the nature of existing recreational access to Lake Murray and the LSR?
  - a. How many public accessible, developed recreation sites are there?
  - b. Where are they located/how are they distributed around the Project?
  - c. Of these publicly accessible access sites how many are owned and operated by public versus private entities and how are they supervised?
  - d. How many sites, open to the public, provide boat access to the reservoir and the LSR?
  - e. How many provide shoreline fishing?
  - f. Identify the most heavily used facilities.
  - g. Are there informal, undeveloped use areas? Where are they?
7. What types of existing developed facilities are there?
  - a. Enumerate boat ramps, restrooms, docks, and other facilities.
  - b. What is the existing capacity at each site?
  - c. What is the general condition of each site and its facilities?
  - d. Ideas for improving existing facilities.
8. Describe notable recreation activities on Lake Murray and/or the LSR.
  - a. List recreation activities currently occurring and identify most prominent activities.

Greatest activity is independent family recreation, including many forms of boating, waterskiing, swimming/sunbathing, fishing, picnicking, and camping.

Solitary wade fishing in river.

Bank fishing at public sites and impromptu sites in the lake and river.

Small and large bass tournaments.

Motor boating

Sailing

Fishing from boats

Fishing from banks

Wade fishing

Swimming and sunning

Picnicking

Canoeing and kayaking (flatwater and whitewater)

Floating with tubes and rafts

- b. Where are these uses occurring, and are they concentrated in certain areas?

Lower Saluda River supports all above activities except sailing

Whitewater boating concentrated on Saluda River below I-26 Bridge

Swimming and sunning on Lower Saluda concentrated at Riverbanks Zoo area; and will expand upriver when greenway trail opens in 2007

Wade fishing concentrated at shoal areas of lower River: at least four areas along river

- c. Identify existing impediments to these activities, if any.

## Recreation Plan Development

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Dramatic river fluctuations are impediments to recreational activities along the lower Saluda River.

9. Are there known management issues associated with use?
  - a. Are there areas of congestion, and if so where?
  - b. Are there known conflicts between users, and if so where and when?

Fishing tournaments are disruptive to other boaters and residents. There needs to be an established, enforced protocol for organizes fishing tournaments.  
Jet skis and large motorboats are disruptive to anglers, other boaters, and residents.

- c. Are there other known management issues, such as littering, trespassing, etc.?

Enforcement of established rules are limited by funding, staffing, and political boundaries.

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- d. Are there known issues regarding recreational safety?

Wade fishing, canoeing/kayaking, and other water contact and bank use is often dangerous due to river fluctuations in water levels on the Lower Saluda River.

10. What is the expected future demand for recreation activities at Lake Murray?
  - a. Will existing facility capacity likely be exceeded, and if so where and when?
  - b. Would accommodating this demand be consistent with the long-term vision for the reservoir?
  - c. Will demand introduce new or additional congestion, conflicts, or other management issues?

11. Identify current local benefits from recreation and any local detriments.

### **STEP 3 – DETERMINE WHAT IS NEEDED AND WHEN**

12. Ideas for better or different access, consistent with Step 2 above.
13. Potential facility enhancements or upgrades, consistent with Step 2 above.
14. Potential new facilities, or other management actions, consistent with Step 2 above.
15. What are the priorities regarding identified needs both in terms of resources and time? How do priorities compare across the entire Project?

### **STEP 4 – DECIDE HOW NEEDS WILL BE MET AND WHO IS RESPONSIBLE**

### **QUESTIONS REGARDING RESERVOIR LEVELS**

## Recreation Plan Development

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16. How is the Project currently operated and what are the typical reservoir levels during key recreation seasons?

- SCE&G operates Saluda Hydroelectric Project as a multi-purpose project. The seasonal changes in elevations provide hydroelectric generation, maintenance of downstream water quality, a unique tailrace fishery, and municipal/industrial water supply.
- SCE&G has a verbal agreement with SCDHEC for a minimum flow of 180 cfs.
- During the low DO season which generally runs from late June to early December, SCE&G will try to maintain a minimum flow of 400 – 500 cfs to help maintain a higher level of DO in the Lower Saluda River.
- From April through the end of August the lake is operated near the normal operating high water level of el. 358 ft Plant Datum (PD). Maximum full pool is el. 360.
- Drawdown begins near the end of August or early September and ends in late December near the winter pool level of 350 - 352 ft PD. This allows additional storage capacity in anticipation of the late winter and early spring rainy season.
- At the beginning of January the lake is allowed to refill during the rainy season so it will be at the normal operating high water level of 358 ft. PD by April.
- The plant normally schedules power operations for contingency reserve to meet our obligation to the Virginia/Carolinas Reserve Sharing Group (VACAR), a member of the Southeastern Electric Reliability Council (SERC), which is governed by the North American Electric Reliability Council (NERC). During the fall and in anticipation of heavy rains from a tropical storm or hurricane the plant will generate as necessary to manage the lake level, system reserve, and emergency generation requirements.
- Power generation may be increased to allow SCE&G to meet their obligations of contingency reserve as part of our VACAR agreement with neighboring utilities.

17. Are there changes to Project operations that you would like to see addressed to improve the overall value of the reservoir, and how specifically would such changes benefit recreation?

- What minimum lake elevation will provide recreational benefits during each season of the year?
- Current reservoir level operations balance the multi-purpose use of the reservoir. Maintaining the existing reservoir level fluctuations would allow for continued water level management through daily and weekly power generation operations however recreation would see no additional benefits. Conversely, limiting the seasonal fluctuation may have recreational benefits but other project purposes would be compromised (power generation, water level management, water quality maintenance, and aquatic weed control).

18. Are there seasonal and/or daily variations in reservoir level that can occur without adversely affecting the overall value of the project (including impoundment objectives such as recreation, fish and wildlife, flood control, generation, navigation, etc.)?

- There are not large daily fluctuations at the Saluda Hydroelectric Project.

19. What are the reservoir levels at which recreation problems tend to occur (may be different for different locations or problems)?

## Recreation Plan Development

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- There appears to be a potential impact to recreational resources when the lake level is lower.
- SCE&G already extended boat ramps at several of their public access parks to accommodate a water level down to el. 345 ft PD.

20. When (i.e., what time of year) and how frequently do problems occur related to reservoir levels?

- In general, the operation of Saluda Hydroelectric Project has been consistent throughout the years except for 1990, 1996, 2002 – 2004, and 2006. During those years the lake level was lowered to around el. 345 – 348 ft PD for the following project maintenance requirements:
  - 1990 – Intake towers maintenance
  - 1996 – Hydrilla control as requested by SCDNR
  - 2002 – 2004 – FERC Order for safety during dam remediation project
  - 2006 – Upstream riprap repair
- It will be necessary to lower the lake level to around el. 345 ft PD in the future for maintenance of project structures and installing new recreational access.

21. Why are the current operating water levels important to the operation of the project and the overall system?

- The Saluda Hydroelectric Project is a multi-purpose reservoir. The current operating water levels are critical for the project to meet its required purposes. The changes in water level have many beneficial impacts both upstream and downstream of the dam :
- The project is used to meet our contingency reserve capacity obligation as part of the VACAR agreement. This is for a loss on our own system or by one of our neighboring Reserve Sharing Group utilities.
- Electricity (inexpensive, clean, renewable)
- Electric system ancillary services (transmission line maintenance & overload protection, security resource for VCS Nuclear Statino)
- Navigation support
- Trout fishery
- Downstream water quality and aquatic habitat
- Municipal and industrial water supply

22. Are there state or federal operating requirements that stipulate specific operating goals?

- SCE&G and SCDHEC have an agreement to discharge a minimum flow of 180 cfs from the project.
- Article 12 of the FERC license requires that reservoir levels and discharge from storage be controlled by reasonable rules and regulations of the Commission for the protection of life, health, and property and for other beneficial public uses including recreational purposes.
- Exhibit H of the latest FERC license application identifies the lower lake level to be Elev. 350 during normal flow years and Elev. 345 during low flow years.

- Our McMeekin Generating Station NPDES permit requires a minimum of 2,500 cfs discharge from Saluda prior to discharging the fossil plant circulating water return directly into the Lower Saluda River.

**QUESTIONS REGARDING DOWNSTREAM FLOWS**

23. Are there riverine recreation opportunities below the dam? If yes, move to additional questions, if not, stop.

Yes, trout fishing (wading, bank, boat), striper fishing (wading, bank, boat), canoeing/kayaking, tubing, sunbathing/swimming/rock hopping, picnicking, walking/hiking, bicycling, wildlife watching.

24. Do we know how different flow levels affect recreation opportunities and specific recreation activities?

25. Can opportunities be enhanced by modifying releases, and in what way?

26. How would modified releases affect upstream lake levels?

27. How would suggested modified downstream flows affect project operations at the project and at upstream and downstream projects?

28. Are there additional concerns with regard to state and federal requirements or existing ecological issues that limit suggested changes to downstream flows?

29. How binding is the VACAR agreement and when does it expire? (I notice that it is not listed in the state/federal operating requirements in Question 22).

# Recreation Resource Conservation Group

## Working Documents

~~July 21, 2006~~

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# Recreation Resource Conservation Group Work Plan

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<b>Facilitator:</b>		
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com
<b>Members:</b>		
Name	Organization	E-mail
Alan Axson	Columbia Fire Department	cfdwaxson@columbiasc.net
Alan Stuart	KA	alan.stuart@kleinschmidtusa.com
Alison Guth	KA	alison.guth@kleinschmidtusa.com
Amanda Hill	USFWS	amanda_hill@fws.gov
Bill Argentieri	SCE&G	bargentieri@scana.com
Bill Marshall	Lower Saluda Scenic River Advisory Council, DNR	marshallb@dnr.sc.gov
Charlene Coleman	American Whitewater	cheetahtrk@yahoo.com
Charles (Charlie) Rentz		flyhotair@greenwood.net
David Hancock	SCE&G	dhancock@scana.com
Dick Christie	SCDNR	dchristie@infoave.net
George Duke	LMHC	kayakduke@bellsouth.net
Gerrit Jobsis	Coastal Conservation League & American Rivers	gerritj@sccl.org; gjobsis@americanrivers.org
Guy Jones	River Runner Outdoor Center	guyjones@sc.rr.com
Irvin Pitts	SCPRT	ipitts@scprt.com
James A. Smith	LMA	bkawasi@sc.rr.com
Jeff Duncan	National Park Service	jeff_duncan@nps.gov
Jennifer O'Rourke	South Carolina Wildlife Federation	jenno@scwf.org
Jennifer Summerlin	Kleinschmidt Associates	jennifer.summerlin@kleinschmidtusa.com
Jim Devereaux	SCE&G	jdevereaux@scana.com
JoAnn Butler	resident	jbutler@scana.com
Joy Downs	Lake Murray Assn.	elymay2@aol.com
Karen Kustafik	City of Columbia Parks and Recreation	kakustafik@columbiasc.net
Keith Ganz-Sarto		keith_ganz_sarto@hotmail.com
Kelly Maloney	Kleinschmidt Associates	kelly.maloney@kleinschmidtusa.com
Larry Michalec	Lake Murray Homeowners Coalition	lmichalec@aol.com
Larry Turner	SCDHEC	turnerle@dhec.sc.gov
Leroy M. Barber Jr.	LMA	lbarber@sc.rr.com
Malcolm Leaphart	Trout Unlimited	malcolml@mailbox.sc.edu
Mark Leao	USFWS	mark_leao@fws.gov
Marty Phillips	Kleinschmidt Associates	marty.phillips@kleinschmidtusa.com
Michael Waddell	TU - Saluda River Chapter	mwaddell@esri.sc.edu
Miriam S. Atria	Capitol City Lake Murray Country	miriam@lakemurraycountry.com
Norman Ferris	Trout Unlimited	norm@sc.rr.com
Patricia Wendling	LMA	wwending@sc.rr.com
Patrick Moore	SCCCL AR	patrickm@sccl.org
Ralph Crafton	LMA	crafton@usit.net
Randy Mahan	SCANA	rmahan@scana.com
Richard Mikell	Adventure Carolina	adventurec@mindspring.com
Stanley Yalicki	LMA	joyyalicki@aol.com
Steve Bell	Lake Murray Watch	bellsteve9339@bellsouth.net
Suzanne Rhodes	SC Wildlife Federation	suzrhodes@juno.com
Tim Vinson	SCDNR	vinson@dnr.sc.gov
Tom Brooks	Newberry Co.	tbrooks@newberrycounty.net
Tommy Boozer	SCE&G	tboozr@scana.com
Tony Bebbber	SCPRT	tbebbber@scprt.com
Van Hoffman	SCANA Land Mgt.	vhoffman@scana.com



# Recreation Resource Conservation Group Work Plan

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## Mission Statement

The mission of the Recreation RCG is to ensure adequate and environmentally-balanced public recreational access and opportunities related to the Saluda Hydroelectric Project for the term of the new license. The objective is to assess the recreational needs associated with the lower Saluda River and Lake Murray and to develop a comprehensive recreation plan to address the recreation needs of the public for the term of the new license. This will be accomplished by collecting and developing necessary information, understanding interests and issues and developing consensus-based recommendations.

## Identified Issues

- ensure that recreational facilities and opportunities are protected and enhanced for current and future users, on and near the lake and river
  - boating access, including future access on Lexington side of lake
  - non-boating access
  - paddling access
  - security at recreation facilities
  - sufficient egress points on lower Saluda River
  - fishing opportunities for non-boaters
- conservation of lands
  - protect the scenic integrity of the Project
  - provide wildlife habitat areas, and
  - provide formal and informal (impromptu areas) recreational opportunities
    - consideration of Two Bird Cove and Hurricane Hole Cove (special recreation designation areas) classification
- using the concept of adaptive management in future recreation planning
- River flows
  - safe recreational opportunities should be available on the Saluda below the lake through daily flow release schedules, and with release rates deemed to be not life threatening through a controlled study using river experts and stakeholders.
  - lack of scheduled recreation flows for the lower Saluda River
  - management of river flows to improve safety for river users (coordinate with Safety RCG)
  - minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)
- lack of a communication system that would encompass information to better inform the public of existing and projected conditions regarding lake levels and river flows as related to anticipated hydro operations and maintenance
- protection of the cold water fishery on the lower Saluda River
- impacts of lake level on recreational use of the lake
- consideration of The Lower Saluda River Corridor Plan and the Lower Saluda Scenic River Corridor Plan Update and their related public access sites and greenway-trail concepts

## Possible Resolution

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<#>access site above the Mill Race rapids (encompassed within LSR Corridor Plan item, above)¶  
<#>creation of a state park on the south side of the reservoir¶  
<#>creation of a multi-lane boating facility that can accommodate large tournaments¶

**Inserted:** <#>support creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on north bank of river connecting Saluda Shoals Park to Gardendale (... [1]

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## Recreation Resource Conservation Group Work Plan

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- support creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on north bank of river connecting Saluda Shoals Park to Gardendale Landing and to Riverbanks Zoo; and a park/preserve on the south side of river at Twelve-mile Creek
- access site above the Mill Race rapids (encompassed within LSR Corridor Plan item, above)
- creation of a state park on the south side of the reservoir
- creation of a multi-lane boating facility that can accommodate large tournaments
- A riverfront greenway trail is wanted by the community as expoused by the River Alliance. Assistance by SCE&G will in making this trail a reality will also help by opening up many areas of the river now only reached by boat, or by trespassing. The River Alliance has proposed a trail to extend up the north shore of the Saluda from the Riverbanks Zoo to I26. Continuation of the trail to Saluda Shoals, connecting the Gardendale site and an additional access area between I20 and I26 is also envisioned by the LSRAC and Saluda Shoals. Also, there is no legal access except by boat to the stretch of river upstream of the rapids above Saluda Shoals which should be remedied with a riverfront trail connection if possible, or through separate access. The trail should parallel the river and not disturb the scenic integrity of the riverbank, but should allow for sufficient viewscapes and even water access by foot, especially to the popular, shallower riffle areas.
- consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.
- public access with parking and trails on the Lexington (south) side such as the public park at the confluence of 12 Mile Creek and the Saluda River proposed in the Corridor Plan by SC PRT and the SC DNR (Lower Saluda River Advisory Council).
- identification of flows needed for the lower Saluda River to support a variety of recreational uses
- identification of a reliable lake level that will provide year round access for a majority of lake users
- Consideration of conservation easements on large tracts of land within the PBL

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### RCG Tasks and Responsibilities

- Utilizing and modifying the Standard Process for evaluating and addressing recreation management and access issues specific to the Saluda Project, including developing a vision statement for the Project.
- Identifying specific areas where lake ~~and river levels, river flows, and/or lake and river level~~ fluctuations may be adversely affecting recreation, including the nature and timing of the effect (e.g., access to sections of water, access to facilities, and aesthetics).

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# Recreation Resource Conservation Group Work Plan

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- Identifying specific areas where river flow changes may be adversely affecting recreation along the river, including the nature and timing of the effect (e.g., access to and safe use of sections of river).
- Working with the Operations Resource Conservation Group to identify “reasonable” (based on hydrologic, structural, and other limitations identified) changes in Project operations that would benefit recreation.
- Working with appropriate RCGs to coordinate actions on issues of mutual interests such as river flows, lake levels, conservation of lands, and the siting and management of recreational facilities.
- Identifying any studies, if applicable, that need to be performed for identifying and/or evaluating (1) changes to Project operations, (2) enhancements to existing facilities, and (3) creation of new facilities to provide for public recreational access and opportunities.
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding modifications to facilities or current Project operations, and provide recommendations for future recreation access and facilities.

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## Work Scope and Product

- **Task 1** – Utilize the stepwise process diagram and solution principles to guide the planning process for addressing recreation management issues at the Saluda Project.
- **Task 2** – Develop a Vision Statement for the Saluda Project.
- **Task 3** – Review the operational constraints and current operations of the Saluda Project (see Initial Consultation Document).
- **Task 4** – Answer the list of questions on the Standard Process Form in order to characterize the existing and potential future condition of access and lake levels and river flows – from a recreation setting perspective.
- **Task 5** – Review stakeholder requests for particular studies and/or enhancement measures to ensure that these are incorporated into study planning, if applicable
- **Task 6** – Develop and recommend operation scenarios to the Operations RCG for analysis. These scenarios should reflect initial thinking on potential solutions and be designed to narrow the focus of Task 10 below. Analysis by the Operations RCG will focus on an assessment of potential recreational impacts associated with any suggested changes to operations.
- **Task 7** – Discuss results of the Operations RCG analyses.
- **Task 8** – Develop study designs/methods/plans and review agreed upon studies, literature reviews, etc.
- **Task 9** – Check the solution principles to ensure proposed study plans are consistent.
- **Task 10** – Provide recommendations for Project operations and recreation access and facilities to be considered in conjunction with all ecological (including water quality), recreational, and safety issues.
- **Task 11** – Develop a consensus based Recreation Plan for the Saluda Project that addresses all of the issues and tasks identified above.

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## Recreation Resource Conservation Group Work Plan

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### Schedule

**Late 2005/Early 2006**—Finalize Mission Statement, Standard Process Form, Solution Principles, and Work Plan

**Mid-2006**—Complete identification of studies, literature reviews, etc. that need to be completed to address issues and tasks identified in the Work Plan

**Late 2006**—Begin compilation of existing information, review preliminary study results, and draft an outline of the Recreation Plan

**2007**—Complete any studies identified in Task 8 and review results; draft recommendations to SHRG, complete draft Recreation Plan

**2008**—Finalize Recreation Plan and provide comments on Draft License Application

# Recreation Vision Statement for the Saluda Project

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The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, aesthetic values, cultural resources, and public recreational opportunities on the reservoir and the Lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of Lake Murray and the lower Saluda River, and ensure adequate facilities and public access are provided. Given the size of the reservoir/hydro-project area, it is felt that it can continue to support a diversity of recreation opportunities. Recognizing that needs and demands will change, recreational uses will be monitored and managed to balance access/uses with the protection of natural resources and environmental quality; and planning for new facilities and management schemes will remain adaptive to changes.

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Recreational opportunities for Lake Murray and the lower Saluda River over the next 30 to 50 years of the pending new FERC license for SCE&G should incorporate the following attributes:

- Recreational sites access areas on the lake and the river should be adequate to allow for the continued rapid population growth in the midlands over the term of the new license based on surveys of the public and input from the stakeholders and public.
- Sites should be spaced around the lake and along the river corridor to provide legal public access to the different geographic sections of both.
- Uncrowded conditions should be available most of the time at the sites, with natural viewsapes and provisions for most of the current and anticipated popular recreational activities incorporated into the overall provisions.
- Patrols and/or assistance for emergencies should be provided, though not necessarily manned, such as adequate phone boxes.
- Safe recreational opportunities should be available for boaters on the lake with adequate lake levels for the navigational markers, and on the river with release levels that are not life-threatening to the average person.
- The recommendations of the Lower Saluda Scenic River Advisory Council should be implemented to reflect the broad community-based consensus for river access, with consideration of additional river access to areas where trespassing is now the only way to enter an area.

Improvements to be considered at the Saluda Project include:

- Evaluation of SCE&G-owned Project lands for possible reclassification for recreation activities.
- Providing appropriate operations and maintenance of public recreation facilities.
- Optimizing the capacity of existing public recreation facilities to accommodate existing and future demand.

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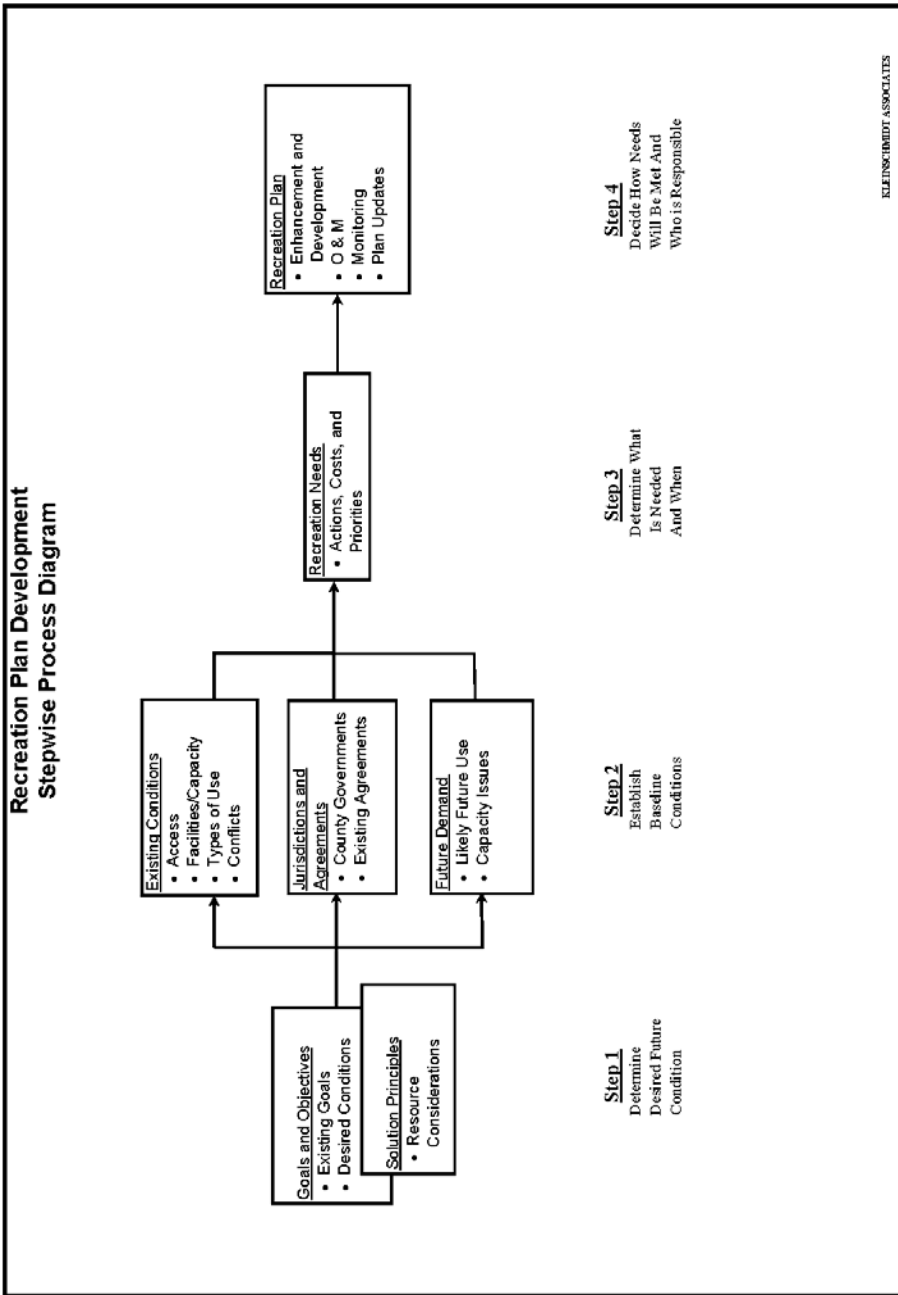
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# Recreation Vision Statement for the Saluda Project

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- Improving access and safety in the public waters below the dam and minimizing impacts of project operations on downstream recreation, recognizing the need to meet power generation, and downstream flow responsibilities at Saluda. Deleted: ly  
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- Managing lake level drawdowns so as to optimize safety and recreational opportunities. Deleted: minimize the occurrence of surface elevations lower than 354' in the late summer and early fall
- Managing river flows so as to optimize safety and recreational opportunities.
- Ensuring public access areas for the non-boating public remain available along the lake and river shorelines.
- Development of new facilities in accordance with the comprehensive plan as the need arises. Formatted: Bullets and Numbering  
Evaluation of other properties and potential partnerships as needed to meet the mission statement Deleted: if a proven
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Stepwise Process Diagram



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Solution Principles

Consideration of new recreational facilities should be based on demonstrated need and the potential impact on existing facilities.

1. Priority should be given to demonstrated need within the FERC project boundary.
2. Priority should be given to recreational proposals where multiple stakeholders offer significant participation.
3. Recreational facilities should appeal to a broad public.
4. Reasonable access for the disabled should be provided.
5. Recreational needs should be prioritized for the project including a schedule of proposed improvements so that all costs are not in the first few years of the new license.
6. The improvement or expansion of existing recreational facilities should be considered first.
7. Additional recreational studies (if needed) should be only of sufficient scope and duration to provide necessary information to develop issue solutions.
8. Consensus based solutions are preferred over studies, unless solutions cannot be developed with existing information.
9. 
10. A process should be developed to adjust proposed improvements over the 30+ year time frame approximately every 7 to 10 years to account for changing needs. This should include the ability to trade a new needed facility for a proposed (but not built) facility of approximately the same cost.
11. Sufficient “future recreational” land should be set aside now to handle the recreational needs of 30+ years.

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Preferred consideration will be given to ideas that:

- do not promote facilities that would adversely impact existing commercial operations;
- identify actual recreational needs that are not filled by existing facilities;
- receive broad public support;
- expand existing recreational facilities prior to developing green field sites;

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## Recreation Plan Development

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- require doing recreational studies only if consensus cannot be reached with existing information (It is preferred to put financial resources into recreational facilities and opportunities that benefit the overall Project, rather than fund unnecessary/subjective studies).

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Standard Process Form

The following is a list of standard questions designed to help characterize existing recreation resources and aid in development of an appropriate recreation plan for the Saluda Project. Questions pertaining to recreation management are categorized according to the four-step recreation plan stepwise process diagram developed for the project. Questions pertaining to reservoir levels and downstream flows are listed following the facility management material.

**STEP 1 – DETERMINE DESIRED FUTURE CONDITION**

1. Identify Lake Murray and/or Lower Saluda River (LSR) qualities important to keep and any qualities that need changes.

Change:

Relative water level stability

Predictability – desire flows in river to be more predictable; desire advanced notice of flows to be available to public

Accessibility and amenities (boardwalk accessible from land and water)

Water quality – desire to resolve DO problems in the tailrace and in the reservoir

Minimum flow – desire minimum flow standards that will protect aquatic health in river

Management of flow increases – desire slower rates for increasing flows in river to increase margin of safety for downstream river users

Keep:

Water quality

Natural shoreline and riverbanks

Undeveloped lands remain undeveloped

Aesthetics

Fishing opportunities

Hunting opportunities

Wildlife watching

Living on lake/river

Solitude

Keep islands natural

Safety/security

Public-private balance

Shoreline Management Program

Contingency reserve capacity

2. Are there unique characteristics of Lake Murray and/or the LSR relative to other reservoirs/tailraces in the area?

Location – near and within metropolitan area

Size

Uninterrupted by bridges

Amount of land owned by SCE&G

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[Extensive shoreline](#)  
[Usable/accessible shoreline](#)  
[Purple Martin habitat](#)  
[Whitewater paddling in river](#)  
[Cold water fisheries in river](#)

3. What is the overall vision for Lake Murray and/or the LSR, in terms of recreation experiences and opportunities?

[Insert Final Vision Statement](#)

4. Are there sensitive biological or cultural resources associated with the Project that need to be considered? Where are these resources located and are there seasonal sensitivities (e.g., nesting or spawning times, etc.)?

[ESA](#)  
[Lands that support wildlife habitat](#)  
[See Cultural RCG](#)  
[Rocky shoals spider lily; Saluda River](#)  
[Spawning, migrating fishes; lower Saluda and Congaree River](#)  
[Trout; lower Saluda](#)

5. Identify specific goals and objectives for managing recreation at Lake Murray and/or in the LSR.

[Lake levels](#)  
[River levels and flows](#)  
[Minimum flows to support aquatic community health and recreational uses in the river](#)  
[Recreational flows](#)  
[Management of flow changes from the hydro to improve safety for downstream river users](#)  
[Scheduled recreational releases](#)  
[Knowledge of current and anticipated generation releases made accessible to the public](#)  
[Park on Lexington side of lake](#)  
[Park/preserve on Lexington side of river at Twelve-mile Creek as describe in LSR Corridor Plan](#)  
[Provide takeout point above Zoo at Millrace Rapids](#)  
[LSR greenway trail described in LSSR Corridor Plan Update \(involves River Alliance/City of Columbia and ICRC/Saluda Shoals Park\)](#)  
[Assure long term stability of Billy Dreher Island, Flotilla Island, and Saluda Shoals Park](#)  
[Large tournament facility](#)  
[Reasonable avoid negatively impacting commercial facilities](#)  
[Conservation of existing project lands for wildlife and scenic values](#)  
[Estimate current and future recreational use of reservoir and river](#)  
[Year-round access for recreation sites](#)

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## **STEP 2 – ESTABLISH BASELINE CONDITIONS**

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## Recreation Plan Development

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6. What is the nature of existing recreational access to Lake Murray and the LSR?
  - a. How many public accessible, developed recreation sites are there?
  - b. Where are they located/how are they distributed around the Project?
  - c. Of these publicly accessible access sites how many are owned and operated by public versus private entities and how are they supervised?
  - d. How many sites, open to the public, provide boat access to the reservoir and the LSR?
  - e. How many provide shoreline fishing?
  - f. Identify the most heavily used facilities.
  - g. Are there informal, undeveloped use areas? Where are they?
7. What types of existing developed facilities are there?
  - a. Enumerate boat ramps, restrooms, docks, and other facilities.
  - b. What is the existing capacity at each site?
  - c. What is the general condition of each site and its facilities?
  - d. Ideas for improving existing facilities.
8. Describe notable recreation activities on Lake Murray and/or the LSR.
  - a. List recreation activities currently occurring and identify most prominent activities.

Greatest activity is independent family recreation, including many forms of boating, waterskiing, swimming/sunbathing, fishing, picnicking, and camping.

Solitary wade fishing in river.

Bank fishing at public sites and impromptu sites in the lake and river.

Small and large bass tournaments.

Motor boating

Sailing

Fishing from boats

Fishing from banks

Wade fishing

Swimming and sunning

Picnicking

Canoeing and kayaking (flatwater and whitewater)

Floating with tubes and rafts

- b. Where are these uses occurring, and are they concentrated in certain areas?

Lower Saluda River supports all above activities except sailing

Whitewater boating concentrated on Saluda River below I-26 Bridge

Swimming and sunning on Lower Saluda concentrated at Riverbanks Zoo area; and will expand upriver when greenway trail opens in 2007

Wade fishing concentrated at shoal areas of lower River: at least four areas along river

- c. Identify existing impediments to these activities, if any.

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## Recreation Plan Development

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Dramatic river fluctuations are impediments to recreational activities along the lower Saluda River.

9. Are there known management issues associated with use?
  - a. Are there areas of congestion, and if so where?
  - b. Are there known conflicts between users, and if so where and when?

Fishing tournaments are disruptive to other boaters and residents. There needs to be an established, enforced protocol for organizes fishing tournaments.  
Jet skis and large motorboats are disruptive to anglers, other boaters, and residents.

- c. Are there other known management issues, such as littering, trespassing, etc.?

Enforcement of established rules are limited by funding, staffing, and political boundaries.

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- d. Are there known issues regarding recreational safety?

Wade fishing, canoeing/kayaking, and other water contact and bank use is often dangerous due to river fluctuations in water levels on the Lower Saluda River.

10. What is the expected future demand for recreation activities at Lake Murray?
  - a. Will existing facility capacity likely be exceeded, and if so where and when?
  - b. Would accommodating this demand be consistent with the long-term vision for the reservoir?
  - c. Will demand introduce new or additional congestion, conflicts, or other management issues?

11. Identify current local benefits from recreation and any local detriments.

### **STEP 3 – DETERMINE WHAT IS NEEDED AND WHEN**

12. Ideas for better or different access, consistent with Step 2 above.
13. Potential facility enhancements or upgrades, consistent with Step 2 above.
14. Potential new facilities, or other management actions, consistent with Step 2 above.
15. What are the priorities regarding identified needs both in terms of resources and time? How do priorities compare across the entire Project?

### **STEP 4 – DECIDE HOW NEEDS WILL BE MET AND WHO IS RESPONSIBLE**

### **QUESTIONS REGARDING RESERVOIR LEVELS**

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## Recreation Plan Development

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16. How is the Project currently operated and what are the typical reservoir levels during key recreation seasons?

- SCE&G operates Saluda Hydroelectric Project as a multi-purpose project. The seasonal changes in elevations provide hydroelectric generation, maintenance of downstream water quality, a unique tailrace fishery, and municipal/industrial water supply.
- SCE&G has a verbal agreement with SCDHEC for a minimum flow of 180 cfs.
- During the low DO season which generally runs from late June to early December, SCE&G will try to maintain a minimum flow of 400 – 500 cfs to help maintain a higher level of DO in the Lower Saluda River.
- From April through the end of August the lake is operated near the normal operating high water level of el. 358 ft Plant Datum (PD). Maximum full pool is el. 360.
- Drawdown begins near the end of August or early September and ends in late December near the winter pool level of 350 - 352 ft PD. This allows additional storage capacity in anticipation of the late winter and early spring rainy season.
- At the beginning of January the lake is allowed to refill during the rainy season so it will be at the normal operating high water level of 358 ft. PD by April.
- The plant normally schedules power operations for contingency reserve to meet our obligation to the Virginia/Carolinas Reserve Sharing Group (VACAR), a member of the Southeastern Electric Reliability Council (SERC), which is governed by the North American Electric Reliability Council (NERC). During the fall and in anticipation of heavy rains from a tropical storm or hurricane the plant will generate as necessary to manage the lake level, system reserve, and emergency generation requirements.
- Power generation may be increased to allow SCE&G to meet their obligations of contingency reserve as part of our VACAR agreement with neighboring utilities.

17. Are there changes to Project operations that you would like to see addressed to improve the overall value of the reservoir, and how specifically would such changes benefit recreation?

- What minimum lake elevation will provide recreational benefits during each season of the year?
- Current reservoir level operations balance the multi-purpose use of the reservoir. Maintaining the existing reservoir level fluctuations would allow for continued water level management through daily and weekly power generation operations however recreation would see no additional benefits. Conversely, limiting the seasonal fluctuation may have recreational benefits but other project purposes would be compromised (power generation, water level management, water quality maintenance, and aquatic weed control).

18. Are there seasonal and/or daily variations in reservoir level that can occur without adversely affecting the overall value of the project (including impoundment objectives such as recreation, fish and wildlife, flood control, generation, navigation, etc.)?

- There are not large daily fluctuations at the Saluda Hydroelectric Project.

19. What are the reservoir levels at which recreation problems tend to occur (may be different for different locations or problems)?

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## Recreation Plan Development

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- There appears to be a potential impact to recreational resources when the lake level is lower.
- SCE&G already extended boat ramps at several of their public access parks to accommodate a water level down to el. 345 ft PD.

20. When (i.e., what time of year) and how frequently do problems occur related to reservoir levels?

- In general, the operation of Saluda Hydroelectric Project has been consistent throughout the years except for 1990, 1996, 2002 – 2004, and 2006. During those years the lake level was lowered to around el. 345 – 348 ft PD for the following project maintenance requirements:
  - 1990 – Intake towers maintenance
  - 1996 – Hydrilla control as requested by SCDNR
  - 2002 – 2004 – FERC Order for safety during dam remediation project
  - 2006 – Upstream riprap repair
- It will be necessary to lower the lake level to around el. 345 ft PD in the future for maintenance of project structures and installing new recreational access.

21. Why are the current operating water levels important to the operation of the project and the overall system?

- The Saluda Hydroelectric Project is a multi-purpose reservoir. The current operating water levels are critical for the project to meet its required purposes. The changes in water level have many beneficial impacts both upstream and downstream of the dam :
- The project is used to meet our contingency reserve capacity obligation as part of the VACAR agreement. This is for a loss on our own system or by one of our neighboring Reserve Sharing Group utilities.
- Electricity (inexpensive, clean, renewable)
- Electric system ancillary services (transmission line maintenance & overload protection, security resource for VCS Nuclear Statino)
- Navigation support
- Trout fishery
- Downstream water quality and aquatic habitat
- Municipal and industrial water supply

22. Are there state or federal operating requirements that stipulate specific operating goals?

- SCE&G and SCDHEC have an agreement to discharge a minimum flow of 180 cfs from the project.
- Article 12 of the FERC license requires that reservoir levels and discharge from storage be controlled by reasonable rules and regulations of the Commission for the protection of life, health, and property and for other beneficial public uses including recreational purposes.
- Exhibit H of the latest FERC license application identifies the lower lake level to be Elev. 350 during normal flow years and Elev. 345 during low flow years.

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## Recreation Plan Development

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- Our McMeekin Generating Station NPDES permit requires a minimum of 2,500 cfs discharge from Saluda prior to discharging the fossil plant circulating water return directly into the Lower Saluda River.

### QUESTIONS REGARDING DOWNSTREAM FLOWS

23. Are there riverine recreation opportunities below the dam? If yes, move to additional questions, if not, stop.

Yes, trout fishing (wading, bank, boat), striper fishing (wading, bank, boat), canoeing/kayaking, tubing, sunbathing/swimming/rock hopping, picnicking, walking/hiking, bicycling, wildlife watching.

24. Do we know how different flow levels affect recreation opportunities and specific recreation activities?

25. Can opportunities be enhanced by modifying releases, and in what way?

26. How would modified releases affect upstream lake levels?

27. How would suggested modified downstream flows affect project operations at the project and at upstream and downstream projects?

28. Are there additional concerns with regard to state and federal requirements or existing ecological issues that limit suggested changes to downstream flows?

29. How binding is the VACAR agreement and when does it expire? (I notice that it is not listed in the state/federal operating requirements in Question 22).

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<b>Page 2: [1] Inserted</b>	<b>Bill Marshall</b>	<b>5/30/2006 10:39 AM</b>
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support creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on north bank of river connecting Saluda Shoals Park to Gardendale Landing and to Riverbanks Zoo; and a park/preserve on the south side of river at Twelve-mile Creek

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<b>Page 2: [2] Inserted</b>	<b>Bill Marshall</b>	<b>5/30/2006 10:39 AM</b>
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(encompassed within LSR Corridor Plan item, above)

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expansion of existing SCE&G and public commercial facilities to accommodate future growth

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SCE&G and public commercial

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A riverfront greenway trail is wanted by the community as expoused by the River Alliance. Assistance by SCE&G will in making this trail a reality will also help by opening up many areas of the river now only reached by boat, or by trespassing. The River Alliance has proposed a trail to extend up the north shore of the Saluda from the Riverbanks Zoo to I26. Continuation of the trail to Saluda Shoals, connecting the Gardendale site and an additional access area between I20 and I26 is also envisioned by the LSRAC and Saluda Shoals. Also, there is no legal access except by boat to the stretch of river upstream of the rapids above Saluda Shoals which should be remedied with a riverfront trail connection if possible, or through seperate access. The trail should parallel the river and not disturb the scenic integrity of the riverbank, but should allow for sufficient viewscapes and even water access by foot, especially to the popular, shallower riffle areas.

consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.

public access with parking and trails on the Lexington (south) side such as the public park at the confluence of 12 Mile Creek and the Saluda River proposed in the Corridor Plan by SC PRT and the SC DNR (Lower Saluda River Advisory Council).

safe recreational oppourtunities should be available on the Saluda below the lake through daily flow release schedules, and with release rates deemed to be not life threatening through a controlled study using river experts and stakeholders.

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<b>Page 2: [6] Inserted</b>	<b>Malcolm Leaphart</b>	<b>5/30/2006 10:58 AM</b>
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**Page 2: [7] Inserted** **Malcolm Leaphart** **5/30/2006 10:59 AM**

consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.

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**Page 2: [8] Inserted** **Bill Marshall** **5/30/2006 10:40 AM**

and to provide wildlife habitat areas

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identification of flows needed for the lower Saluda River to support a variety of recreational uses

creation of scheduled recreation flows for the

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**Page 2: [10] Inserted** **Dave Anderson** **5/18/2006 9:57 AM**

identification of flows needed for the lower Saluda River to support a variety of recreational uses

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**Page 2: [11] Deleted** **SCANA** **7/21/2006 10:10 AM**

lower Saluda River

identification of a reliable lake level that will provide year round access for a majority of lake users

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identification and conservation of undeveloped shoreline and adjacent land for recreational use

management of river flows to improve safety for river users (coordinate with Safety RCG)

minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)

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**Page 2: [13] Inserted** **Dave Anderson** **5/18/2006 9:55 AM**

identification and conservation of undeveloped shoreline and adjacent land for recreational use

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**Page 2: [14] Inserted** **Bill Marshall** **5/30/2006 10:45 AM**

management of river flows to improve safety for river users (coordinate with Safety RCG)

minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)



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

**SALUDA HYDROELECTRIC PROJECT**  
*(FERC NO. 516)*

**RECREATION PLAN**

DRAFT

*JULY 2006*

*Prepared by:*

***Kleinschmidt***  
*Energy & Water Resource Consultants*

SOUTH CAROLINA  
ELECTRIC & GAS COMPANY  
COLUMBIA, SOUTH CAROLINA

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**RECREATION PLAN**

**DRAFT**

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## ***1.0 PROJECT DESCRIPTION***

These sections will be basic descriptions of existing and/or planned future recreation opportunities.

### ***1.1 Regional Setting***

This section will briefly describe recreation opportunities in the Lake Murray region. In order to be consistent with the Statewide Comprehensive Outdoor Recreation Plan (SCORP), the region is defined as the “Capital City & Lake Murray Country” tourism region and includes the counties of Richland, Lexington, Saluda, and Newberry.

### ***1.2 Lake Murray***

This section will briefly describe Project facilities, Lake Murray, and recreation opportunities available on the lake.

### ***1.3 Lower Saluda River***

This section will briefly describe recreation opportunities available on the lower Saluda River. We must also describe what is actually in the project boundary.

## ***2.0 DATA COLLECTION METHODS AND STORAGE***

This section will basically be the methodology from the Recreation Assessment Study and the Boat Density Study.

## ***3.0 SITE DESCRIPTIONS, USE ESTIMATES, AND BOAT DENSITY ANALYSIS***

This section will incorporate results from the Recreation Assessment Study and the Boat Density Study.

## ***4.0 FACILITY DEVELOPMENT CONSULTATION PROCESS AND METHODOLOGY***

This section will describe the consultation process with the Recreation RCG. We will incorporate the following subheadings to help describe the process.

### ***4.1 Standard Process***

This section will describe the Standard Process that we are using in the Recreation RCG.

### ***4.2 Standard Process Steps and Questions***

Basically, this will be a list of the four steps and the final questions from the Standard Process form.

### 4.3 Recreation Solution Principles

This will be a reiteration of the final Solution Principles we are following.

## **5.0 FACILITY DEVELOPMENT PRIORITIZATION AND SCHEDULING**

The following questions briefly describe the process we will use for determining facility development and prioritization.

**“Does the *existing* supply of recreation sites/facilities meet the *current* demand for them?”  
The answer to this question defines our baseline – it tells us what exists *now* and how it is *currently* used.**

1. Identify supply of recreation sites. In this instance, supply of recreation sites around Lake Murray will be determined using the results of the recreation site inventory. That will tell us (a) what’s available for public access sites and (b) approximately how many people these sites can accommodate at any period in time (site capacity).
2. Estimate whether we are meeting *current* demand for these recreation sites. We need to estimate at what level these sites are being used now. This is determined from our vehicle counts, which are occurring concurrently with the site surveys. This information will be supplemented with results from the user surveys, which will tell us whether the patrons of recreation sites feel the existing facilities are adequate to meet their needs, and the staging locations of special events (regattas, fishing tournaments, etc.).

### 5.1 Prioritization Consultation

**“Will the current supply of recreation sites/facilities meet expected future demand?”**

1. Determine what *future* participation in recreation might look like. We need to estimate how many more people will be demanding recreational access to the Project. This information will come from estimates of population projections (population trends are an indicator of potential growth in recreation demand); trends in participation in outdoor recreation from national studies, the SCORP, River Corridor studies, and other relevant literature.
2. Decide whether the *existing* sites might accommodate our expected *future* use, or whether those sites might need to be *expanded* or new sites *created*. The capacity at which these sites are being used currently will be compared with the estimates of future use to gain an idea of how much additional use in the future a site could or could not handle.

### 5.2 Implementation Schedule

**“If site expansion or new access is determined to be required, where and when should that occur?”**

1. Identify the recreation sites where expansion might be necessary. Identify the activities that need to be accommodated. Determine whether (a) the site can accommodate an expansion and (b) whether an expansion is desirable at that site. Data required here will come from the site evaluation, professional engineers, and resource



managers/professionals. For boat launches, also examine maps from the boating density study, survey results, and accident locations to identify whether or not waters in front of the launch can handle additional boat traffic.

2. If it is determined that new sites should be created, the location of any potential site should be determined by examining the following items, at a minimum:
  - a. Location of existing project lands that are available
  - b. Topographic suitability of available project lands to meet the need
  - c. Location of other sensitive resources (T&E species, spawning beds, wetlands, etc.).
  - d. Current on-water use patterns that might become more concentrated by the development of a new site.
3. Develop a prioritization schedule that will identify the approximate time frame for these improvements to occur.

### 5.3 Annual Consultation

We will include an annual consultation with the SCDNR and SCPRT that will review improvements made during the prior year and review the schedule for the upcoming year. If the schedule of improvements needs adjusting, it can occur at this meeting.

### 5.4 Recreation Plan Addenda

We will include an annual report describing improvements made during the previous year and plans for the coming year; basically meeting notes from the annual consultation.

## **6.0 RECREATION CONCEPT PLAN EVALUATION**

This section will describe the detailed improvements that we agree will take place.

### 6.1 Suitable Sites for Development

This section will describe the sites and the improvements to those sites.

### 6.2 Unsuitable Sites for Development

During the course of consultation, we may find that a site may need improvements that are unfeasible for a given reason. We will record why these sites are unsuitable in order to provide a record for future use.

## **7.0 OTHER ISSUES ADDRESSED WITHIN THE RECREATION RCG CONSULTATION PROCESS**

If we have any other recommendations related to recreation, we will describe them in this section.

## **8.0 REFERENCES**

**Danielle Fitzpatrick**

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**From:** Patrick Moore [PatrickM@scccl.org]  
**Sent:** Friday, August 11, 2006 4:09 PM  
**To:** Dave Anderson  
**Cc:** Kelly Maloney; Alan Stuart  
**Subject:** RE: Downstream Recreation Flow Assessment Study Plan

Along with the question below I was wondering what flow levels would be evaluated? I remember there was a discussion about issues associated with releasing rec analysis flows but there was no consensus and I am unable to tell what range of flows will be covered in the 180 day period.

Thanks

Patrick

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

**From:** Patrick Moore  
**Sent:** Friday, August 11, 2006 3:24 PM  
**To:** 'Dave Anderson'  
**Cc:** Kelly Maloney  
**Subject:** RE: Downstream Recreation Flow Assessment Study Plan

Hey Dave and Kelly,  
I am writing up full track changes but after the first read am I correct in stating:

We will never actually go on the river, nor will any of our panel actually experience the flow, or the rate of change of flows.

Patrick

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

**From:** Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]  
**Sent:** Friday, August 11, 2006 2:50 PM  
**To:** Tom Eppink; Bill Marshall; Charlene Coleman; Dave Anderson; Guy Jones; Jennifer Summerlin; Karen Kustafik; Kelly Maloney; Malcolm Leaphart; Patrick Moore  
**Cc:** Alan Stuart; Bill Argentieri; Randy Mahan  
**Subject:** Downstream Recreation Flow Assessment Study Plan

Attached is the draft "Downstream Recreation Flow Assessment Study Plan". I would like to collect any comments by August 28th (two weeks) and then schedule a meeting to review comments. Whether this will be a conference call or sit down meeting is up in the air--it will depend on the amount and substance of the comments received. If you have any questions regarding the study plan, feel free to contact Kelly Maloney or myself.

<<Draft Flow Assessment Study Plan (08-09-06).doc>>

## Stacia Hoover

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**From:** Dave Anderson  
**Sent:** Friday, July 28, 2006 4:42 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Michalec; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Richard Mikell; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebbber  
**Subject:** 07-21-06 Draft Recreation RCG Meeting Notes

Here are the draft meeting notes from our July 21st Recreation RCG meeting. Please have any comments/changes back to me by August 11th. I have also attached the Working Documents with the "track changes" we did in the meeting for your reference. I will be finalizing portions of the Working Documents in the coming weeks.



2006-07-21



Recreation RCG

Meeting Notes - Rec. Working Documen...

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
July 21, 2006**

draft dka 07-28-06

**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Alison Guth	Kleinschmidt Associates	Tim Vinson	SCDNR
Dave Anderson	Kleinschmidt Associates	John Frick	landowner
Bill Argentieri	SCE&G	Steve Bell	Lake Watch
Alan Stuart	Kleinschmidt Associates	Regis Parsons	landowner
Tom Eppink	SCANA Services	Tony Bebbber	SCPRT
Tommy Boozer	SCE&G	Joy Downs	LMA
David Hancock	SCE&G	Richard Mikell	Adventure Carolina
George Duke	LMHC		

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**HOMEWORK ITEMS:**

- Tony Bebbber – check on combining data for the Recreation Participation & Preference Study for four counties around Lake Murray
- Dave Anderson – email web link on Recreation Participation & Preference Study to group
- Entire Group – review and prioritize issues

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**

**October 25, 2006 at 9:30 a.m.**

**Located at the Lake Murray Training Center**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
July 21, 2006**

draft dka 07-28-06

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Dave Anderson welcomed the group and noted that the purpose of the meeting would be to finalize the Work Plan, Vision Statement, Solution Principles, and begin discussion on the Recreation Plan (attached, dated July 14, 2006). After passing out the working documents, Dave noted that they would begin an interactive session of reviewing each section and make changes as needed. The group began this exercise by separating possible solutions from the Identified Issues in the Work Plan. During this discussion, Tim Vinson noted that he would like to see additional boating access sites on the Lexington side of Lake Murray. David Hancock replied and noted this issue would be covered with the possible creation of a state park on the south side of the reservoir. Tim agreed that this would sufficiently address his issue. The group continued through the document and modified items to ensure that they correctly covered all the issues.

The group briefly discussed whether to cover the issue of Two Bird Cove in the Work Plan. Regis Parsons, a landowner in the cove, was concerned about the recent classification of the cove to a special recreation area. The group decided that since this issue overlapped between the Recreation and Lake and Land Management RCGs, they would mention the item in the Recreation Work Plan, but deal with it primarily in the Lake and Land Management RCG.

As the group progressed through the Work Plan, Dave noted that he had included all of the comments and issues in the draft and, because of this, several items were repeated in the document. The group agreed to remove a few items that were already noted in the document.

After complete review of the Work Plan, the group moved on to discuss the Vision Statement. Dave noted that the Vision Statement can be explained as the over-arching image of the Project in fifty years that guides the group through the tasks set out in the Work Plan.

During discussions on the Vision Statement, John Frick noted that he believed there needed to be an item included that encouraged low density development around the lake, as well as ensuring back property owners access to the lake. The group noted that this was not an issue that pertained to the Recreation Vision Statement and the issue was placed in the Parking Lot for the Lake and Land Management RCG. There were no additional comments on the Vision Statement and the group moved to Solution Principles and made a few changes. All changes made during the meeting are attached (document dated July 21, 2006).

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
July 21, 2006**

draft dka 07-28-06

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After a short break, the group began to discuss the Recreation Plan “straw man.” Dave noted that the Recreation Plan is the primary deliverable from the Recreation RCG. Dave reviewed each item in the document. During discussions, it was noted that the new Recreation Participation & Preference Study is available; however, the report does not group the data into the four counties surrounding the Project. Tony Bebbler will check on combining data for the Recreation Participation & Preference Study for the four counties as a homework item.

There was brief discussion regarding the prioritization of recreation sites that were at capacity and looking into expanding existing sites. Dave explained there will be an implementation schedule because, budget-wise, not all improvements could be done at one time. It was also noted that SCE&G and the agencies will meet on a regular basis to discuss the schedule and any priority adjustments. Alan suggested that the meetings be scheduled after the implementation schedule was developed. The group agreed. The group voiced no objections to the direction that the Recreation Plan was headed.

Dave gave a brief update as to the status of the TWCs. He noted the Recreation Assessment Study was started this past spring. He explained that the interviewers have been hired and in place since Memorial Day. Dave also noted that the inventory of existing SCE&G recreation sites has been completed and the database will be ready by the end of the year. Dave also pointed out that as of June 30, they have completed 173 of the 600 sample days and have completed 660 questionnaires. Dave also noted that the TWC recently had discussions regarding the Boat Density Study Plan and the group is going to move forward with this study. He added that both studies will be using the new Recreation Participation & Preference Study funded by SCPRT and noted he would send the web link to the group.

Finally, Dave explained that there was a study currently being reviewed internally that will be submitted to the Downstream Flows TWC for approval. Dave asked the group if there were questions on any of the studies mentioned. George Duke noted that he was a little concerned with the use of a 1977 study as a baseline for the Boat Density Study. Dave replied that the 1977 study is generally the standard used throughout FERC relicensings when performing a boat density study. He noted that they use the values for powerboats when applying values to jet skis because jet skis were not around in 1977. Dave also added that they have an idea of the number of jet skis from the interviews at the recreation sites. George also expressed concern that since 2006 was a drought year, accurate boat counts would not be attained. Dave noted that they would be using 2001 photography to obtain the counts.

Dave concluded the meeting and reviewed the homework assignments. He noted that before the next meeting the group should review and prioritize those issues that do not need the results of the studies currently taking place. The next Recreation RCG meeting was set for October 25<sup>th</sup>, 2006.

*MEETING NOTES*

*SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP*

*LAKE MURRAY TRAINING CENTER  
July 21, 2006*

draft dka 07-28-06

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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**July 21, 2006  
9:30 AM**

**Lake Murray Training Center**

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- **9:30 to 10:30** Finalize Recreation RCG Work Plan (Dave Anderson)
- **10:30 to 10:45** BREAK
- **11:00 to 12:00** Finalize Recreation Vision Statement (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 1:30** Finalize Solution Principles (Dave Anderson)
- **1:30 to 2:00** Discussion of Recreation Plan Straw Man (Dave Anderson)
- **2:00 to 2:10** BREAK
- **2:10 to 2:30** Update on TWCs (Dave Anderson)
- **2:30 to 2:45** Develop an Agenda for Next Meeting and Set Next Meeting Date

Adjourn





# Recreation Resource Conservation Group

## Working Documents

July 21, 2006

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## Recreation Resource Conservation Group Work Plan

DRAFT

<b>Facilitator:</b>		
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com
<b>Members:</b>		
Name	Organization	E-mail
Alan Axson	Columbia Fire Department	cfdwaxson@columbiasc.net
Alan Stuart	KA	alan.stuart@kleinschmidtusa.com
Alison Guth	KA	alison.guth@kleinschmidtusa.com
Amanda Hill	USFWS	amanda_hill@fws.gov
Bill Argentieri	SCE&G	bargentieri@scana.com
Bill Marshall	Lower Saluda Scenic River Advisory Council, DNR	marshallb@dnr.sc.gov
Charlene Coleman	American Whitewater	cheetahrk@yahoo.com
Charles (Charlie) Rentz		flyhotair@greenwood.net
David Hancock	SCE&G	dhancock@scana.com
Dick Christie	SCDNR	dchristie@infoave.net
George Duke	LMHC	kayakduke@bellsouth.net
Gerrit Jobsis	Coastal Conservation League & American Rivers	gerritj@scccl.org; gjobsis@americanrivers.org
Guy Jones	River Runner Outdoor Center	guyjones@sc.rr.com
Irvin Pitts	SCPRT	ipitts@scprt.com
James A. Smith	LMA	bkawasi@sc.rr.com
Jeff Duncan	National Park Service	jeff_duncan@nps.gov
Jennifer O'Rourke	South Carolina Wildlife Federation	jenno@scwf.org
Jennifer Summerlin	Kleinschmidt Associates	jennifer.summerlin@kleinschmidtusa.com
Jim Devereaux	SCE&G	jdevereaux@scana.com
JoAnn Butler	resident	jbutler@scana.com
Joy Downs	Lake Murray Assn.	elymay2@aol.com
Karen Kustafik	City of Columbia Parks and Recreation	kakustafik@columbiasc.net
Keith Ganz-Sarto		keith_ganz_sarto@hotmail.com
Kelly Maloney	Kleinschmidt Associates	kelly.maloney@kleinschmidtusa.com
Larry Michalec	Lake Murray Homeowners Coalition	lmichalec@aol.com
Larry Turner	SCDHEC	turnerle@dhec.sc.gov
Leroy M. Barber Jr.	LMA	lbarber@sc.rr.com
Malcolm Leaphart	Trout Unlimited	malcolml@mailbox.sc.edu
Mark Leao	USFWS	mark_leao@fws.gov
Marty Phillips	Kleinschmidt Associates	marty.phillips@kleinschmidtusa.com
Michael Waddell	TU - Saluda River Chapter	mwaddell@esri.sc.edu
Miriam S. Atria	Capitol City Lake Murray Country	miriam@lakemurraycountry.com
Norman Ferris	Trout Unlimited	norm@sc.rr.com
Patricia Wendling	LMA	wwending@sc.rr.com
Patrick Moore	SCCCL AR	patrickm@scccl.org
Ralph Crafton	LMA	crafton@usit.net
Randy Mahan	SCANA	rmahan@scana.com
Richard Mikell	Adventure Carolina	adventurec@mindspring.com
Stanley Yalicki	LMA	joyyalicki@aol.com
Steve Bell	Lake Murray Watch	bellsteve9339@bellsouth.net
Suzanne Rhodes	SC Wildlife Federation	suzrhodes@juno.com
Tim Vinson	SCDNR	vinsont@dnr.sc.gov
Tom Brooks	Newberry Co.	tbrooks@newberrycounty.net
Tommy Boozer	SCE&G	tboozer@scana.com
Tony Bebber	SCPRT	tbebber@scprt.com
Van Hoffman	SCANA Land Mgt.	vhoffman@scana.com

## Recreation Resource Conservation Group Work Plan

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### Mission Statement

The mission of the Recreation RCG is to ensure adequate and environmentally-balanced public recreational access and opportunities related to the Saluda Hydroelectric Project for the term of the new license. The objective is to assess the recreational needs associated with the lower Saluda River and Lake Murray and to develop a comprehensive recreation plan to address the recreation needs of the public for the term of the new license. This will be accomplished by collecting and developing necessary information, understanding interests and issues and developing consensus-based recommendations.

### Identified Issues

- ensure that recreational facilities and opportunities are protected and enhanced for current and future users, on and near the lake and river
  - boating access, including future access on Lexington side of lake
  - non-boating access
  - paddling access
  - security at recreation facilities
  - sufficient egress points on lower Saluda River
  - fishing opportunities for non-boaters
- conservation of lands
  - protect the scenic integrity of the Project.
  - provide wildlife habitat areas, and
  - provide formal and informal (impromptu areas) recreational opportunities
    - consideration of Two Bird Cove and Hurricane Hole Cove (special recreation designation areas) classification
- using the concept of adaptive management in future recreation planning
- River flows
  - safe recreational opportunities should be available on the Saluda below the lake through daily flow release schedules, and with release rates deemed to be not life threatening through a controlled study using river experts and stakeholders.
  - lack of scheduled recreation flows for the lower Saluda River
  - management of river flows to improve safety for river users (coordinate with Safety RCG)
  - minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)
- lack of a communication system that would encompass information to better inform the public of existing and projected conditions regarding lake levels and river flows as related to anticipated hydro operations and maintenance
- protection of the cold water fishery on the lower Saluda River
- impacts of lake level on recreational use of the lake.
- consideration of The Lower Saluda River Corridor Plan and the Lower Saluda Scenic River Corridor Plan Update and their related public access sites and greenway-trail concepts

### Possible Resolution

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<#>access site above the Mill Race rapids (encompassed within LSR Corridor Plan item, above)¶  
<#>creation of a state park on the south side of the reservoir¶  
<#>creation of a multi-lane boating facility that can accommodate large tournaments¶

**Inserted:** <#>support creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on north bank of river connecting Saluda Shoals Park to Gardendale (... [1]

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## Recreation Resource Conservation Group Work Plan

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- support creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on north bank of river connecting Saluda Shoals Park to Gardendale Landing and to Riverbanks Zoo; and a park/preserve on the south side of river at Twelve-mile Creek
- access site above the Mill Race rapids (encompassed within LSR Corridor Plan item, above)
- creation of a state park on the south side of the reservoir
- creation of a multi-lane boating facility that can accommodate large tournaments
- A riverfront greenway trail is wanted by the community as expoused by the River Alliance. Assistance by SCE&G will in making this trail a reality will also help by opening up many areas of the river now only reached by boat, or by trespassing. The River Alliance has proposed a trail to extend up the north shore of the Saluda from the Riverbanks Zoo to I26. Continuation of the trail to Saluda Shoals, connecting the Gardendale site and an additional access area between I20 and I26 is also envisioned by the LSRAC and Saluda Shoals. Also, there is no legal access except by boat to the stretch of river upstream of the rapids above Saluda Shoals which should be remedied with a riverfront trail connection if possible, or through separate access. The trail should parallel the river and not disturb the scenic integrity of the riverbank, but should allow for sufficient viewsapes and even water access by foot, especially to the popular, shallower riffle areas.
- consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.
- public access with parking and trails on the Lexington (south) side such as the public park at the confluence of 12 Mile Creek and the Saluda River proposed in the Corridor Plan by SC PRT and the SC DNR (Lower Saluda River Advisory Council).
- identification of flows needed for the lower Saluda River to support a variety of recreational uses
- identification of a reliable lake level that will provide year round access for a majority of lake users
- Consideration of conservation easements on large tracts of land within the PBL

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### RCG Tasks and Responsibilities

- Utilizing and modifying the Standard Process for evaluating and addressing recreation management and access issues specific to the Saluda Project, including developing a vision statement for the Project.
- Identifying specific areas where lake ~~and river levels, river flows, and/or lake and river level~~ fluctuations may be adversely affecting recreation including the nature and timing of the effect (e.g., access to sections of water, access to facilities, and aesthetics).

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## Recreation Resource Conservation Group Work Plan

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- Identifying specific areas where river flow changes may be adversely affecting recreation along the river, including the nature and timing of the effect (e.g., access to and safe use of sections of river).
- Working with the Operations Resource Conservation Group to identify “reasonable” (based on hydrologic, structural, and other limitations identified) changes, in Project operations that would benefit recreation.
- Working with appropriate RCGs to coordinate actions on issues of mutual interests such as river flows, lake levels, conservation of lands, and the siting and management of recreational facilities.
- Identifying any studies, if applicable, that need to be performed for identifying and/or evaluating (1) changes to Project operations, (2) enhancements to existing facilities, and (3) creation of new facilities to provide for public recreational access and opportunities.
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding modifications to facilities or current Project operations, and provide recommendations for future recreation access and facilities.

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### Work Scope and Product

- **Task 1** – Utilize the stepwise process diagram and solution principles to guide the planning process for addressing recreation management issues at the Saluda Project.
- **Task 2** – Develop a Vision Statement for the Saluda Project.
- **Task 3** – Review the operational constraints and current operations of the Saluda Project (see Initial Consultation Document).
- **Task 4** – Answer the list of questions on the Standard Process Form in order to characterize the existing and potential future condition of access and lake levels and river flows – from a recreation setting perspective.
- **Task 5** – Review stakeholder requests for particular studies and/or enhancement measures to ensure that these are incorporated into study planning, if applicable
- **Task 6** – Develop and recommend operation scenarios to the Operations RCG for analysis. These scenarios should reflect initial thinking on potential solutions and be designed to narrow the focus of Task 10 below. Analysis by the Operations RCG will focus on an assessment of potential recreational impacts associated with any suggested changes to operations.
- **Task 7** – Discuss results of the Operations RCG analyses.
- **Task 8** – Develop study designs/methods/plans and review agreed upon studies, literature reviews, etc.
- **Task 9** – Check the solution principles to ensure proposed study plans are consistent.
- **Task 10** – Provide recommendations for Project operations and recreation access and facilities to be considered in conjunction with all ecological (including water quality), recreational, and safety issues.
- **Task 11** – Develop a consensus based Recreation Plan for the Saluda Project that addresses all of the issues and tasks identified above.

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## **Recreation Resource Conservation Group Work Plan**

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### **Schedule**

**Late 2005/Early 2006**—Finalize Mission Statement, Standard Process Form, Solution Principles, and Work Plan

**Mid-2006**—Complete identification of studies, literature reviews, etc. that need to be completed to address issues and tasks identified in the Work Plan

**Late 2006**—Begin compilation of existing information, review preliminary study results, and draft an outline of the Recreation Plan

**2007**—Complete any studies identified in Task 8 and review results; draft recommendations to SHRG, complete draft Recreation Plan

**2008**—Finalize Recreation Plan and provide comments on Draft License Application

## Recreation Vision Statement for the Saluda Project

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The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, aesthetic values, cultural resources, and public recreational opportunities on the reservoir and the Lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of Lake Murray and the lower Saluda River, and ensure adequate facilities and public access are provided. Given the size of the reservoir/hydro-project area, it is felt that it can continue to support a diversity of recreation opportunities. Recognizing that needs and demands will change, recreational uses will be monitored and managed to balance access/uses with the protection of natural resources and environmental quality; and planning for new facilities and management schemes will remain adaptive to changes.

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Recreational opportunities for Lake Murray and the lower Saluda River over the next 30 to 50 years of the pending new FERC license for SCE&G should incorporate the following attributes:

- Recreational sites access areas on the lake and the river should be adequate to allow for the continued rapid population growth in the midlands over the term of the new license based on surveys of the public and input from the stakeholders and public.
- Sites should be spaced around the lake and along the river corridor to provide legal public access to the different geographic sections of both.
- Uncrowded conditions should be available most of the time at the sites, with natural viewscapes and provisions for most of the current and anticipated popular recreational activities incorporated into the overall provisions.
- Patrols and/or assistance for emergencies should be provided, though not necessarily manned, such as adequate phone boxes.
- Safe recreational opportunities should be available for boaters on the lake with adequate lake levels for the navigational markers, and on the river with release levels that are not life-threatening to the average person.
- The recommendations of the Lower Saluda Scenic River Advisory Council should be implemented to reflect the broad community-based consensus for river access, with consideration of additional river access to areas where trespassing is now the only way to enter an area.

Improvements to be considered at the Saluda Project include:

- Evaluation of SCE&G-owned Project lands for possible reclassification for recreation activities.
- Providing appropriate operations and maintenance of public recreation facilities.
- Optimizing the capacity of existing public recreation facilities to accommodate existing and future demand.

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## Recreation Vision Statement for the Saluda Project

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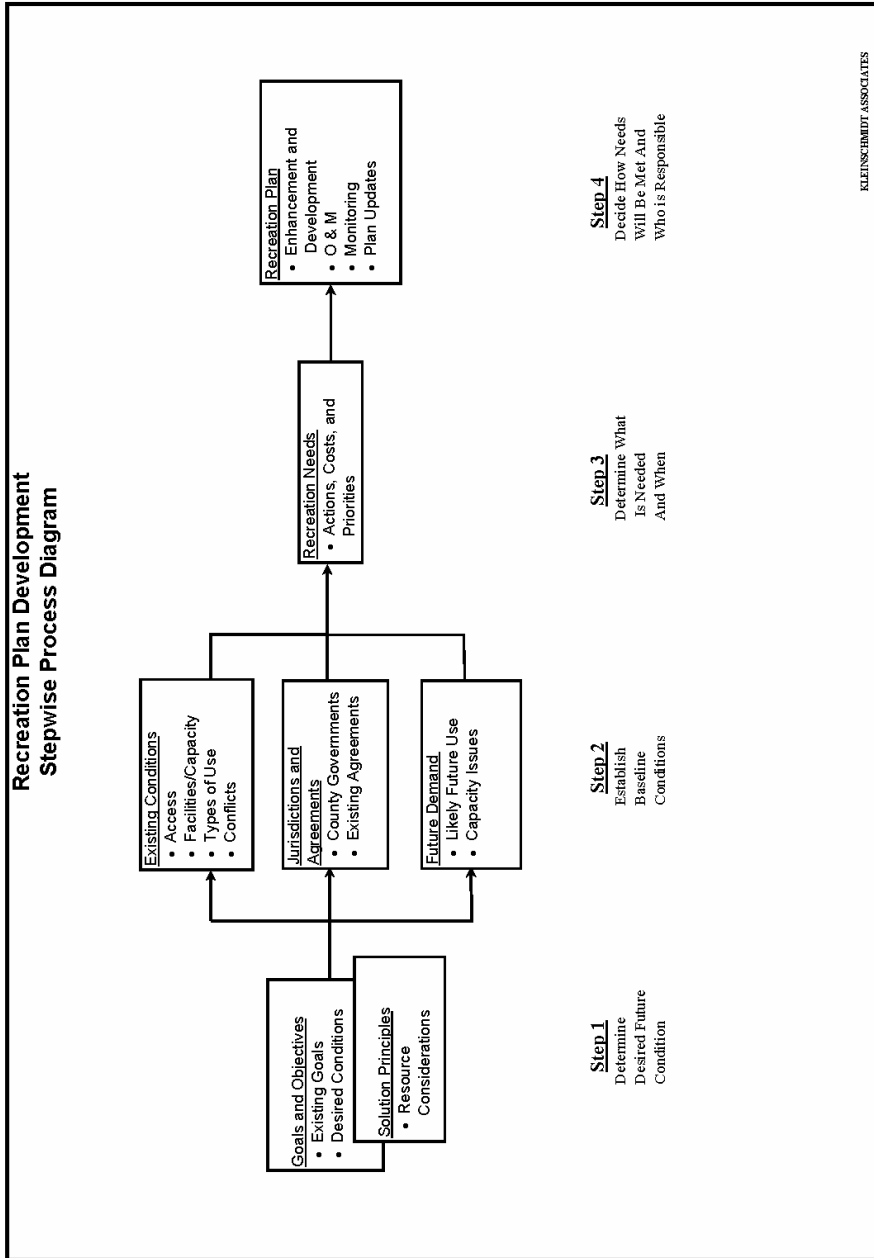
- Improving access and safety in the public waters below the dam and minimizing impacts of project operations on downstream recreation, recognizing the need to meet power generation, and downstream flow responsibilities at Saluda. Deleted: ly  
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- Managing lake level drawdowns so as to optimize safety and recreational opportunities, Deleted: minimize the occurrence of surface elevations lower than 354' in the late summer and early fall
- Managing river flows so as to optimize safety and recreational opportunities.
- Ensuring public access areas for the non-boating public remain available along the lake and river shorelines.
- Development of new facilities in accordance with the comprehensive plan as the need arises. Formatted: Bullets and Numbering  
Evaluation of other properties and potential partnerships as needed to meet the mission statement Deleted: if a proven
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# Recreation Plan Development

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## Stepwise Process Diagram



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## Recreation Plan Development

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### Solution Principles

Consideration of new recreational facilities should be based on demonstrated need and the potential impact on existing facilities.

1. Priority should be given to demonstrated need within the FERC project boundary.
2. Priority should be given to recreational proposals where multiple stakeholders offer significant participation.
3. Recreational facilities should appeal to a broad public.
4. Reasonable access for the disabled should be provided.
5. Recreational needs should be prioritized for the project including a schedule of proposed improvements so that all costs are not in the first few years of the new license.
6. The improvement or expansion of existing recreational facilities should be considered first.
7. Additional recreational studies (if needed) should be only of sufficient scope and duration to provide necessary information to develop issue solutions.
8. Consensus based solutions are preferred over studies, unless solutions cannot be developed with existing information.
9. ~~\_\_\_\_\_~~
10. A process should be developed to adjust proposed improvements over the 30+ year time frame approximately every 7 to 10 years to account for changing needs. This should include the ability to trade a new needed facility for a proposed (but not built) facility of approximately the same cost.
11. Sufficient “future recreational” land should be set aside now to handle the recreational needs of 30+ years.

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Preferred consideration will be given to ideas that:

- do not promote facilities that would adversely impact existing commercial operations;
- identify actual recreational needs that are not filled by existing facilities;
- receive broad public support;
- expand existing recreational facilities prior to developing green field sites;

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## Recreation Plan Development

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- require doing recreational studies only if consensus cannot be reached with existing information (It is preferred to put financial resources into recreational facilities and opportunities that benefit the overall Project, rather than fund unnecessary/subjective studies).

## Recreation Plan Development

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### Standard Process Form

The following is a list of standard questions designed to help characterize existing recreation resources and aid in development of an appropriate recreation plan for the Saluda Project. Questions pertaining to recreation management are categorized according to the four-step recreation plan stepwise process diagram developed for the project. Questions pertaining to reservoir levels and downstream flows are listed following the facility management material.

#### **STEP 1 – DETERMINE DESIRED FUTURE CONDITION**

1. Identify Lake Murray and/or Lower Saluda River (LSR) qualities important to keep and any qualities that need changes.

##### Change:

Relative water level stability

Predictability – desire flows in river to be more predictable; desire advanced notice of flows to be available to public

Accessibility and amenities (boardwalk accessible from land and water)

Water quality – desire to resolve DO problems in the tailrace and in the reservoir

Minimum flow – desire minimum flow standards that will protect aquatic health in river

Management of flow increases – desire slower rates for increasing flows in river to increase margin of safety for downstream river users

##### Keep:

Water quality

Natural shoreline and riverbanks

Undeveloped lands remain undeveloped

Aesthetics

Fishing opportunities

Hunting opportunities

Wildlife watching

Living on lake/river

Solitude

Keep islands natural

Safety/security

Public-private balance

Shoreline Management Program

Contingency reserve capacity

2. Are there unique characteristics of Lake Murray and/or the LSR relative to other reservoirs/tailraces in the area?

Location – near and within metropolitan area

Size

Uninterrupted by bridges

Amount of land owned by SCE&G

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## Recreation Plan Development

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[Extensive shoreline](#)  
[Usable/accessible shoreline](#)  
[Purple Martin habitat](#)  
[Whitewater paddling in river](#)  
[Cold water fisheries in river](#)

3. What is the overall vision for Lake Murray and/or the LSR, in terms of recreation experiences and opportunities?

[Insert Final Vision Statement](#)

4. Are there sensitive biological or cultural resources associated with the Project that need to be considered? Where are these resources located and are there seasonal sensitivities (e.g., nesting or spawning times, etc.)?

[ESA](#)  
[Lands that support wildlife habitat](#)  
[See Cultural RCG](#)  
[Rocky shoals spider lily: Saluda River](#)  
[Spawning, migrating fishes: lower Saluda and Congaree River](#)  
[Trout: lower Saluda](#)

5. Identify specific goals and objectives for managing recreation at Lake Murray and/or in the LSR.

[Lake levels](#)  
[River levels and flows](#)  
[Minimum flows to support aquatic community health and recreational uses in the river](#)  
[Recreational flows](#)  
[Management of flow changes from the hydro to improve safety for downstream river users](#)  
[Scheduled recreational releases](#)  
[Knowledge of current and anticipated generation releases made accessible to the public](#)  
[Park on Lexington side of lake](#)  
[Park/preserve on Lexington side of river at Twelve-mile Creek as describe in LSR Corridor Plan](#)  
[Provide takeout point above Zoo at Millrace Rapids](#)  
[LSR greenway trail described in LSSR Corridor Plan Update \(involves River Alliance/City of Columbia and ICRC/Saluda Shoals Park\)](#)  
[Assure long term stability of Billy Dreher Island, Flotilla Island, and Saluda Shoals Park](#)  
[Large tournament facility](#)  
[Reasonable avoid negatively impacting commercial facilities](#)  
[Conservation of existing project lands for wildlife and scenic values](#)  
[Estimate current and future recreational use of reservoir and river](#)  
[Year-round access for recreation sites](#)

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### **STEP 2 – ESTABLISH BASELINE CONDITIONS**

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## Recreation Plan Development

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6. What is the nature of existing recreational access to Lake Murray and the LSR?
  - a. How many public accessible, developed recreation sites are there?
  - b. Where are they located/how are they distributed around the Project?
  - c. Of these publicly accessible access sites how many are owned and operated by public versus private entities and how are they supervised?
  - d. How many sites, open to the public, provide boat access to the reservoir and the LSR?
  - e. How many provide shoreline fishing?
  - f. Identify the most heavily used facilities.
  - g. Are there informal, undeveloped use areas? Where are they?
7. What types of existing developed facilities are there?
  - a. Enumerate boat ramps, restrooms, docks, and other facilities.
  - b. What is the existing capacity at each site?
  - c. What is the general condition of each site and its facilities?
  - d. Ideas for improving existing facilities.
8. Describe notable recreation activities on Lake Murray and/or the LSR.
  - a. List recreation activities currently occurring and identify most prominent activities.

Greatest activity is independent family recreation, including many forms of boating, waterskiing, swimming/sunbathing, fishing, picnicking, and camping.  
Solitary wade fishing in river.  
Bank fishing at public sites and impromptu sites in the lake and river.  
Small and large bass tournaments.  
Motor boating  
Sailing  
Fishing from boats  
Fishing from banks  
Wade fishing  
Swimming and sunning  
Picnicking  
Canoeing and kayaking (flatwater and whitewater)  
Floating with tubes and rafts

- b. Where are these uses occurring, and are they concentrated in certain areas?

Lower Saluda River supports all above activities except sailing  
Whitewater boating concentrated on Saluda River below I-26 Bridge  
Swimming and sunning on Lower Saluda concentrated at Riverbanks Zoo area; and will expand upriver when greenway trail opens in 2007  
Wade fishing concentrated at shoal areas of lower River: at least four areas along river

- c. Identify existing impediments to these activities, if any.

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## Recreation Plan Development

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Dramatic river fluctuations are impediments to recreational activities along the lower Saluda River.

9. Are there known management issues associated with use?
  - a. Are there areas of congestion, and if so where?
  - b. Are there known conflicts between users, and if so where and when?

Fishing tournaments are disruptive to other boaters and residents. There needs to be an established, enforced protocol for organizing fishing tournaments.  
Jet skis and large motorboats are disruptive to anglers, other boaters, and residents.

- c. Are there other known management issues, such as littering, trespassing, etc.?

Enforcement of established rules are limited by funding, staffing, and political boundaries.

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- d. Are there known issues regarding recreational safety?

Wade fishing, canoeing/kayaking, and other water contact and bank use is often dangerous due to river fluctuations in water levels on the Lower Saluda River.

10. What is the expected future demand for recreation activities at Lake Murray?
  - a. Will existing facility capacity likely be exceeded, and if so where and when?
  - b. Would accommodating this demand be consistent with the long-term vision for the reservoir?
  - c. Will demand introduce new or additional congestion, conflicts, or other management issues?

11. Identify current local benefits from recreation and any local detriments.

### **STEP 3 – DETERMINE WHAT IS NEEDED AND WHEN**

12. Ideas for better or different access, consistent with Step 2 above.
13. Potential facility enhancements or upgrades, consistent with Step 2 above.
14. Potential new facilities, or other management actions, consistent with Step 2 above.
15. What are the priorities regarding identified needs both in terms of resources and time? How do priorities compare across the entire Project?

### **STEP 4 – DECIDE HOW NEEDS WILL BE MET AND WHO IS RESPONSIBLE**

### **QUESTIONS REGARDING RESERVOIR LEVELS**

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## Recreation Plan Development

DRAFT

16. How is the Project currently operated and what are the typical reservoir levels during key recreation seasons?

- SCE&G operates Saluda Hydroelectric Project as a multi-purpose project. The seasonal changes in elevations provide hydroelectric generation, maintenance of downstream water quality, a unique tailrace fishery, and municipal/industrial water supply.
- SCE&G has a verbal agreement with SCDHEC for a minimum flow of 180 cfs.
- During the low DO season which generally runs from late June to early December, SCE&G will try to maintain a minimum flow of 400 – 500 cfs to help maintain a higher level of DO in the Lower Saluda River.
- From April through the end of August the lake is operated near the normal operating high water level of el. 358 ft Plant Datum (PD). Maximum full pool is el. 360.
- Drawdown begins near the end of August or early September and ends in late December near the winter pool level of 350 - 352 ft PD. This allows additional storage capacity in anticipation of the late winter and early spring rainy season.
- At the beginning of January the lake is allowed to refill during the rainy season so it will be at the normal operating high water level of 358 ft. PD by April.
- The plant normally schedules power operations for contingency reserve to meet our obligation to the Virginia/Carolinas Reserve Sharing Group (VACAR), a member of the Southeastern Electric Reliability Council (SERC), which is governed by the North American Electric Reliability Council (NERC). During the fall and in anticipation of heavy rains from a tropical storm or hurricane the plant will generate as necessary to manage the lake level, system reserve, and emergency generation requirements.
- Power generation may be increased to allow SCE&G to meet their obligations of contingency reserve as part of our VACAR agreement with neighboring utilities.

17. Are there changes to Project operations that you would like to see addressed to improve the overall value of the reservoir, and how specifically would such changes benefit recreation?

- What minimum lake elevation will provide recreational benefits during each season of the year?
- Current reservoir level operations balance the multi-purpose use of the reservoir. Maintaining the existing reservoir level fluctuations would allow for continued water level management through daily and weekly power generation operations however recreation would see no additional benefits. Conversely, limiting the seasonal fluctuation may have recreational benefits but other project purposes would be compromised (power generation, water level management, water quality maintenance, and aquatic weed control).

18. Are there seasonal and/or daily variations in reservoir level that can occur without adversely affecting the overall value of the project (including impoundment objectives such as recreation, fish and wildlife, flood control, generation, navigation, etc.)?

- There are not large daily fluctuations at the Saluda Hydroelectric Project.

19. What are the reservoir levels at which recreation problems tend to occur (may be different for different locations or problems)?

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## Recreation Plan Development

DRAFT

- There appears to be a potential impact to recreational resources when the lake level is lower.
- SCE&G already extended boat ramps at several of their public access parks to accommodate a water level down to el. 345 ft PD.

20. When (i.e., what time of year) and how frequently do problems occur related to reservoir levels?

- In general, the operation of Saluda Hydroelectric Project has been consistent throughout the years except for 1990, 1996, 2002 – 2004, and 2006. During those years the lake level was lowered to around el. 345 – 348 ft PD for the following project maintenance requirements:
  - 1990 – Intake towers maintenance
  - 1996 – Hydrilla control as requested by SCDNR
  - 2002 – 2004 – FERC Order for safety during dam remediation project
  - 2006 – Upstream riprap repair
- It will be necessary to lower the lake level to around el. 345 ft PD in the future for maintenance of project structures and installing new recreational access.

21. Why are the current operating water levels important to the operation of the project and the overall system?

- The Saluda Hydroelectric Project is a multi-purpose reservoir. The current operating water levels are critical for the project to meet its required purposes. The changes in water level have many beneficial impacts both upstream and downstream of the dam :
- The project is used to meet our contingency reserve capacity obligation as part of the VACAR agreement. This is for a loss on our own system or by one of our neighboring Reserve Sharing Group utilities.
- Electricity (inexpensive, clean, renewable)
- Electric system ancillary services (transmission line maintenance & overload protection, security resource for VCS Nuclear Statino)
- Navigation support
- Trout fishery
- Downstream water quality and aquatic habitat
- Municipal and industrial water supply

22. Are there state or federal operating requirements that stipulate specific operating goals?

- SCE&G and SCDHEC have an agreement to discharge a minimum flow or 180 cfs from the project.
- Article 12 of the FERC license requires that reservoir levels and discharge from storage be controlled by reasonable rules and regulations of the Commission for the protection of life, health, and property and for other beneficial public uses including recreational purposes.
- Exhibit H of the latest FERC license application identifies the lower lake level to be Elev. 350 during normal flow years and Elev. 345 during low flow years.

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## Recreation Plan Development

DRAFT

- Our McMeekin Generating Station NPDES permit requires a minimum of 2,500 cfs discharge from Saluda prior to discharging the fossil plant circulating water return directly into the Lower Saluda River.

### QUESTIONS REGARDING DOWNSTREAM FLOWS

23. Are there riverine recreation opportunities below the dam? If yes, move to additional questions, if not, stop.

Yes, trout fishing (wading, bank, boat), striper fishing (wading, bank, boat), canoeing/kayaking, tubing, sunbathing/swimming/rock hopping, picnicking, walking/hiking, bicycling, wildlife watching.

24. Do we know how different flow levels affect recreation opportunities and specific recreation activities?

25. Can opportunities be enhanced by modifying releases, and in what way?

26. How would modified releases affect upstream lake levels?

27. How would suggested modified downstream flows affect project operations at the project and at upstream and downstream projects?

28. Are there additional concerns with regard to state and federal requirements or existing ecological issues that limit suggested changes to downstream flows?

29. How binding is the VACAR agreement and when does it expire? (I notice that it is not listed in the state/federal operating requirements in Question 22).

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**Page 2: [1] Inserted** **Bill Marshall** **5/30/2006 10:39 AM**

support creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on north bank of river connecting Saluda Shoals Park to Gardendale Landing and to Riverbanks Zoo; and a park/preserve on the south side of river at Twelve-mile Creek

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**Page 2: [2] Inserted** **Bill Marshall** **5/30/2006 10:39 AM**

(encompassed within LSR Corridor Plan item, above)

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**Page 2: [3] Deleted** **SCANA** **7/21/2006 10:00 AM**

expansion of existing SCE&G and public commercial facilities to accommodate future growth

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**Page 2: [4] Inserted** **Dave Anderson** **5/17/2006 3:37 PM**

SCE&G and public commercial

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**Page 2: [5] Deleted** **SCANA** **7/21/2006 10:01 AM**

A riverfront greenway trail is wanted by the community as expoused by the River Alliance. Assistance by SCE&G will in making this trail a reality will also help by opening up many areas of the river now only reached by boat, or by trespassing. The River Alliance has proposed a trail to extend up the north shore of the Saluda from the Riverbanks Zoo to I26. Continuation of the trail to Saluda Shoals, connecting the Gardendale site and an additional access area between I20 and I26 is also envisioned by the LSRAC and Saluda Shoals. Also, there is no legal access except by boat to the stretch of river upstream of the rapids above Saluda Shoals which should be remedied with a riverfront trail connection if possible, or through seperate access. The trail should parallel the river and not disturb the scenic integrity of the riverbank, but should allow for sufficient viewscapes and even water access by foot, especially to the popular, shallower riffle areas.

consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.

public access with parking and trails on the Lexington (south) side such as the public park at the confluence of 12 Mile Creek and the Saluda River proposed in the Corridor Plan by SC PRT and the SC DNR (Lower Saluda River Advisory Council).

safe recreational opportunities should be available on the Saluda below the lake through daily flow release schedules, and with release rates deemed to be not life threatening through a controlled study using river experts and stakeholders.

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**Page 2: [6] Inserted** **Malcolm Leaphart** **5/30/2006 10:58 AM**

A riverfront greenway trail is wanted by the community as expoused by the River Alliance. Assistance by SCE&G will in making this trail a reality will also help by opening up many areas of the river now only reached by boat, or by trespassing. The River Alliance has proposed a trail to extend up the north shore of the Saluda from the Riverbanks Zoo to I26. Continuation of the trail to Saluda Shoals, connecting the Gardendale site and an additional access area between I20 and I26 is also envisioned

by the LSRAC and Saluda Shoals. Also, there is no legal access except by boat to the stretch of river upstream of the rapids above Saluda Shoals which should be remedied with a riverfront trail connection if possible, or through separate access. The trail should parallel the river and not disturb the scenic integrity of the riverbank, but should allow for sufficient viewsapes and even water access by foot, especially to the popular, shallower riffle areas.

**Page 2: [7] Inserted** **Malcolm Leaphart** **5/30/2006 10:59 AM**

consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.

public access with parking and trails on the Lexington (south) side such as the public park at the confluence of 12 Mile Creek and the Saluda River proposed in the Corridor Plan by SC PRT and the SC DNR (Lower Saluda River Advisory Council).

safe recreational opportunities should be available on the Saluda below the lake through daily flow release schedules, and with release rates deemed to be not life threatening through a controlled study using river experts and stakeholders.

**Page 2: [8] Inserted** **Bill Marshall** **5/30/2006 10:40 AM**  
and to provide wildlife habitat areas

**Page 2: [9] Deleted** **SCANA** **7/21/2006 10:17 AM**

identification of flows needed for the lower Saluda River to support a variety of recreational uses  
creation of scheduled recreation flows for the

**Page 2: [10] Inserted** **Dave Anderson** **5/18/2006 9:57 AM**  
identification of flows needed for the lower Saluda River to support a variety of recreational uses

**Page 2: [11] Deleted** **SCANA** **7/21/2006 10:10 AM**

lower Saluda River  
identification of a reliable lake level that will provide year round access for a majority of lake users

**Page 2: [12] Deleted** **SCANA** **7/21/2006 10:32 AM**

identification and conservation of undeveloped shoreline and adjacent land for recreational use  
management of river flows to improve safety for river users (coordinate with Safety RCG)  
minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)

**Page 2: [13] Inserted** **Dave Anderson** **5/18/2006 9:55 AM**  
identification and conservation of undeveloped shoreline and adjacent land for recreational use

**Page 2: [14] Inserted** **Bill Marshall** **5/30/2006 10:45 AM**  
management of river flows to improve safety for river users (coordinate with Safety RCG)

minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)



## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Monday, May 15, 2006 4:34 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Michalec; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Richard Mikell; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Flach; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebber  
**Subject:** 04-18-06 Final Downstream Flows TWC Meeting Notes

Here are the final meeting notes from the April 18th meeting.



2006-04-18 DFTWC  
Meeting Notes...

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**LAKE MURRAY TRAINING CENTER  
April 18, 2006**

*final dka 05-15-06*

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**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Dave Anderson	Kleinschmidt Associates	Jeni Summerlin	Kleinschmidt Associates
Karen Kustafik	City of Cola. Parks & Rec.	Charlene Coleman	American Whitewater
Patrick Moore	CCL/AR	Tom Eppink	SCANA Services
Bill Marshall	SCDNR & LSSRAC	Mike Waddell	Trout Unlimited

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**HOMEWORK ITEMS:**

- Dave Anderson – contact Kelly Maloney about drafting a flow study on the lower Saluda River

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**                      **TBA**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**LAKE MURRAY TRAINING CENTER  
April 18, 2006**

*final dka 05-15-06*

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

The Downstream Flows Technical Working Committee (TWC) met shortly after the Safety Resource Conservation Group (RCG) meeting to briefly discuss issues concerning flows/users on the lower Saluda River. In the preceding Safety RCG meeting, the Downstream Flows TWC was given the additional responsibility to address not only recreational flow needs but also to address safety issues related to downstream flows.

The group began to look at the user list to examine flows that are suitable for each individual activity. Dave A. pointed out that the DNR recommends a minimum flow of 470 cfs for one-way downstream navigation, and flows of 590 cfs (July – November), 1170 cfs (Jan-April), and 880 cfs (May, June and December) for seasonal aquatic habitat. Dave A. reminded the group that ultimately a schedule of flows and how they are implemented needs to be developed.

As previously stated in the Safety RCG meeting, Patrick M. would like to see a flow study to understand the rate of change of the lower Saluda River at various flows and river reaches. He also suggested coming up with a study that analyzes different flows for various user groups and skill levels that will provide reasonably safer conditions. He noted that an example of safer conditions would be when users feel compelled to get off the river based on the rate of change in the river.

Dave A. mentioned that we may be able to correlate the flow study with the river survey. He suggested adding questions to the lower Saluda River Questionnaire being developed by the Recreation Management TWC, such as “did you feel comfortable on the river today.” He noted that the interviewers would write down the time and date of the interview that could then be correlated to the USGS gage information for that day and time. He added that once the river survey is complete, the results will be presented to the group to determine if a flow study is needed.

There was some further discussion as to how to incorporate a flow study with the river survey. Patrick suggested adding in questions pertaining to skill level and comfort level on the river, the amount of river flow adequate for the user’s activity, and how often they use the river. Ultimately, the group decided to forego adding additional questions to the questionnaire. Bill M. suggested that the TWC needed to consider a study to understand the rate of change in the river under differing hydro release rates to see how rising waters levels can affect the safety of river users. He also suggested that the study could focus on characterizing rivers conditions and associated potential hazards at different flows and under changing/increasing flow conditions.



**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**LAKE MURRAY TRAINING CENTER**

**April 18, 2006**

*final dka 05-15-06*

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The group decided to explore the possibility of designing a study with the goals of: 1) understanding the “rate of change” of the river at various flows at various river reaches; and 2) an analysis of different flows for various user groups and skill levels that provide the safest conditions.

Dave A. noted that he would turn over these issues to Kelly Maloney, an individual with whitewater experience from Kleinschmidt. He added that Kelly will get in touch with everyone about drafting a flow study plan to address these goals.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**LAKE MURRAY TRAINING CENTER  
April 18, 2006**

*final dka 05-15-06*

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**Saluda Hydro Relicensing  
Downstream Flows Technical Working Committee**

**Meeting Agenda**

**April 18, 2006**

**2:30 pm**

**Lake Murray Training Center**

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There was no set agenda for this meeting as it was intended to discuss updates on the Working Document and a request for a flow study on the lower Saluda River.



## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Thursday, May 11, 2006 10:03 PM  
**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 Bebber  
**Subject:** 04-17-06 Draft Rec Management TWC Meeting Notes

We didn't get any comments on these (must be getting better at this), but I wanted to remind everyone these are due to be finalized next Monday.



2006-04-17  
creation Manageme

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**LAKE MURRAY TRAINING CENTER  
April 17, 2006**

*draft jms 04-28-2006*

**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Dave Anderson	Kleinschmidt Associates	Randy Mahan	SCANA Services
Jeni Summerlin	Kleinschmidt Associates	David Hancock	SCE&G
Marty Phillips	Kleinschmidt Associates	Tom Eppink	SCANA Services
Kelly Maloney	Kleinschmidt Associates	Tommy Boozer	SCE&G
Tim Vinson	SCDNR	Patrick Moore	CCL/AR
Bill Marshall	SCDNR & LSSRAC	Steve Bell	Lake Watch
Malcolm Leaphart	Trout Unlimited	Tony Bebber	SCPRT
George Duke	LMHOC		

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**HOMEWORK ITEMS:**

- Dave Anderson – draft a study plan for the analysis of Lake Murray aerial photographs
- Dave Anderson – draft a “straw man” of the Saluda Project Recreation Plan

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:** TBA

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**LAKE MURRAY TRAINING CENTER**

**April 17, 2006**

*draft jms 04-28-2006*

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Shortly after the Recreation Resource Conservation Group (RCG) meeting, the group agreed to proceed with the Recreation Management Technical Working Committee (TWC) meeting. Dave Anderson opened the meeting by discussing the Recreation Assessment Study Plan. Dave A. noted that the purpose of this and other study plans is to address the current recreational needs and accommodate the future use of the Project for recreation. Marty noted that this TWC needs to remember another RCG is presently working on a lake and shoreline management plan. She mentioned that we are also working on a recreation user study and boat density study. She added that the combination of these two studies will be used to obtain the information necessary to address the objectives of the TWC. Marty mentioned that Table 2-1 in the Recreation Assessment Study Plan has not been completely written because some information is not available at this time.

There was a brief discussion about shoreline management and Steve B. asked if we could put together a survey to determine the amount of project lands that should be set aside for the future. Marty replied that we will be able to determine this with the studies that we already have planned and input from the RCG. Steve B. also mentioned that the studies we are focusing on are for formal recreation sites and asked how we can focus on non-formal recreation sites. Patrick noted that Catawba-Wateree had a recreation survey that found most people are involved in non-traditional recreational use. Tony B. noted that Catawba-Wateree conducted their survey through the mail and got a high response.

Steve B. noted that a list of questions should be developed to ask the public what they want to do with the undeveloped shoreline. There was some further discussion about protecting additional shoreline for the future and Dave H. noted that SCE&G's management will decide what to do with the land. The group decided that most people would prefer to set aside additional undeveloped land for recreation and the Recreation RCG, acting as a focus group, would make recommendations to the Lake and Land Management RCG to set aside land for future recreational use.

George mentioned that we need to look at people who are not passionate lake users and find out what they want and how we can make the land more usable to them. The group agreed and Dave A. noted that he will send out a draft "straw man" for the Saluda Project Recreation Plan to spell out the how we will determine future recreational needs of the Project.

Dave A. then focused attention on the Lake Murray questionnaire. The group briefly examined comments made by Tony B. Dave then went over the lower Saluda River questionnaire and the

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**LAKE MURRAY TRAINING CENTER**

**April 17, 2006**

*draft jms 04-28-2006*

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group discussed questions pertaining to sirens on the river. Through some discussion, the group agreed to the changes made pertaining to the siren questions.

Dave A. noted that he would like to draft out the “straw man” before scheduling the next TWC meeting and the group agreed. He added that he would examine the aerial photographs of Lake Murray and would draft a study plan for the boat density analysis.

*MEETING NOTES*

*SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE*

*LAKE MURRAY TRAINING CENTER  
April 17, 2006*

*draft jms 04-28-2006*

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**Saluda Hydro Relicensing  
Recreation Management Technical Working Committee**

**Meeting Agenda**

**April 17, 2006  
2:30 pm  
Lake Murray Training Center**

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There was no set agenda for this meeting as it was intended to finalize comments on the Recreation Assessment Study Plan.



## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Monday, April 10, 2006 4:42 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); James Smith; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Michalec; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; RMAHAN@scana.com; Richard Mikell; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Flach; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebber  
**Subject:** 04-07-06 Draft Rec Management TWC Meeting Notes

Please have any comments/edits back to me by April 24th.



2006-04-07  
creation Manageme

Here are the attachments for the meeting notes:



Public Access Site  
Questionnai...



Public Access Site  
Questionnai...



**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MMANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL  
April 7, 2006**

*draft dka 04-10-06*

**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Tommy Boozer	SCE&G	Steve Bell	Lake Murray Watch
Van Hoffman	SCE&G	Tony Bebbber	SCPRT
David Hancock	SCE&G	Dave Anderson	Kleinschmidt Associates
Kelly Maloney	Kleinschmidt Associates	Marty Phillips	Kleinschmidt Associates
Patrick Moore	AR/CCL	Jennifer Summerlin	Kleinschmidt Associates

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**HOMEWORK ITEMS:**

- Tommy B. – review lease agreements for Dreher Island and Saluda Shoals
- Tim V. – provide group with number and location of regatta permits
- Dave A. – locate and distribute recreation site maps and future recreation properties
- Dave A. – distribute draft study plan
- Dave A. – check with Malcolm about next meeting date

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**

**April 17, 2006 at 2:00 p.m.  
Lake Murray Training Center**

## **MEETING NOTES**

### **SOUTH CAROLINA ELECTRIC & GAS COMPANY SALUDA HYDRO PROJECT RELICENSING RECREATION MMANAGEMENT TECHNICAL WORKING COMMITTEE**

#### **CONFERENCE CALL April 7, 2006**

*draft dka 04-10-06*

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#### **MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Dave A. opened the meeting by mentioning that Tommy B. had provided an updated map of existing recreation sites and future recreation lands and that he would be distributing the map to the group and posting it to the web site. Dave then directed attention to the draft Lake Murray Public Access Site Questionnaire (attached). Someone asked about the time frame the surveys would be conducted. Dave replied that the study is being planned for Memorial Day to September 30<sup>th</sup>. There was some discussion as to how we would collect information from waterfowl hunters, who typically use access areas during the winter. Dave replied that it is being proposed to conduct a focus group with a selective group of waterfowl hunters, where the same type of information would be collected. There was some discussion about whether the on-site surveys should be conducted for an entire year. Dave felt that concentrating effort during the peak recreation season provided the best information for the money expended. Tony thought that missing the March/April timeframe would skew the results towards skiers and boaters. After this discussion, the group agreed to keep the time frame as it currently stands, but to examine the data next fall to see how many anglers were interviewed. If the group decides that there were not enough anglers surveyed during the peak recreation season, the sampling frame could be modified to “pick up” March and April of next year.

The group then examined specific questions on the Lake Murray questionnaire. David H. asked if we could ask a question about off season usage to deal with the sampling frame issue. Dave A. said we could, but the questionnaire is at the maximum length. There was some discussion about the time of day the interviews would take place. Kelly M. replied that the day was defined as 6:00 am to 7:00 pm. The group agreed this was good since anglers typically use the lake during the early morning hours.

Steve B. asked if we could record if the respondent was disabled to get an idea of how many disabled people are using the sites. Marty replied that this could lead to all sorts of problems and she would not feel comfortable with letting the interviewers make this determination.

Steve B. asked about Question 5A and if we could get respondents to specifically locate where they went. Kelly M. replied that we could try it in the pretest. Marty replied that we could break out the lake into smaller segments, as long as the segments lined up with the segments used in the boating density study. Marty also talked about how many on-the-water activities take place over large geographic areas and a dot might not really mean anything. Dave A. mentioned that we could get some of this same information from the aerial photographs, but we would not know where the boats came from. Tony B. thought the individual maps would be most useful. Marty stated that we

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL**

**April 7, 2006**

*draft dka 04-10-06*

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would not be able to correlate group responses to dots on a map. The group agreed to try the individual maps during the pre-test and see if this format works.

Tony B. had a couple of specific suggestions for the questionnaire. He wanted to change "Tent or Vehicle Camping" to "Camping," take out "Hunting" and move "Swimming," "Picknicking," and "Sunbathing" to the top of the list (Question 3). For Question 7D, he thought "Tent Camping" and "RV Camping" should be separate items and the "Bilingual Signs" should be added to the list. Tony also suggested combining Questions 7E and 7F. Marty replied that we need to keep 7E and 7F the way they are to tell the difference between a non-response and a "no."

Kelly M. mentioned that Karen K. had submitted comments about asking if the respondents have alcoholic beverages with them. Tommy replied that we should not consider it. Marty mentioned that this would likely shut off the interview process because of the nature of the question. Steve B. stated that it would gather information about people drinking on the rocks on the LSR. Tommy replied that it is an issue that SCE&G can not do anything about. Steve replied that it is an issue that SCE&G brings up when they discuss the safety issues on the LSR. Dave A. suggested that it is not an issue for this TWC and he thinks we should refer the issue to the Safety RCG.

Dave then focused attention on the Lower Saluda River Public Access Site Questionnaire (attached). He mentioned that it is very similar to the Lake questionnaire, except for a few questions about the sirens on the river. Patrick M. liked the questions on the siren and asked if we could ask about behavior associated with the sirens. Kelly said they could try to develop a question concerning how people typically behave when the sirens go off.

Dave A. asked if the siren questions are applicable at the other sites being sampled on the river (besides the Zoo). The group thought they were. Patrick M. asked where people would be intercepted at the Zoo. Dave replied that they would be intercepted by the west parking lot. Patrick mentioned that there is another access site at the opposite site of the parking lot. Dave agreed that the best way to intercept people would not be determined until the pre-test and site inventories are completed. Dave questioned if the same recreation season would capture most of the use in this area. Patrick thought a lot of use occurred during April and May. The group agreed that they can reexamine this area once the peak recreation results are available to determine if we need to complete more interviews next year.

There was some further discussion about asking about safety issues on the LSR. Tony wondered if we could ask if people have enough time to get off the river. Marty wondered if we just need to observe behavior associated with the sirens. Patrick mentioned this is something he suggested but the logistics were too many to overcome. There was some discussion about other possible questions such as "Did you feel safe on the river today" (which would then be tied to flow

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL**

**April 7, 2006**

*draft dka 04-10-06*

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conditions), or “Did flows impact your experience today.” Dave suggested that Kleinschmidt craft new questions about safety on the LSR and distribute a new questionnaire for review. Dave mentioned that we don’t need to meet face-to-face to take comments, we need to get this done as soon as possible so that we can get the study in place. The group agreed to make electronic comments to the questionnaire after Kleinschmidt distributes it.

Dave directed attention to the remaining agenda items and suggested we postpone the other topics (due to time). Steve B. mentioned that the “Public Lands Open to the Public” did not need to be discussed as long as the group has listing of public access and that these areas would be indicated on classification maps. The group agreed to table this discussion. Steve also asked about remaining issues to be dealt with in this TWC/RCG. Dave pointed him to the “Cataloged Study Request” document available on the web site. Steve expressed his concern that we might be missing some issues. The group agreed to review the “Cataloged Study Request” document and make any comments on other issues to Dave. Dave indicated he would send out the draft study plan after the call and the TWC needed to meet to finalize the plan. The group agreed to meet after the RCG meeting on the 17<sup>th</sup> and would attempt to accommodate Malcolm and meet later in the day. Dave agreed to contact Malcolm before setting the next meeting date.

*MEETING NOTES*

*SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE*

*CONFERENCE CALL  
April 7, 2006*

*draft dka 04-10-06*

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**Saluda Hydro Relicensing  
Recreation Management Technical Working Committee**

**Meeting Agenda**

**April 7, 2006**

**9:30 AM**

**Conference Call**

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- **9:30 to 10:00** Discussion of User Questionnaires
- **10:00 to 10:30** Discussion of “Project Lands Open to the Public”
- **10:30 to 10:45** Identifying Other Issues
- **10:45 to 11:00** Setting Next Meeting Date and Moving Forward



**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL**

**April 7, 2006**

*draft dka 04-10-06*

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**Additional Comments Received**

**Malcolm Leaphart:** Sorry I could not participate in the teleconference call last Friday when I was out of town, and also this morning when I have conflicting meetings at work (between them at this moment in fact...). I suggest a face-to-face session next, and a late afternoon or evening time would be appreciated as morning meetings are difficult to get away from work for.

I am honestly anxious for the TWC to get past the survey preparations and to begin to address key project recreational access issues, especially those for the lower Saluda River. In my absence, I defer to Tony Bebber's expertise and support whatever recommendations he makes in getting the surveys wrapped up. As for the river recreational management issues, I will follow up as soon as I can with a list of those items that need to be discussed. Hopefully that will be helpful as a starting point for discussions of improved access and recreational sites along the lower Saluda. As a lake user, I am also concerned that the recreational and access sites there are inadequate and look forward to participating in discussing those.

**Tony Bebber:** Here's some additional comments on the LSR draft. When looking through it, I realized that we have only asked about the specific site. Don't we want to ask if there are other recreational needs on Lake Murray or Lower Saluda, sort of like 7A on the LSR form? Maybe I'll know for sure after I see the study plan? Will it include a mail or phone survey of area residents (4+ counties)?

**Steve Bell:** I agree with Tony, that while the site surveys will provide some useful information, additional studies and/or information will be needed to address specific stakeholder issues. As I explained at the end of the meeting, we need to review all issues to determine what if any additional studies or info is needed to address stakeholder concerns. The study plan will have to be amended at that time.

**Lake Murray Recreation Study  
Public Access Site Questionnaire**

Clerk: _____	Site: _____	Date: _____	Time: _____ am/pm
Weather: (Check all that apply)	<input type="checkbox"/> Sunny <input type="checkbox"/> Cloudy <input type="checkbox"/> Heavy Rain	<input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Light Rain <input type="checkbox"/> Windy	Record Respondent Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female RESPONDENT REFUSED INTERVIEW: <input type="checkbox"/> RESPONDENT DOES NOT SPEAK ENGLISH: <input type="checkbox"/>

**THE FIRST FEW QUESTIONS ASK ABOUT YOUR EXPERIENCE HERE TODAY**

1. Including yourself, how many people are in your party today? *(Fill in blank.)*  
       \_\_\_\_\_ people in party
  
2. What time did you arrive **at Lake Murray** today? *(Fill in blank.)*  
       \_\_\_\_\_ am / pm
  
3. What is the primary recreation activity that you participated in today **at Lake Murray**?  
*(Read the list to respondents. Check only one main activity in the first column.)*  
 What other activities did you participate in today? *(Check all that apply in the second column. If boating or fishing from a boat are indicated as primary activities, skip to Question 5A.)*

Check only <u>one</u> main activity	Check all other activities	Types of Activities
		<b>FISHING:</b>
<input type="checkbox"/>	<input type="checkbox"/>	boat fishing
<input type="checkbox"/>	<input type="checkbox"/>	pier/dock fishing
<input type="checkbox"/>	<input type="checkbox"/>	bank fishing
		<b>BOATING:</b>
<input type="checkbox"/>	<input type="checkbox"/>	motor boating
<input type="checkbox"/>	<input type="checkbox"/>	pontoon/party boating
<input type="checkbox"/>	<input type="checkbox"/>	water skiing/tubing/other tow
<input type="checkbox"/>	<input type="checkbox"/>	jet skiing
<input type="checkbox"/>	<input type="checkbox"/>	sailing
<input type="checkbox"/>	<input type="checkbox"/>	canoeing/kayaking
<input type="checkbox"/>	<input type="checkbox"/>	windsurfing
		<b>OTHER:</b>
<input type="checkbox"/>	<input type="checkbox"/>	bicycling
<input type="checkbox"/>	<input type="checkbox"/>	tent or vehicle camping
<input type="checkbox"/>	<input type="checkbox"/>	horseback riding
<input type="checkbox"/>	<input type="checkbox"/>	walking/hiking/backpacking
<input type="checkbox"/>	<input type="checkbox"/>	sightseeing
<input type="checkbox"/>	<input type="checkbox"/>	hunting
<input type="checkbox"/>	<input type="checkbox"/>	nature study/wildlife viewing
<input type="checkbox"/>	<input type="checkbox"/>	swimming
<input type="checkbox"/>	<input type="checkbox"/>	picnicking
<input type="checkbox"/>	<input type="checkbox"/>	sunbathing
<input type="checkbox"/>	<input type="checkbox"/>	other: _____
	<input type="checkbox"/>	None





7C. Are there any additional facilities needed **at this recreation site**? (Check one box.)

- YES
- NO (If no, skip to Question 8.)

7D. What do you recommend? (Do not read this list. Allow respondent to answer and check all that apply and/or fill in the blanks.)

<input type="checkbox"/> access road	<input type="checkbox"/> camping area	<input type="checkbox"/> rest rooms
<input type="checkbox"/> bank fishing area	<input type="checkbox"/> fish cleaning station	<input type="checkbox"/> signs & information
<input type="checkbox"/> boat dock	<input type="checkbox"/> fishing pier/dock	<input type="checkbox"/> swimming area
<input type="checkbox"/> boat fueling	<input type="checkbox"/> lighting	<input type="checkbox"/> trails
<input type="checkbox"/> boat launch	<input type="checkbox"/> parking lot	<input type="checkbox"/> trash cans
<input type="checkbox"/> boat pump outs	<input type="checkbox"/> picnic tables/shelter	<input type="checkbox"/> RV camping
<input type="checkbox"/> other (please specify: _____)		

7E. Are there any other improvements that you would recommend for this site? (Check one box.)

- YES
- NO (If no, skip to Question 8.)

7F. What improvements do you recommend? (Fill in the blank.)

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### I HAVE JUST A FEW MORE QUESTIONS

8. Do you own a permanent or seasonal lakefront home or condominium **on Lake Murray**? What is your zip code? (Check one box and fill in the blank for zip code.)

- YES – Permanent Home → ZIP CODE: \_\_\_\_\_
- YES – Seasonal Home → ZIP CODE: \_\_\_\_\_
- NO - Non-lakefront resident → ZIP CODE: \_\_\_\_\_

9. In what year were you born? (Fill in blank.)

\_\_\_\_\_ YEAR

10. Do you have any additional comments about the recreation facilities at **Lake Murray**? (Fill in blank and be as specific as possible.)

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**THANK YOU FOR YOUR HELP! WE APPRECIATE YOUR TIME TODAY!**

**Lower Saluda River Recreation Study  
Public Access Site Questionnaire**

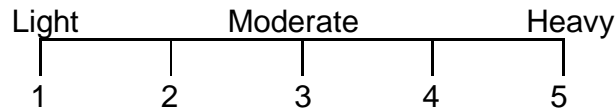
Clerk: _____	Site: _____	Date: _____	Time: _____ am/pm
Weather: <input type="checkbox"/> Sunny	<input type="checkbox"/> Partly Cloudy	Record Respondent Gender: <input type="checkbox"/> Male	<input type="checkbox"/> Female
(Check all that apply) <input type="checkbox"/> Cloudy	<input type="checkbox"/> Light Rain	RESPONDENT REFUSED INTERVIEW: <input type="checkbox"/>	
<input type="checkbox"/> Heavy Rain	<input type="checkbox"/> Windy	RESPONDENT DOES NOT SPEAK ENGLISH: <input type="checkbox"/>	

**THE FIRST FEW QUESTIONS ASK ABOUT YOUR EXPERIENCE HERE TODAY**

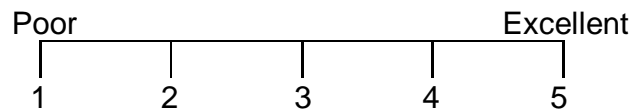
- Including yourself, how many people are in your party today? *(Fill in blank.)*  
\_\_\_\_\_ people in party
- What time did you arrive **at the Lower Saluda River** today? *(Fill in blank.)*  
\_\_\_\_\_ am / pm
- What is the primary recreation activity that you participated in today **at the Lower Saluda River**? *(Read the list to respondents. Check only one main activity in the first column.)*  
What other activities did you participate in today? *(Check all that apply in second column.)*

Check only <u>one</u> main activity	Check all other activities	Types of Activities
		<b>FISHING:</b>
<input type="checkbox"/>	<input type="checkbox"/>	boat fishing
<input type="checkbox"/>	<input type="checkbox"/>	pier/dock fishing
<input type="checkbox"/>	<input type="checkbox"/>	wading fishing
<input type="checkbox"/>	<input type="checkbox"/>	bank fishing
		<b>BOATING:</b>
<input type="checkbox"/>	<input type="checkbox"/>	tubing/floating
<input type="checkbox"/>	<input type="checkbox"/>	flatwater canoeing/kayaking
<input type="checkbox"/>	<input type="checkbox"/>	whitewater canoeing/kayaking
<input type="checkbox"/>	<input type="checkbox"/>	rafting
		<b>OTHER:</b>
<input type="checkbox"/>	<input type="checkbox"/>	bicycling
<input type="checkbox"/>	<input type="checkbox"/>	tent or vehicle camping
<input type="checkbox"/>	<input type="checkbox"/>	horseback riding
<input type="checkbox"/>	<input type="checkbox"/>	walking/hiking/backpacking
<input type="checkbox"/>	<input type="checkbox"/>	sightseeing
<input type="checkbox"/>	<input type="checkbox"/>	hunting
<input type="checkbox"/>	<input type="checkbox"/>	nature study/wildlife viewing
<input type="checkbox"/>	<input type="checkbox"/>	swimming
<input type="checkbox"/>	<input type="checkbox"/>	picnicking
<input type="checkbox"/>	<input type="checkbox"/>	sunbathing
<input type="checkbox"/>	<input type="checkbox"/>	other: _____
	<input type="checkbox"/>	None

4. On a scale from 1 to 5, with 1 being light, 3 being moderate, and 5 being heavy, how would you rate the crowdedness **at this recreation site** today? (Circle one number.)



- 5A. On a scale from 1 to 5, with 1 being poor and 5 being excellent, how would you rate the overall condition **of this recreation site** today? (Circle one number.)



- 6A. Why did you choose to come to this site today? (Fill in the blank.)

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- 7A. Are there any additional facilities needed **at this recreation site**? (Check one box.)

- YES  
 NO (If no, skip to Question 8.)

- 7B. What do you recommend? (Do not read this list. Allow respondent to answer and check all that apply and/or fill in the blank.)

<input type="checkbox"/> access road	<input type="checkbox"/> camping area	<input type="checkbox"/> rest rooms
<input type="checkbox"/> bank fishing area	<input type="checkbox"/> fish cleaning station	<input type="checkbox"/> signs & information
<input type="checkbox"/> boat dock	<input type="checkbox"/> fishing pier/dock	<input type="checkbox"/> swimming area
<input type="checkbox"/> picnic tables/shelter	<input type="checkbox"/> lighting	<input type="checkbox"/> trails
<input type="checkbox"/> boat launch	<input type="checkbox"/> parking lot	<input type="checkbox"/> trash cans
<input type="checkbox"/> other (please specify: _____)		

- 7C. Are there any other improvements that you would recommend for this site? (Check one box.)

- YES  
 NO (If no, skip to Question 8.)

- 7D. What improvements do you recommend? (Fill in the blank.)

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- 8A. Are you aware of the siren on **the Lower Saluda River**? (Check one box.)

- YES  
 NO (If no, skip to Question 9.)

8B. Do you know what the siren is for? *(Check one box.)*

- YES
- NO *(If no, skip to Question 9.)*

8C. What do you think the siren is for? *(Fill in the blank.)*

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**I HAVE JUST A FEW MORE QUESTIONS**

9. Do you own a permanent or seasonal lakefront home or condominium **on Lake Murray**? What is your zip code? *(Check one box and fill in the blank for zip code.)*

- YES – Permanent Home → ZIP CODE: \_\_\_\_\_
- YES – Seasonal Home → ZIP CODE: \_\_\_\_\_
- NO – Non-lakefront resident → ZIP CODE: \_\_\_\_\_

10. In what year were you born? *(Fill in blank.)*

\_\_\_\_\_ YEAR

11. Do you have any additional comments about the recreation facilities at **the Lower Saluda River**? *(Fill in blank and be as specific as possible.)*

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**THANK YOU FOR YOUR HELP! WE APPRECIATE YOUR TIME TODAY!**

## Danielle Fitzpatrick

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**From:** Malcolm Leaphart [malcolml@mailbox.sc.edu]  
**Sent:** Tuesday, April 11, 2006 9:21 AM  
**To:** Dave Anderson  
**Cc:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (jpitts@scprt.com); James Smith; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Michalec; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Richard Mikell; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Flach; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebber  
**Subject:** Re: 04-07-06 Draft Rec Management TWC Meeting Notes

Dave, Please clarify for me how we are going to identify NEW recreation sites since neither of the questionnaires ask those surveyed 'if' and 'where' they would like to see some on the river and the lake? This is of course a key issue for the Rec RCG and committtees and I want to make sure that we do fail to address it... Thanks.

Quoting Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>:

> Please have any comments/edits back to me by April 24th.  
>  
> <<2006-04-07 Recreation Management TWC Meeting Notes (DRAFT).doc>>  
>  
> Here are the attachments for the meeting notes:  
>  
> <<Public Access Site Questionnaire LSR (04-03-06).doc>> <<Public  
> Access Site Questionnaire (04-03-06).doc>>  
>

## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Tuesday, April 11, 2006 4:55 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); James Smith; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Michalec; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; RMAHAN@scana.com; Richard Mikell; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Flach; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebber  
**Cc:** Cheryl Balitz  
**Subject:** 03-24-06 Recreation Management TWC Final Meeting Notes

Here are the final meeting notes from the Rec Management TWC March 24th conference call.



2006-03-24  
creation Manageme

Cheryl, can you post these to this page: <http://www.saludahydrorelicense.com/recreation.htm>

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL  
March 24, 2006**

*draft dka 03-28-06*

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**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Malcolm Leaphart	Trout Unlimited	Tim Vinson	SCDNR
Tommy Boozer	SCE&G	Steve Bell	Lake Murray Watch
Van Hoffman	SCE&G	Tony Bebbler	SCPRT
David Hancock	SCE&G	Dave Anderson	Kleinschmidt Associates
Lee Barber	LMA	Marty Phillips	Kleinschmidt Associates
Kelly Maloney	Kleinschmidt Associates	George Duke	LMHC
Patrick Moore	AR/CCL		

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**HOMEWORK ITEMS:**

- Tommy B. – review lease agreements for Dreher Island and Saluda Shoals
- Tim V. – provide group with number and location of regatta permits and regatta form
- Dave A. – email Malcolm recreation site spreadsheets
- Dave A. – locate and distribute recreation site maps and future recreation properties
- Dave A. – distribute revised lake questionnaire and river questionnaire
- Dave A. – distribute draft study plan

**PARKING LOT ITEMS:**

- Discussion of project lands open to the public

**DATE OF NEXT MEETING:**

**April 7, 2006 at 9:30 a.m.  
Conference Call**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL  
March 24, 2006**

*draft dka 03-28-06*

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Dave A. opened the meeting by conducting a “roll call” to see who was on the conference call. After establishing who was on the call, Dave introduced Marty and Kelly, who are helping write the study plan for estimating use at SCE&G owned recreation sites. After the introductions, Dave pointed the group to the draft inventory form (attached) he sent for final review. There were very few comments on the form and Dave will finalize the form for inclusion in the study plan. George D. asked if the inventory will include commercial sites. Someone replied that the group had agreed to not include the commercial sites in the inventory, but we will retain the information we have already collected on these commercial sites.

Malcolm commented that we need to list out the objectives of the TWC and asked about the purpose of the surveys being proposed. The group agreed this would be a useful exercise. Steve B. agreed that we need to review the issues that are supposed to be dealt with in the TWC and make sure we have not forgotten anything. The group discussed when this could take place and agreed it is something they could do before or after the next RCG meeting on April 17.

Malcolm asked about the sites where we are conducting the inventory. Tommy explained that they had passed out a spreadsheet with SCE&G Public Sites, Public Landings and Marinas, and Private Marinas listed on them. Malcolm had not received a copy of that and requested a copy. Dave will send him the spreadsheet. Malcolm also asked about designated future sites and how he could find out where these are located. Someone pointed out that Tommy B. had brought these to a previous meeting. Malcolm requested a copy of these maps; Dave agreed to locate better copies and distribute them.

Dave A. introduced the second version of the user questionnaire, pointing out that the questionnaire has been changed to be more conducive to an interview type format. Dave told the group that he had received comments on the previous version from SCPRT and SCE&G. The current questionnaire (attached) takes into account these comments, but also is much shorter to accommodate user interviews. Dave also noted that there will be two versions of the questionnaire—for the lake and river. The version the group discussed is for the lake; a version for the river will be distributed next week. The group then proceeded to go over the questionnaire.

There were no comments on the first two questions—these are necessary for estimating use. The group talked about why Question Three had gone from listing all activities (along with primary activity) to just listing the primary activity. Someone commented that not asking about all activities



**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL  
March 24, 2006**

*draft dka 03-28-06*

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was for time consideration and did not provide useful information for management of the recreation sites. The group then discussed the benefits of knowing all activities participated in, including recognizing there are “secondary” activities that take place. The group agreed to reword the question to include responses for additional activities. The group also agreed to take out “stream fishing” from the list since the questionnaire is dealing with lake users.

There was some discussion on Question 5A. Tommy and David H. want to keep the question in, but the group decided that asking about mileage on the water would lead to bad information. The group decided to explore using a handout for respondents to point to their boating destination. Someone also mentioned it would be nice to know motivations for going to specific places on the lake (i.e., less crowded). The group agreed to consider this, but Dave is not willing to add additional questions in consideration of the interview length. Once a final version of the questionnaire is available, the group can decide if knowing these motivations is more important than any of the questions on the questionnaire. There was also some discussion on asking about how far people traveled to get to a particular recreation site. Someone mentioned that we are asking for ZIP codes and could estimate distance with that information. Someone also mentioned that we could add “Location” to Question 6B to gauge whether there were any problem with the location of the sites. There was also some discussion on Question 5B; someone mentioned that responses to that are very subjective. Kelly M. acknowledged that it is subjective, but this question is necessary for dealing with issues of boat densities.

There was considerable discussion on Question 6B. Tommy and David H. had suggested this question be removed. They felt that one bad experience with a dirty restroom (when several people before that had experienced a clean restroom) could skew the results. The group agreed that this is useful information to have when considering site expansion or new facilities. The group decided to look at this question again, perhaps rewording it to an open-ended format (e.g., What additional amenities are needed at this site? What is your favorite part about this site? What is your least favorite part?). There was also some discussion on turning Question 7B into an open-ended question.

There were a few comments on Questions 8-12. Someone suggested asking for ZIP codes for both the permanent home and the seasonal home; the group agreed this would be better than the current version. We also need to look at changing this question to say “waterfront” or something like that. Someone also suggested adding “about this recreation facility” to the end of Question 11. There was some discussion about recording race of the respondent. Dave commented that he could not trust an interviewer to accurately record race without asking the question. The group talked about adding questions on race, which we will explore. Someone commented that we may need bilingual signs at the facilities; other comments talked about having bilingual interviewers because of the large Hispanic population. There was also some discussion about providing incentives for

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL  
March 24, 2006**

*draft dka 03-28-06*

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completing the survey; Marty agreed to look at how much something like this would cost—specifically cold water bottles. Marty commented that incentives work in other types of surveys but she was not aware of any research using incentives for interviews.

The group then discussed the schedule for the study. Dave told the group that considering everything we have to accomplish before the survey starts (inventory, pre-test, training) that is impossible to start on April 1. He proposed that we conduct the interviews and counts from Memorial Day to Labor Day to capture peak recreation use. Someone commented that the recreation season is defined as April 1 to late September. Someone mentioned that peak fishing times are in March, April, and the fall months and that waterfowl hunting takes place in the winter. The group was concerned that we will miss these activities if we just survey the summer months. When revising the study plan, Kleinschmidt will consider how we could address some of the off season activities.

Dave told everyone that they will be getting a revised draft lake questionnaire, a draft river questionnaire, and a draft study plan the following week. The group set April 7, 2006 at 9:30 am for their next meeting.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL**

**March 24, 2006**

*draft dka 03-28-06*

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**Saluda Hydro Relicensing  
Recreation Management Technical Working Committee**

**Meeting Agenda**

**March 24, 2006**

**9:30 AM**

**Conference Call**

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- **9:30 to 10:00** Review and Finalize SCE&G Public Site Inventory Form
- **10:00 to 10:30** Review Public Access Site Questionnaire
- **10:30 to 11:00** Discussion of Recreation Site Assessment Schedule
- **11:00 to 11:15** Schedule Next Meeting and Moving Forward



**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION MANAGEMENT TECHNICAL WORKING COMMITTEE**

**CONFERENCE CALL  
March 24, 2006**

*draft dka 03-28-06*

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**Additional Comments Received**

**Patrick Moore:** I listened in on my first rec management TWC this morning and was surprised to hear we are not dealing with Mill Race.

Doesn't SCE&G own the access areas? While it may be outside the project boundary and thus outside our inventory and rec user study, project impacts are present and at their most dangerous to users at Mill Race. This more than a safety issue, it is a rec issue and we should be able to report to the rec RCG on user demographics. How do ya'll plan to address this within recreation RCG? This is ongoing recreation on SCE&G land that is impacted by the project. It seems like we need to address it considering it is where such a large portion of the rec on the LSR takes place.

**Karen Kustafik:** I am curious about how locations will be selected for the survey, because many of those activities are location dependent.

I assume both official and unofficial access sites will be surveyed? Tony--is this your effort? I had to depart yesterday's meeting and meant to catch up with you when we resumed after break. Was there further discussion about the survey, and possible integration of safety concerns?

It may be informative to note whether the participant had alcoholic beverages with them. Randy mentioned the possibility of pushing for legislative change re PFDs, and data collected on the percentage of river users using PFDs may be useful to make that case.

## SCE&G Public Site Inventory Form

Inspected by: \_\_\_\_\_

Date: \_\_\_\_\_

Site Name: \_\_\_\_\_

Site Code: \_\_\_\_\_

Site Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

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**Facility Type:**

\_\_\_\_ Primitive Camp

\_\_\_\_ Picnic Area

\_\_\_\_ Day Use

\_\_\_\_ Overlook Site

\_\_\_\_ Informal Site

\_\_\_\_ Launch Ramp

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**Road Access:**

\_\_\_\_ Paved access..... # of lanes

\_\_\_\_ Unpaved access..... # of lanes

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**Operations:**

\_\_\_\_ Manned

\_\_\_\_ Seasonal (From \_\_\_\_ To \_\_\_\_)

\_\_\_\_ Unmanned

\_\_\_\_ Year Round

\_\_\_\_ Fee (\$)..... (Site \_\_\_\_; Parking; \_\_\_\_)

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**Site Amenities:**

#	Type	#	Type
____	Picnic Tables	____	Potable Water
____	Grills	____	Boat Fuel
____	Firepit/ring	____	Trash Cans
____	Boat Pump Out	____	Docks
____	Trails (specify use _____: Miles _____)	____	Playground
____	Shelter	____	Showers
____	Designated Swim Area	____	Concession
____	Store	____	Marina (# of slips _____)
____	Dumping Station		

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**Parking Lots:**

Type	Estimated # Paved	Estimated # Gravel	
ADA Spaces	_____	_____	_____ Spaces delineated?
Regular Spaces	_____	_____	_____ Curbs?
Vehicle & trailer spaces	_____	_____	

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**Sanitation Facilities:**

	Flush	(ADA?)	Portable	(ADA?)	Showers	(ADA?)
Unisex	_____	(____)	_____	(____)	_____	(____)
Women	_____	(____)	_____	(____)	_____	(____)
Men	_____	(____)	_____	(____)	_____	(____)

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**Campground/Campsite:**

	RV sites	Cabins	Tent sites	Primitive sites
# of sites	_____	_____	_____	_____
On site parking	_____	_____	_____	_____
Water front	_____	_____	_____	_____
ADA compliant	_____	_____	_____	_____

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**Boat Launch Facilities:**

_____ Hard surface	_____ Unimproved	_____ # of Lanes
_____ Gravel	_____ Carry In	_____ Boat Prep Area?

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**Courtesy/Fishing Docks:**

Courtesy/Fishing	Dimensions	ADA Compliant
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

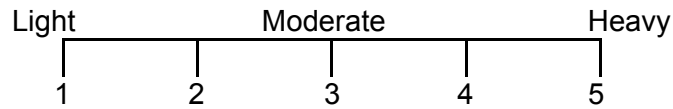
Picture Number From \_\_\_\_\_ To \_\_\_\_\_

DRAFT

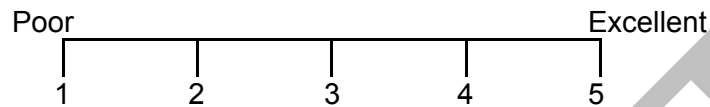




5C. On a scale from 1 to 5, with 1 being light, 3 being moderate, and 5 being heavy, how would you rate the crowdedness **at this recreation site** you are at today? *(Please circle one number.)*



6A. On a scale from 1 to 5, with 1 being poor and 5 being excellent, how would you rate the overall condition **at this recreation site** today? *(Please circle one number.)*



6B. Using the same scale, with 1 being poor and 5 being excellent, please rate the condition of the facilities **at this recreation site** today. *(Please circle all that apply. If a facility is not available at this site, please indicate whether or not it is needed.)*

	Poor					Excellent					Is Facility Needed at this Site?	
	1	2	3	4	5	1	2	3	4	5	Yes	No
restrooms	1	2	3	4	5	1	2	3	4	5	Yes	No
swimming area	1	2	3	4	5	1	2	3	4	5	Yes	No
fishing pier/dock	1	2	3	4	5	1	2	3	4	5	Yes	No
picnic tables/shelter	1	2	3	4	5	1	2	3	4	5	Yes	No
trash cans	1	2	3	4	5	1	2	3	4	5	Yes	No
boat launch	1	2	3	4	5	1	2	3	4	5	Yes	No
boat dock	1	2	3	4	5	1	2	3	4	5	Yes	No
camping area	1	2	3	4	5	1	2	3	4	5	Yes	No
signs	1	2	3	4	5	1	2	3	4	5	Yes	No
lighting	1	2	3	4	5	1	2	3	4	5	Yes	No
fish cleaning station	1	2	3	4	5	1	2	3	4	5	Yes	No
access road	1	2	3	4	5	1	2	3	4	5	Yes	No
parking lot	1	2	3	4	5	1	2	3	4	5	Yes	No
lighting	1	2	3	4	5	1	2	3	4	5	Yes	No
boat fueling	1	2	3	4	5	1	2	3	4	5	Yes	No
pump outs	1	2	3	4	5	1	2	3	4	5	Yes	No
trails	1	2	3	4	5	1	2	3	4	5	Yes	No

7A. Are there any additional facilities or improvements needed at this recreation site? *(Please fill in the blank.)*

- YES  
 NO *(If no, skip to Question 8.)*

7B. Please indicate which additional improvements are needed at the particular recreation site you are at today. *(Please check all that apply.)*

- |   |  |
|---|--|
| <input type="checkbox"/> better access road                             | <input type="checkbox"/> better lake access at low water   |
| <input type="checkbox"/> paving/grading of parking area                 | <input type="checkbox"/> navigation aids   |
| <input type="checkbox"/> paving/grading of access road                  | <input type="checkbox"/> better maintenance <i>(emptying trash cans, cleaning restrooms, etc.)</i> |
| <input type="checkbox"/> increased security/patrolling                  | <input type="checkbox"/> ADA compliant facilities  |
| <input type="checkbox"/> other – <i>(please describe</i> _____ <i>)</i> |  |

**WE'D LIKE TO LEARN A LITTLE BIT ABOUT YOU:**

8. Do you own a permanent or seasonal home on Lake Murray? *(Please check one box.)*

- YES – Permanent Home
- YES – Seasonal Home
- NO

9. What is your zip code? If you are a seasonal resident, please provide the zip code of your seasonal home. *(Please fill in the blank.)*

\_\_\_\_\_ ZIP CODE

10. In what year were you born? *(Please fill in blank.)*

\_\_\_\_\_ YEAR

11. Do you have any additional comments? Please be as specific as possible.

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**Thank you for your help with this important study! We appreciate your time today.**

12. *Please record gender of respondent. (Please check one box.)*

- MALE
- FEMALE

## Danielle Fitzpatrick

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**From:** Tony Bebber [tbebber@scprt.com]  
**Sent:** Saturday, April 08, 2006 12:56 AM  
**To:** Dave Anderson; Van Hoffman; David Hancock; Dick Christie; George Duke; Jennifer Summerlin; Kelly Maloney; Lee Barber; Malcolm Leaphart; Marty Phillips; Patrick Moore; Steve Bell; Tim Vinson; Tommy Boozer  
**Cc:** Alan Stuart; Tony Bebber  
**Subject:** RE: Draft Saluda Recreation Site Assessment Study Plan



001-Saluda  
recreation Site Ass..

I've reviewed this briefly and look forward to the additional study plan(s) Dave mentioned. My comments are included in "track changes" mode. See you in a week.

Tony B

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**From:** Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]  
**Sent:** Fri 4/7/2006 11:18 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 Bebber  
**Cc:** Alan Stuart  
**Subject:** Draft Saluda Recreation Site Assessment Study Plan

I talked to Alan and have reviewed the Operating Procedures, and we both felt that it is not necessary to send out the draft study plan to the entire Recreation RCG at this point. The purpose of the TWCs is to represent respective technical expertise to formulate study plans to address the issues talked about in the RCGs. While I am not sending the draft out to the entire RCG, if you wish to get comments on an individual basis from other RCG members, that is up to you, but I will only be taking comments on the draft from TWC members.

So that everyone has a complete copy of the study plan, I am including the appendices in this email.

Here is the draft study plan:

<<001-Saluda Recreation Site Assessment Study Plan (04-04-06).doc>>

Appendix A:

<<SCE&G Public Site Inventory Form (03-28-06).doc>>

Appendix B:

<<Public Access Site Questionnaire LSR (04-03-06).doc>> <<Public Access Site Questionnaire (04-03-06).doc>>

In the interest of time, please try to provide e-mail comments to me by the end of next week and then we can finalize the study plan at our face to face meeting the week of the 17th.

# SOUTH CAROLINA ELECTRIC & GAS COMPANY

## RECREATION ASSESSMENT STUDY PLAN

DRAFT

SALUDA PROJECT  
(FERC NO. 516)

*MARCH 31, 2006*

Prepared by:

***Kleinschmidt***  
*Energy & Water Resource Consultants*

SOUTH CAROLINA ELECTRIC & GAS COMPANY

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**RECREATION ASSESSMENT STUDY PLAN**

**SALUDA PROJECT  
(FERC NO. 516)**

**DRAFT**

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**SOUTH CAROLINA ELECTRIC & GAS COMPANY**

**RECREATION ASSESSMENT STUDY PLAN**

**SALUDA PROJECT  
(FERC NO. 516)**

**DRAFT**

**1.0 PURPOSE OF THE STUDY**

South Carolina Electric & Gas (SCE&G) has requested an assessment of existing and future recreational use, opportunities, and needs for the Saluda Project. The assessment is designed to provide information pertinent to the current and future availability and adequacy of recreation sites at Lake Murray and the Lower Saluda River. This study plan is a portion of the overall recreation study plan and serves to identify the recreational use, opportunities, and existing needs of the Project by addressing the following goals and objectives:

***Goal 1:** Characterize existing recreational use of SCE&G's recreation sites on Lake Murray and the Lower Saluda River. This will be accomplished by meeting the following objectives:*

- i. Identify recreation points, inventory the services and facilities offered at each, and assess the general condition of each site (including American with Disabilities Act [ADA] compliance).
- ii. Identify the patterns of use at each site (type, volume, and daily patterns of use).

***Goal 2:** Identify future recreational needs relating to existing public recreation sites on Lake Murray and the Lower Saluda River.\* This will be accomplished by meeting the following objectives:*

- i. Estimate future recreational use of recreation sites.
- ii. Identify user needs and preferences, including perceptions of crowding at recreation sites.

\* Another study plan will assess future recreation needs regarding additional sites on Lake Murray or the Lower Saluda River.

## 2.0 DATA COLLECTION

A combination of data collection efforts will be used to obtain the information necessary to address the study objectives. Table 2-1 identifies the information needed to address each objective and the data collection method that will be used. Both primary and secondary data will be required. Primary data will entail site inventories and assessments, counts of recreation site users, and user surveys. Secondary data will include US Bureau of Census data, the South Carolina Statewide Comprehensive Outdoor Recreation Plan (SCORP), and other relevant literature.

**Comment:** If you are considering all future recreation needs (not just existing sites), you will want to include the Lower Saluda River Corridor Plan and Update, and possibly the State Trails Plan.



**Table 2-1. Recreation Study Plan Objectives and Efforts**

Objectives	Information Needed	Source
<i>Goal 1: Characterize existing recreational use of recreation sites on Lake Murray and the Lower Saluda River</i>		
Identify recreation points, inventory the services and facilities offered at each, and assess the general condition and ADA compliance of each site	<ul style="list-style-type: none"> <li>• Physical inventory of all boat ramps, grills, shelters, restrooms, parking capacity, etc., at each site</li> <li>• General assessment of site condition to include maintenance, basic rehabilitation needs, etc.</li> <li>• Visitors assessment of site conditions</li> <li>• Identification of activities that occur at each site</li> <li>• ADA compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Recreation Site Inventory</li> <li>• Survey of Recreation Site Users</li> </ul>
Identify the patterns of use at each site (type, volume, and daily patterns of use)	<ul style="list-style-type: none"> <li>• Use vehicle counts as proxy for people</li> <li>• Estimate of # people/vehicle</li> <li>• Estimate of # vehicles/site</li> <li>• Parking capacity</li> <li>• Visitation records for Billy Dreher State Park</li> <li>• regatta permit records for Lake Murray</li> </ul>	<ul style="list-style-type: none"> <li>• Counts of Vehicles at Recreation Sites</li> <li>• Survey of Recreation Site Users - # of people per vehicle and length of visit</li> <li>• Recreation Site Inventory - # of parking spaces</li> <li>• South Carolina Parks, Recreation and Tourism (SCPRT)</li> <li>• South Carolina Department of Natural Resources (SCDNR)</li> </ul>
<i>Goal 2: Identify future recreational needs relating to public recreation sites on Lake Murray and the Lower Saluda River</i>		
Estimate future recreational use of recreation sites	<ul style="list-style-type: none"> <li>• Current inventory and use data from Goal 1</li> <li>• Population projections for the project area</li> <li>• Recreational use trends</li> </ul>	<ul style="list-style-type: none"> <li>• Results of Goal 1</li> <li>• US Bureau of Census Data</li> <li>• SCORP or other literature</li> <li>• <u>Lower Saluda Corridor Plan/Update</u></li> </ul>
Identify user needs and preferences, including perceptions of crowding at recreation sites	<ul style="list-style-type: none"> <li>• User preferences on opinions of needs and crowding at sites</li> <li>• Condition assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Survey of Recreation Site Users</li> <li>• Recreation Site Inventory</li> </ul>

**Comment:** Specify if you will survey public designated and informal/impromptu sites.

**Comment:** And SC Div of Research & Statistics (Budget and Control Board)

**Formatted:** Bullets and Numbering

\*Note: Another study plan will assess future recreation needs regarding additional sites on Lake Murray or the Lower Saluda River.

SCE&G recreation sites on Lake Murray and the Lower Saluda River that will be included in this assessment include:

**Table 2-2. Recreation Sites to be Assessed**

<b>Lake Murray Recreation Sites (Site Number)</b>	<b>Lower Saluda River Recreation Sites (Site Number)</b>
1. Parksite (1-1)	1. Gardendale (Saluda River Canoe Portage) (1-15)
2. Shull Island/Larry Koon (1-2)	2. Mett's Landing (1-10)
3. Shull Island (1-2b)	3. Saluda Shoals Park (1-9)
4. Murray Shores (1-3)	4. Mill Race
5. River Bend (1-4)	
6. Sunset (1-5)	
7. Rock Creek (1-6)	
8. Hilton (1-7)	
9. Dam (1-8)	
10. Billy Dreher State Park (1-11)	
11. Macedonia Church (1-12)	
12. Higgins Bridge (1-13)	
13. Kempson Bridge (1-14)	
14. Bundrick Island (1-21)	
15. Lake Murray Estates Park (1-22)	

The capacity, availability, and overall condition of existing recreation sites will be assessed through review of existing information and an on-site inventory (Section 2.1). Recreational use of SCE&G's public recreation sites (Table 2-2) during the peak recreation season<sup>1</sup> will be estimated using a combination of data including: vehicle counts, state park visitation records, counts of boaters (in one instance), and survey data, as described in Section 2.2 and 2.3. The survey effort is explained in Section 2.4. Methods for estimating recreational use are described in Section 3.0.

### 2.1 Recreation Site Inventory

Data on the types of activities supported, the parking capacity of recreation sites at the Saluda Project, and the land area each site encompasses will be obtained from two sources. First, existing information regarding recreation sites such as input from managing entities and existing GIS data layers will be referenced. Second, a site visit

<sup>1</sup> The peak recreation season for the Saluda Project is defined as April 1 through September 30. Use at recreation sites will be monitored from Memorial Day through September 30, 2006. Use that occurs during April and May will be estimated separately.

will be made to collect data on the type, number, and size of facilities (bathhouses/restrooms, parking areas, boat ramps, picnic shelters and tables, etc.) located at each site. The general condition of recreation facilities and a qualitative assessment of each site's compliance with the ADA will also be recorded. A copy of the inventory form is provided in Appendix A.

Upon completion of the inventory, all data will be uploaded into a GIS database. The database will be structured so that it can be used in a variety of formats (brochure, maps, web pages, etc.) and can be updated as recreation sites are modified, added, or changed in any way.

## 2.2 Vehicle Counts

Counts of vehicles will be conducted at 15 sites on Lake Murray and four sites on the Lower Saluda River on a stratified random sample of 30 recreation days<sup>2</sup> throughout the study period (Memorial Day to September 30). The sample of counts will be stratified by month and day type (week days, weekends, and holidays). It is assumed that most recreation activity occurs on weekend days and holidays. Because of this, the weekends and holidays are sampled at a higher rate than week days in order to focus data collection efforts on time periods when people are most likely to be at the Project. Days will be divided into morning and afternoon periods to accommodate the 8 hour work day. Morning and afternoon periods will be sampled with equal probability.

A survey clerk will physically count the number of vehicles entering the park, the number of people within each vehicle (if possible), and whether or not there is a trailer associated with each vehicle. Vehicles will also be recorded as they exit each site. Sample dates at each site will occur on 3 holidays, 13 weekday and 14 weekend days.

## 2.3 Additional Use Data Collection Efforts

Vehicle counts will be used for all Lake Murray and Lower Saluda recreation sites with two exceptions, Billy Dreher State Park and Bundrick Island. Visitation records for Billy Dreher State Park will be obtained from the South Carolina Department

**Comment:** Should be listed as Dreher Island State Park (or State Recreation Area) throughout the document.

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<sup>2</sup> The recreation day was defined as 6:30 am to 7:30 pm for each day type (weekday, weekend, and holiday).

of Parks, Recreation and Tourism (SCPRT), the managing entity. Billy Dreher State Park is the only SCE&G recreation site that offers camping. Estimates of camping use at the park will be obtained from SCPRT.

Bundrick Island is a popular beach area used informally by boaters. There is no vehicular access for the public at this time. This site will be included in the monitoring effort, however, the information collected will pertain to the number of boats pulled up on the beach, the number of people per boat, etc.

**Comment:** and interviews?

It is anticipated that information regarding South Carolina Department of Natural Resources' (SCDNR) boating event permits, which identify all boating events involving greater than 20 boats, will be available for use during this assessment. These permits will identify which, if any, of SCE&G's public recreation sites are commonly used as launching points for boating events on Lake Murray.

#### 2.4 Recreation Site Survey

The preferences and perceptions of people using SCE&G's recreation sites are important inputs in management decisions regarding the adequacy and availability of existing recreation sites. Information from recreation site users will be obtained via an onsite survey during the recreation season (Memorial Day through September 30) which will be implemented concurrently during vehicle counts.

Exit surveys will be administered to collect user characteristics (origin, gender, age, group size, etc.), the type of land-based and water-based recreation activities individuals are participating in, length of stay, perceptions of crowdedness, and conditions of recreation sites at the Project. The data collected will be used to provide a general picture of recreation use patterns, assist in the development of recreation use estimates at access sites, provide a social carrying capacity input for the assessment of capacity at recreation sites, assist in the evaluation of existing conditions at Project recreation sites, and identify existing and potential future recreation facilities needs. The survey will be pre-tested in the field prior to implementation and revisions will be incorporated as necessary. Two survey versions will be implemented – one for Lake

Murray and one for the Lower Saluda River. Draft questionnaires are provided in Appendix B.

Recreation site surveys will be administered concurrently with vehicle counts. Surveys will be administered in either randomly designated AM or PM sample period while counts at site entrances are ongoing.

All survey clerks will be trained as a means of quality control. Survey clerks will be provided with detailed information on the study schedule, appropriate materials to aid in data collection, and direction on appropriate interviewing techniques and attire. Interviewers will also be provided with coolers of bottled water, which will be used as an incentive for survey respondents to complete the survey. The survey will be implemented in English.

## 2.5 Additional User Data Collection Efforts

Waterfowl hunting typically occurs during the fall and winter months. Waterfowl hunters represent a unique group of users whose preferences and perceptions may differ from those using recreation sites during the summer months. The preferences and perceptions of waterfowl hunters will be identified through use of an expert panel of waterfowl hunters.

Kleinschmidt will work with the Recreation Management Technical Working Group to identify waterfowl hunters who use Lake Murray to serve as an expert panel and speak for all waterfowl hunters using the lake. Approximately 7 to 10 hunters will be invited to participate in a group meeting, similar to a focus group, to identify the opportunities and needs of waterfowl hunters using SCE&G recreation sites. The information collected will be similar to that of the access site survey. Kleinschmidt will recruit the hunters, develop a meeting format and materials, and will conduct the meeting. It is anticipated that the meeting will occur in late fall or early winter, during waterfowl hunting season.

**Comment:** Waterfowl season is split and runs through late January – check SCDNR regs.

### 3.0 ANALYSIS

The following sections provide a description of the approach for estimating existing and future recreational use, recreation site capacity and use density percentages, and recreation needs.

#### 3.1 Current Recreation Use Estimates

The weekday, weekend, and holiday average recreation days will be calculated for each Lake Murray and Lower Saluda River recreation site utilizing the vehicle counts and recreation site survey data. The average number of people at each site within the morning and afternoon periods will be estimated within each day type and converted to a daily estimate. Daily estimates for each day type will be expanded to represent the study period (Memorial Day through September 30<sup>th</sup>) and summed for a total estimate for each recreation site. Total estimated use of Billy Dreher State Park will be obtained directly from park visitation records.

Because vehicle counts during April and May are not scheduled, it is necessary to estimate the use occurring at SCE&G's recreation sites during those months in a different manner. The percent of use that occurs at Billy Dreher State Park during April and May from the entire season (April through September) will be used as a proxy to estimate the volume of use occurring at other recreation sites during April and May. For example, if Billy Dreher State Park records show that there are 100 visitors from April through September, and 20 percent of those visitors were recorded during April and May, then it will be assumed that all parks receive approximately 20 percent of total visitation during those months.

**Comment:** You'll need to know more about types of visitors. April is a huge fishing month, compared to July- Aug which are mostly boaters/skiers.

#### 3.2 Future Recreation Use Estimates

Estimated projections of future recreation use at Lake Murray and the Lower Saluda River will be developed using the average annual increase in population growth over the past 10 years, as reported by the Census Bureau, for counties surrounding the Project. The estimates will be augmented with discussion of trends reported in the SCORP (2002). Estimated projections will be provided for 5 year intervals to the term of the license, 50 years into the future (up to year 2060).

**Comment:** You'll want to use the latest figures from the SC Rec. Participation & Preference Study (2005) from USC (available real soon).

**Comment:** Coordinate with data from State Div. of Research & Statistics.

While it is acknowledged that future changes in the supply of recreation resources, either in their quantity, accessibility, and/or quality may influence future demand and use, the demand analysis undertaken for this study does not attempt to speculate on what these future changes might consist of or how they might specifically affect levels of use at Project facilities. Therefore, the demand analysis results should be viewed as a general guide of potential future recreation pressure developed for planning purposes only.

### 3.3 Recreation Site Capacity

For purposes of this study, the carrying capacity for a recreation site is defined as the number of vehicles and boat trailers that are able to be parked at a recreation site at one time, based on the number of available parking spaces associated with each site. For paved formal parking areas, this will be achieved by counting the number of designated parking spaces available at the recreation site. For informal, gravel parking areas, the number of available parking spaces for each recreation site will be estimated by measuring the area (in sq ft) available for parking and estimating the number of vehicles that could be parked at the location, if optimal space was utilized. These estimates will be based on parking capacity standards for vehicle length, width, and available turn around space.

### 3.4 Recreation Site Use Density

The average use density of recreation sites will be estimated by comparing the average observed number of vehicles at the sites on sampled weekday, weekend, and holiday days with the available parking capacity for each recreation site. The average observed number of vehicles divided by the parking capacity will provide an estimated use density for each site.

**Comment:** I'm not sure if Dreher Island keep data that way.

### 3.5 Recreation Needs Assessment

The need for recreation and site development or modification of existing recreation resources will be assessed based on the inventory, condition, and capacity

assessment. The needs assessment will focus on the existing condition and user opinions of recreation sites, ADA compliance, and the ability of sites to meet current and anticipated future recreation demand pressures. Consideration will also be given to site opportunities and constraints, as well as, support facilities such as signage and maintenance.

**Deleted:** of existing recreation resources.



#### **4.0 REFERENCES**

South Carolina Department of Parks, Recreation and Tourism, Recreation, Planning and Engineering Office. 2002. South Carolina Statewide Comprehensive Outdoor Recreation Plan.

## **5.0 SCHEDULE**

The proposed schedule for completion of the Recreation Assessment is as follows:

<b>Task</b>	<b>Date</b>
Mobilization for field work (includes field clerk hiring, training, etc.)	April 2006
Survey development and pre-testing	April 2006 – May 2006
Survey clerk training and mobilization	April 2006 – May 2006
Data collection (includes counts and surveys and waterfowl group)	May 2006 – November 2006
Data entry, cleaning, and processing	Early October, 2006
Conduct analyses	November 2006 to January 2007
Submit draft report	January 2007
Client Review	February 2007
Finalize report	February/March 2007

APPENDIX A  
SITE INVENTORY FORM

APPENDIX B  
RECREATION SITE QUESTIONNAIRES

## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Friday, March 17, 2006 5:56 PM  
**To:** Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (jpitts@scprt.com); James Smith; Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Michalec; Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; RMAHAN@scana.com; Richard Mikell; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Flach; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebbber  
**Subject:** 02-15-06 Recreation RCG Final Meeting Notes

Here are the final meeting notes from our February 15th meeting. Don't forget about homework assignments for the next meeting!



2006-02-15  
Meeting Notes - Rec.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
February 15, 2006**

*final dka 03-17-06*

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**ATTENDEES:**

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<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Bill Argentieri	SCE&G	David Hancock	SCE&G
Alison Guth	Kleinschmidt Associates	George Duke	LMHC
Alan Stuart	Kleinschmidt Associates	Norm Nicholson	LCSD
Randy Mahan	SCANA	Lee Barber	LMA
Tom Eppink	SCANA	Dave Anderson	Kleinschmidt Associates
Steve Bell	Lake Watch	Van Hoffman	SCE&G
Guy Jones	River Runner	Bill Marshall	SCDNR/LSSRAC
Tony Bebber	SCPRT		

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**HOMEWORK ITEMS:**

- Alan Stuart/Tom Eppink – ADA Design Standards
- All – Review Standard Process Form
- All – draft a vision statement for Lake Murray/LSR

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**

**April 17, 2006 at 9:30 a.m.  
Located at the Lake Murray Training Center**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
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**LAKE MURRAY TRAINING CENTER  
February 15, 2006**

*final dka 03-17-06*

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*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

The meeting began with a group review of the updated facility inventory provided by David H. Tommy B. and David H. had updated the inventory from last meeting and included some additional variables such as number of shelters, number of grills, etc. There was a discussion regarding additional variables that should be collected so that the group can understand what is currently available around the lake and river. Tony B. mentioned that number of parking spaces would be useful to know so we can begin to talk about facility capacity. He noted he could get this information for Dreher Island. David H. commented counting parking spaces at some sites would be problematic because of gravel parking areas and/or un-striped parking lots. Dave A. asked if it would be acceptable to come up with an estimate based on the size of the parking area. Dave A. also mentioned we could identify paved and non-paved parking areas.

There was some discussion on the inventory of existing docks at access sites. Lee B. mentioned that knowing dock capacity would be useful, citing Hilton as an example where the dock is not big enough. David H. replied the dock at Hilton is supposed to be a courtesy dock for launching/trailing boats. There is also a fishing dock at Hilton. The group agreed that knowing the function of the dock would be helpful, i.e., identifying courtesy docks, multi-slip docks, fishing docks.

Dave noted the inventory at present has no indication of ADA compliant facilities at any of the sites. There was some discussion on whether we should record ADA compliant facilities (the entire facility is compliant) versus ADA compliant amenities (parking spaces, restrooms, trails). Alan S. and Tom E. agreed to research ADA design standards so we can be consistent across all recreational sites. Dave wondered if there are any design standards for ramp length, as this is a fluctuating reservoir. David H. replied SCE&G makes the ramps at their sites as long as functionally possible to accommodate for this.

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Dave A. questioned the group as to the necessity of collecting all of the information for private marinas as well. Randy M. stated that SCE&G does not really have much of an impact as to what

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#### **LAKE MURRAY TRAINING CENTER February 15, 2006**

*final dka 03-17-06*

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The group also discussed adding a variable on the number of restrooms and identifying the restrooms as either seasonal (port a johns) or year round. There was also some discussion on how this information will be stored once collected. Steve B. wondered if we could include a facility’s potential for expansion as a variable. Randy M. replied that we do not want to give the public any expectations of what might happen around the lake. Steve B. agreed but wanted to make sure the group understands what the potential build out will be around the lake.

Bill M. asked for clarification regarding ownership of recreational sites. David H. replied that SCE&G pays for most of the public sites around the lakes and does all of the maintenance on those sites. The group then discussed the need for identifying public campgrounds. The group decided to add “Primitive Camping” as a variable to the facility inventory. The list of variables the group would like to see added to the inventory are: courtesy dock, fishing dock, parking, overflow parking, multi-slip docks, private, commercial, restrooms (seasonal/permanent), ADA compliance, primitive camping, formal camping, on-site security.

Dave A. introduced the “standard process” that is being proposed for use by this group as a way of staying focused on recreation issues around the lake/river. Dave went over the standard process diagram (attached) and briefly discussed the solution principles that will guide decision making for this group. Dave agreed to send out the principles for comment by the next meeting. The solution principles are:

1. Consideration of new recreational facilities should be based on demonstrated need and the potential impact on existing facilities.
2. Priority should be given to demonstrated need within the FERC project boundary.
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5. Reasonable access for the disabled should be provided.



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February 15, 2006**

*final dka 03-17-06*

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6. Recreational needs should be prioritized for the project.
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8. Additional recreational studies (if needed) should be only of sufficient scope and duration to provide necessary information to develop issue solutions.
9. Consensus based solutions are preferred over studies, unless solutions cannot be developed with existing information.

Preferred consideration will be given to ideas that:

- do not promote facilities that would adversely impact existing commercial operations;
- identify actual recreational needs that are not filled by existing facilities;
- receive broad public support;
- expand existing recreational facilities prior to developing green field sites;
- require doing recreational studies only if consensus cannot be reached with existing information (It is preferred to put financial resources into recreational facilities and opportunities that benefit the overall Project, rather than fund unnecessary/subjective studies).

These principles will be discussed at the next meeting after the group has had a chance to review them.

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February 15, 2006**

*final dka 03-17-06*

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The group then began to discuss Step One questions. Rather than summarize the suggested responses to these questions, these meeting notes (and any future notes talking about answering the process questions) will simply state the group discussed the answers to the questions. The actual result of this discussion will be tracked using the Microsoft Word Tracking Tool on the Standard Process Form. For example, someone mentioned water level stability, which can be found as a response to Question One. Any disagreements about a particular answer will be summarized in the meeting notes.

The group agreed to review Question Three and get their vision statement to Dave by the next meeting. Dave will compile these visions and the group will discuss and finalize a vision statement for recreational opportunities at the Project.

As a result of discussing Question Five, the group discussed the need for more commercial marinas around the lake. Steve B. felt that there are areas on the lake that could use a commercial marina. Lee B. disagreed. There was some discussion on whether new marinas are needed or if the current ones need to be upgraded. David H. explained the current moratorium on multi-slip marinas and why it is in place. The group agreed that any future access sites should not impact existing commercial operations. Lee B. suggested asking Archie Trawick, owner of Jake’s Landing, to come and speak to the group. Norm N. said that a marina management company had taken over Lake Murray Marina and wondered if it would be beneficial for them to come speak to the group.

After lunch, the group began to form Technical Working Committees. Dave A. listed three TWCs that he envisioned forming based on the issues submitted in response to the Initial Consultation Document. These are Recreation Management, Downstream Flows, and Lake Levels. The Recreation Management TWC will deal with future facilities, existing and future sites, policy, etc. The Downstream Flows TWC will talk about scheduled recreational releases. The Lake Levels TWC will help determine an appropriate lake level for recreational activities and will examine the effects of various lake levels on recreation. Membership in the TWCs is as follows:

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
February 15, 2006**

*final dka 03-17-06*

Recreation Management	Downstream Flows	Lake Levels
Tommy Boozer David Hancock Tony Bebber SCDNR Rep Steve Bell Van Hoffman George Duke Lee Barber (observer) Dave Anderson (facilitator)	Charlene Coleman Malcolm Leaphart Patrick Moore Guy Jones Tom Eppink Bill Marshall Karen Kustafik Dave Anderson (facilitator)	Lee Barber Steve Bell Bill Argentieri DNR Rep Alan Stuart (facilitator)

Bill M. asked about bringing up a new issue. He wanted to know about equipment requirements for the Lower Saluda River. He brought up that at other rivers he is familiar with, there are requirements for certain equipment before a recreational user is allowed on the river (i.e., helmets, PFDs). Alan S. noted that any regulations would be a legislative issue, but education could help the situation. Dave A. asked Bill M. if he would like to add this issue to the Parking Lot for the Safety RCG. Bill agreed.

Dave reminded the members of the TWCs that the recreation season is rapidly approaching and that he would like to see the first meeting of the Recreation Management TWC occur as quickly as possible. He also reminded the group that he would like to complete Step One of the Standard Process at the next RCG meeting. The group agreed on the next meeting date and then broke up into respective TWCs to schedule meetings.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
February 15, 2006**

*final dka 03-17-06*

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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**February 15, 2006**

**9:30 AM**

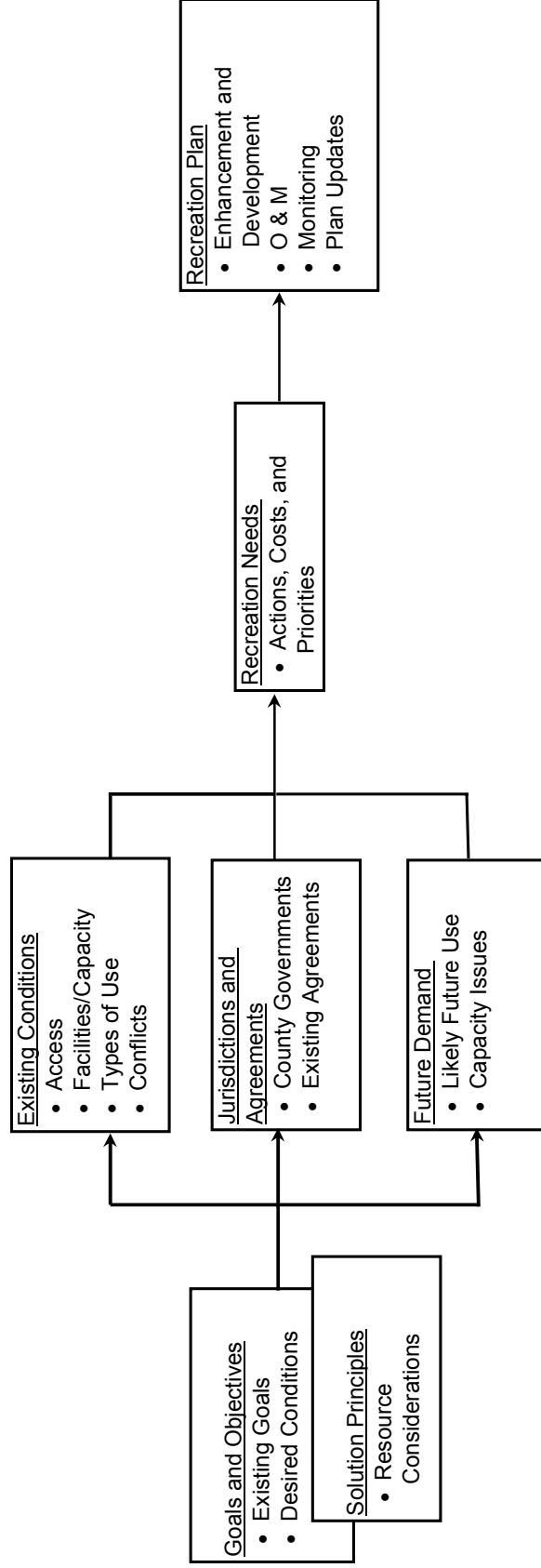
**Lake Murray Training Center**

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- **9:00 to 10:00** Discussion of Facility Inventory
- **10:00 to 12:00** Discussion of Standard Questions
- **12:00 to 12:30** Lunch
- **12:30 to 3:00** Identification of Technical Working Committees



## Recreation Plan Development Standard Process



**Step 1**

Determine  
Desired Future  
Condition

**Step 2**

Establish  
Baseline  
Conditions

**Step 3**

Determine What  
Is Needed  
And When

**Step 4**

Decide How Needs  
Will Be Met And  
Who is Responsible

## **Recreation Issues Standard Process**

The following is a list of standard questions designed to help characterize existing recreation resources and aid in development of an appropriate recreation plan for the Saluda Project. Questions pertaining to recreation management are categorized according to a four-step recreation planning process developed for the project. Questions pertaining to reservoir levels and downstream flows are listed following the facility management material.

### **STEP 1 – DETERMINE DESIRED FUTURE CONDITION**

1. Identify impoundment and/or downstream tailrace qualities important to keep and any qualities that need changes.
2. Are there unique characteristics of the reservoir and/or tailrace relative to other reservoirs/tailraces in the area?
3. What is the overall vision for the reservoir and/or tailrace, in terms of recreation experiences and opportunities?
4. Are there sensitive biological or cultural resources associated with the Project that need to be considered? Where are these resources located and are there seasonal sensitivities (e.g., nesting or spawning times, etc.)?
5. Identify specific goals and objectives for managing recreation at the reservoir and/or in the tailrace.

### **STEP 2 – ESTABLISH BASELINE CONDITIONS**

6. What is the nature of existing recreational access to the reservoir?
  - a. How many public accessible, developed recreation sites are there?
  - b. Where are they located/how are they distributed around reservoir?
  - c. Of these publicly accessible access sites how many are owned and operated by public versus private entities and how are they supervised?
  - d. How many sites, open to the public, provide boat access to the reservoir?
  - e. How many provide shoreline fishing?
  - f. Identify the most heavily used facilities.
  - g. Are there informal, undeveloped use areas? Where are they?
7. What types of existing developed facilities are there?
  - a. Enumerate boat ramps, restrooms, docks, and other facilities.
  - b. What is the existing capacity at each site?
  - c. What is the general condition of each site and its facilities?
  - d. Ideas for improving existing facilities.

8. Describe notable recreation activities on the reservoir.
  - a. List recreation activities currently occurring and identify most prominent activities.
  - b. Where are these uses occurring, and are they concentrated in certain areas?
  - c. Identify existing impediments to these activities, if any.
9. Are there known management issues associated with use?
  - a. Are there areas of congestion, and if so where?
  - b. Are there known conflicts between users, and if so where and when?
  - c. Are there other known management issues, such as littering, trespassing, etc.?
10. What is the expected future demand for recreation activities at the reservoir?
  - a. Will existing facility capacity likely be exceeded, and if so where and when?
  - b. Would accommodating this demand be consistent with the long-term vision for the reservoir?
  - c. Will demand introduce new or additional congestion, conflicts, or other management issues?
11. Identify current local benefits from recreation and any local detriments.

### **STEP 3 – DETERMINE WHAT IS NEEDED AND WHEN**

12. Ideas for better or different access, consistent with Step 2 above.
13. Potential facility enhancements or upgrades, consistent with Step 2 above.
14. Potential new facilities, or other management actions, consistent with Step 2 above.
15. What are the priorities regarding identified needs both in terms of resources and time?  
How do priorities compare across the entire Project?

### **STEP 4 – DECIDE HOW NEEDS WILL BE MET AND WHO IS RESPONSIBLE**

## **QUESTIONS REGARDING RESERVOIR LEVELS**

16. How is the reservoir currently operated and what are the typical reservoir levels during key recreation seasons?
17. Are there changes to reservoir level operations that you would like to see addressed to improve the overall value of the reservoir, and how specifically would such changes benefit recreation?
18. Are there seasonal and/or daily variations in reservoir level that can occur without adversely affecting the overall value of the project (including impoundment objectives such as recreation, fish and wildlife, flood control, generation, navigation, etc.)?
19. What are the reservoir levels at which recreation problems tend to occur (may be different for different locations or problems)?
20. When (i.e., what time of year) and how frequently do problems occur related to reservoir levels?
21. Why are the current operating water levels important to the operation of the project and the overall system?
22. Are there state or federal operating requirements that stipulate specific operating goals?

## **QUESTIONS REGARDING DOWNSTREAM FLOWS**

23. Are there riverine recreation opportunities below the dam? If yes, move to additional questions, if not, stop.
24. Do we know how different flow levels affect recreation opportunities and specific recreation activities?
25. Can opportunities be enhanced by modifying releases, and in what way?
26. How would modified releases affect upstream lake levels?
27. How would suggested modified downstream flows affect project operations at the project and at upstream and downstream projects?
28. Are there additional concerns with regard to state and federal requirements or existing ecological issues that limit suggested changes to downstream flows?



## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Monday, March 13, 2006 11:19 AM  
**To:** Tony Bebber; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); James Smith; Jeff Duncan; Jennifer Summerlin; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Larry Michalec; Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Richard Mikell; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Flach; Tim Vinson; Tom Brooks; Tommy Boozer  
**Subject:** 02-15-06 Draft Recreation RCG Meeting Notes

We have a few edits to the meeting notes, so I am sending them around one more time before they become final on Wednesday.



2006-02-15  
Meeting Notes - Rec.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
February 15, 2006**

*draft dka 02-28-06*

**ATTENDEES:**

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**HOMEWORK ITEMS:**

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- All – Review Standard Process Form
- All – draft a vision statement for Lake Murray/LSR

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**

**April 17, 2006 at 9:30 a.m.  
Located at the Lake Murray Training Center**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
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**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
February 15, 2006**

*draft dka 02-28-06*

Recreation Management	Downstream Flows	Lake Levels
Tommy Boozer	Charlene Coleman	Lee Barber
David Hancock	Malcolm Leaphart	Steve Bell
Tony Bebbber	Patrick Moore	Bill Argentieri
SCDNR Rep	Guy Jones	DNR Rep
Steve Bell	Tom Eppink	Alan Stuart
Van Hoffman	Bill Marshall	
George Duke	Karen Kustafik	
Lee Barber (observer)	Dave Anderson	
Dave Anderson		

Bill M. asked about bringing up a new issue. He wanted to know about equipment requirements for the Lower Saluda River. He brought up that at other rivers he is familiar with, there are requirements for certain equipment before a recreational user is allowed on the river (i.e., helmets, PFDs). Alan S. noted that any regulations would be a legislative issue, but education could help the situation. Dave A. asked Bill M. if he would like to add this issue to the Parking Lot for the Safety RCG. Bill agreed.

Dave reminded the members of the TWCs that the recreation season is rapidly approaching and that he would like to see the first meeting of the Recreation Management TWC occur as quickly as possible. He also reminded the group that he would like to complete Step One of the Standard Process at the next RCG meeting. The group agreed on the next meeting date and then broke up into respective TWCs to schedule meetings.

*MEETING NOTES*

*SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP*

*LAKE MURRAY TRAINING CENTER  
February 15, 2006*

*draft dka 02-28-06*

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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**February 15, 2006**

**9:30 AM**

**Lake Murray Training Center**

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- **9:00 to 10:00** Discussion of Facility Inventory
- **10:00 to 12:00** Discussion of Standard Questions
- **12:00 to 12:30** Lunch
- **12:30 to 3:00** Identification of Technical Working Committees





## Danielle Fitzpatrick

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**From:** Dave Anderson  
**Sent:** Wednesday, February 22, 2006 4:42 PM  
**To:** Tony Bebber; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; James Smith; Jeff Duncan; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Larry Michalec; Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Flach; Tim Vinson; Tommy Boozer  
**Subject:** Final January Meeting Notes

Attached are the final meeting notes from the January 11, 2006 Recreation RCG meeting. These will be posted to the website ASAP. I will be getting the draft meeting notes for the February meeting out as soon as I can.

Dave



2006-01-11finalMeetingMinutes-...

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
January 11, 2006**

*final dka 02-22-06*

**ATTENDEES:**

<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
Bill Argentieri	SCE&G	Norm Ferris	TU
Alison Guth	Kleinschmidt Associates	Bill Marshall	SCDNR/LSSRAC
Randy Mahan	SCANA	Patrick Moore	CCL/American Rivers
Charles Rentz	Resident	David Hancock	SCE&G
Steve Bell	Lake Watch	Dave Anderson	Kleinschmidt Associates
Karen Kustafik	Columbia Parks and Recreation	Lee Barber	LMA
George Duke	LMHOC	Guy Jones	River Runner Outdoor Center
Tim Vinson	SCDNR	Alan Stuart	Kleinschmidt Associates
Tony Bebber	SCPRT	Tommy Boozer	SCE&G
Jim Devereaux	SCE&G		

**HOMEWORK ITEMS:**

- Dave Anderson – send updated list of sites and amenities to group

**PARKING LOT ITEMS:**

- None

**DATE OF NEXT MEETING:**

**February 15, 2006 at 9:30 a.m.  
Located at the Lake Murray Training Center**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
January 11, 2006**

*final dka 02-22-06*

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Tommy B. began the meeting by giving an update on recreational access around the reservoir. He showed maps of SCE&G owned access, public marinas, and private marinas, and noted that there is recreational access around the entire lake. Tommy also noted that Billy Dreher State Park and Saluda Shoals Park are two large recreation areas on the Chapin side and Lower Saluda River, respectively. Tommy also pointed out the tract of land leased to the Lexington County Sheriffs Department. Tommy noted that they had some property set aside on the upstream part of the river such as Kempsons Bridge and Higgins Bridge for future recreation areas. He further noted that all of the boat ramps at public access areas on the lake were extended when the lake was down for the dam remediation project so that boats can launch from 345'. He also pointed out that SCE&G has 10 sites set aside for future development and are looking at additional sites. Tommy also explained that all of the islands on the lake are owned by SCE&G and are open to the public for recreation. Steve B. noted that all of the project lands that SCE&G owns below the 360' is open to the public. The group discussed that if it was private property you could not walk on it, even if it is below the 360'. The group discussed that SCE&G is only required by FERC to purchase land that is necessary to the operation of the project and that it was an unusual project since it has so much property. It was mentioned that the high water mark is the project boundary on Lake Norman in Charlotte, NC. It was discussed that the FERC has the option of requiring a licensee to buy a piece of property for operation of the project.

Tommy B. continued that the five year review resulted in a commitment to some improvements, including building a fishing platform at Sunset Point, paving at Hilton Park, and enlarging the parking lot at River Bend. Tommy also talked about Park Site 1 on the Lexington side of the dam and noted when the highway was redesigned for the dam remediation, it took the main entrance to the site. A new entrance is being designed at the intersection near Corley Mill Road that will have a stoplight. He further noted that the new bridge would change some of the aesthetics at the park site. He also noted that many utilities have a drop box for user fees, but SCE&G has no plans of doing this so that they can continue to use the user fees for traffic control. The other issue SCE&G looked at in relation to the dam remediation and the new highway was the site on the Irmo side of the dam, which may have some issues when the new highway is complete. Tommy mentioned that all of their parks have some sort of parking lot with a boat ramp and courtesy dock and at some sites they have rest rooms or Port-a-johns. He noted that any future park sites will have to be buffered away from neighborhoods. Another issue Tommy talked about is public marinas and wet storage around the lake and the possibility of these facilities closing.

## **MEETING NOTES**

### **SOUTH CAROLINA ELECTRIC & GAS COMPANY SALUDA HYDRO PROJECT RELICENSING RECREATION RESOURCE GROUP**

#### **LAKE MURRAY TRAINING CENTER January 11, 2006**

*final dka 02-22-06*

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George D. asked about a couple of marinas that went out of business when the water went down, which led to a discussion of the service these marinas provide. It is hard for them to compete with private marinas since most of them do not provide gas and food, so many public marinas are going private to remain in business. However, Tommy noted that losing these public marinas affects public access so SCE&G is working on getting a clause in new permits that says that a public marina will have to remain a public marina unless they get a new permit. Tommy noted that Lake Murray Tourism has a brochure with all the information about public and private marinas, but he doesn't think this information is on the web. The group noted that maybe this was something they can look into. Lee B. mentioned that the conversion of marinas from public to private was one thing that interests his group, especially the loss of space for larger boats. Steve B. mentioned that small access points encourage development around the lake. Tommy B. and David H. agreed and noted they try to get new neighborhoods to put in community access points.

Tommy continued his presentation and moved to the LSR and noted three recreation areas on the river (Saluda Shoals, Metz Landing, and Gardendale) and that they are looking for property for another take out above the rapids.

Bill M. presented an update on the Lower Saluda River Corridor Plan and provided a brief history of the plan. The plan was written in the late 1980s and published in 1990 when the river received scenic river status (about a 10 mile stretch of the river). The 1990 plan identifies eight potential and existing park/access sites along the river. Currently, five park/access sites are established: Saluda Shoals Park, Hope Ferry (Metts) Landing, Gardendale Landing, Riverbanks Zoo, and Riverbanks Garden. Bill M. noted that many of the current facilities on the river (Saluda Shoals, Riverbanks Zoo) were originally leased by SCE&G. Bill M. talked about the plan update in 2000 and the vision for a greenway trail going down the entire river linking existing parks and access sites on the north bank and linking with the Three Rivers Greenway. Bill M. told the group what he knows about the Three Rivers Greenway. There were some concerns about Rocky-shoal spider lilies below the Greenway and Bill A. noted that SCE&G is working with the Zoo and SC Native Plants Society for spider lily enhancement associated with the Columbia project.

Bill M. also showed the planned path for the Saluda River corridor that would link up the park sites at the top of the dam with the proposed river side trail, which starts at Saluda Shoals Park. Bill M. doubted this trail would be completed given that the trail would have to be routed along Bush River Road to avoid security concerns around the dam. Steve B. asked about SCE&G owned property along the river and Tommy B. said it is very fragmented now. There was some discussion about how to control development along the river and the impact that the proposed Corridor Plan may have on visitation. Bill M. noted it will increase but he has no information to discern how much, other than what anecdotal evidence suggests on existing sections of the Three Rivers Greenway.

## **MEETING NOTES**

### **SOUTH CAROLINA ELECTRIC & GAS COMPANY SALUDA HYDRO PROJECT RELICENSING RECREATION RESOURCE GROUP**

#### **LAKE MURRAY TRAINING CENTER January 11, 2006**

*final dka 02-22-06*

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Bill M. talked about a particular section between the I-20 and I-26 bridges that will be difficult to complete because of existing land uses.

Tony B. presented information about the last Statewide Comprehensive Outdoor Recreation Plan (SCORP) done for South Carolina in 2002. The SCORP is in the process of being updated and may be of use during the Relicensing process. SCPRP has conducted a phone survey for the new SCORP. Tony B. noted the SCORP is the official plan used by state agencies for recreation planning and is listed as a FERC-approved comprehensive plan. The SCORP considers outdoor recreation related to citizen participation and analyzes demand for recreational opportunities. It also identifies funding opportunities and is used as a tool to distribute monies in the state. Tony B. talked a little bit about the process of writing the plan and that the final plan is approved the National Park Service. Tony B. then gave a brief overview of results from the latest SCORP, highlights of which are: state is in a region of unprecedented growth; steady population growth and trend toward an older population and high minority population; tourism accounts for \$9 billion of gross state product; and nature based and cultural tourism are expected to grow. After presenting some basic results about participation trends in various activities, Tony identified the following issues that were raised in the SCORP process: protecting significant lands for public recreation; manage and expand trail resources; maintain/improve existing parks and recreation facilities; increase funding for variety of park facilities; acquire public open space; provide more multi-use athletic complexes; create partnerships; implement existing plans; increase ongoing education about recreational opportunities and avoid user conflicts; and increase public beach access.

Tommy B. asked about visitation to Billy Dreher State Park and if it operates profitably. Tony B. thinks it is getting close to breaking even and that use is increasing. George D. pointed out that we need to concentrate on facilities close to the population base.

The group then discussed the mission statement and decided to finalize the statement and post it to the website. Afterwards, the group started listing recreation issues associated with Lake Murray and the Lower Saluda River. Among the group, the issues were public access, conservation of lands, instream flows, dependable water levels on the lake, safety as it relates to flows, river access/egress, canoe portages; provide for sufficient nature based recreational activities, permanent protection for Dreher Island, protection of property for a state park on the south side of the reservoir, implementation of the Lower Saluda Scenic River Corridor Plan, and water quality as it relates to primary contact activities. Bill A. also mentioned having a ten year review cycle for recreation activities. Bill A. asked for clarification of nature based activities and wondered if this meant SCE&G sponsoring fishing tournaments. Tony B. replied that fishing, hunting, hiking, canoeing, and bird watching are typical activities and that tournaments are not usually considered nature-based tourism. He envisions SCE&G providing the places for tournaments, not necessarily sponsorship.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
January 11, 2006**

*final dka 02-22-06*

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The group had a discussion about adaptive management and how any sort of recreation plan would be based on this principle. Steve B. noted that we don't need to put anything off that we can do now. Dave said that adaptive management is a way of correcting things that change with time. The group also briefly discussed the American Whitewater request for using the spillway as a recreational resource; Bill A. said that SCE&G has a severe liability issue with this request.

The group further discussed lake levels and it was suggested that a survey be done to see what is acceptable to lake users. Randy M. mentioned that there is difference between what is convenient and what they can use.

The group then began to identify information that they might need to address some of the issues raised. Tim Vinson noted completing a Boating Needs Assessment. George D. mentioned looking at industry figures of boating participation. The group also talked about a carrying capacity study like was done on the Duke Power projects. Dave mentioned completing an inventory of existing sites and amenities available at each one. Tommy B. agreed to update the table provided in the ICD and see if the group thinks any other information will be necessary.

The discussion then switched to the river and the need for Mike Dawson to update the group on the Three Rivers Greenway. The group is interested in hearing about access, facilities plan, projected timeframe, safety issues, parking and ADA compliance, and an instream flow analysis at the confluence. Jim D. agreed to talk to Mike about giving the group a presentation.

Below is a table of issues as recorded by Dave A.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
January 11, 2006**

*final dka 02-22-06*

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<b>LSR</b>	<b>Both</b>	<b>Lake</b>
public access/portage	scenic integrity	aquatic weeds – <b>covered under lake and land management</b>
conservation of land	future growth	access
safety as it has to do with security at the recreational facilities, and safety related to flows	adaptive management	facilities/adequacy
facilities/adequacy	water quality - <b>covered under water quality group</b>	new state park in Lexington County
communication	fishing	expansion of facilities
recreation Flows/instream flows	non-boating access	conservation of land – <b>management prescriptions identified in land use group and specifics for recreation will be developed in this group, will make recommendations</b>
		paddling access
		large multi-lane facility
		lake level reliability – <b>will be carried over between this group and the other group</b>

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The agenda for this meeting is attached below.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER  
January 11, 2006**

*final dka 02-22-06*

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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**January 11, 2005**

**9:00 AM**

**Lake Murray Training Center**

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- **9:00 to 10:45** Update on Recreation around Lake Murray and Associated Issues – Tommy Boozer, SCE&G
- **10:45 to 11:00** Break
- **11:00 to 11:30** Discussion on the SCORP – Tony Bebber, SCPRT
- **11:30 to 12:00** Lunch
- **12:00 to 12:15** Group Discussion of Mission Statement for Finalization Purposes
- **12:15 to 3:00** Group Discussion of Recreation Interests





## Cheryl Balitz

From: Malcolm Leaphart [mailto:malcolml@mailbox.sc.edu]

Sent: Friday, February 17, 2006 11:22 AM

To: ARGENTIERI, WILLIAM R

Cc: marshallb@dnr.sc.gov

Subject: RE: Recreation RCG Meeting Agenda

Bill,

Bill Marshall sent a heads-up about my possibly serving on a Recreation RCG

Technical Committee on 'River Flows'. I would need more details before committing to that request as frankly flow levels for fishermen is not as high

a priority item for Trout Unlimited as flows and water quality are for the

2

fisheries, especially the trout. Also, our view is that the real issue for

recreation on the tailrace beyond access points is the unsafe conditions from

the drastic flow levels that need to be eliminated or significantly reduced.

That view is contradictory to the current thinking in the Safety RCG that more

warning lights and public education are the answers. And, that view is apparently not in sync with the current Recreation RCG efforts since TU is

really not seeking any recreational levels for anglers. We want the right flow

levels for the fish as determined by science based studies...

My first priority would therefore be for a technical committee on river flows,

not for the Recreation RCG, but for the Fish and Wildlife RCG, or possibly

Water Quality RCG (or a joint committee since the issues overlap). But the time

to attend the frequent and varied meetings as the process is now structured is

really not very workable to me as a volunteer, and I am evaluating any further

commitments closely, including to the RCGs, based on how written comments are

handled. Those may be the only way for many of us to participate as Charlene

Coleman has previously noted, and we will be evaluating whether meeting attendance is the only way to get issues on the table as we submit

written requests for agenda items for discussion to the RCGs. My first experience to have my comments for eliminating flows added to the

Tuesday

Safety RCG meeting agenda and discussed apparently failed; but, I am waiting on

a reply from Dave Anderson to see if my reports from other attendees are not

complete on his efforts as moderator.

I can however provide flow level observations for both the wading and boating

fishermen who have been facing the difficult navigability situations from the dramatic and unsafe flow level swings. My input would be based on over 30 years of experience as a river fisherman and boater - both motorized and paddle. I have for years follow up'd trips to the river with evaluations of the USGS flow rates to note the levels and the problems witnessed at the various times. Those correlations could be shared with Bill Marshall, the SC DNR Wild and Scenic River coordinator for the lower Saluda and its stakeholders, who has years of research and consensus building experience on the lower Saluda. As a member of his taskforce since inception, I am confident in and supportive of Bill's representation of the river stakeholders' interests.

Quoting "ARGENTIERI, WILLIAM R" <BARGENTIERI@scana.com>:

> To all,

>

>

>

> Attached is the agenda for tomorrow's Recreation RCG Meeting. Hope to see all of you there.

>

>

>

> Bill

>

>

## Danielle Fitzpatrick

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**From:** Alison Guth  
**Sent:** Thursday, January 05, 2006 3:52 PM  
**To:** Dave Anderson; 'MAHAN, RANDOLPH R'; 'tboozier@scana.com'; 'dhancock@scana.com'; 'bargentieri@scana.com'; 'kayakduke@bellsouth.net'; 'vhoffman@scana.com'; 'devereauxj@scana.com'; 'vinsont@dnr.sc.gov'; 'Bill Marshall'; 'lakemurraywatch@bellsouth.net'; 'cfdwaxson@columbiasc.net'; 'gjobsis@americanrivers.org'; 'Mike Waddell'; 'dchristie@infoave.net'; 'ipitts@scprt.com'; 'tbebbber@scprt.com'; 'Elymay2@aol.com'  
**Subject:** Draft Recreation Notes

Hello Recreation Group,

I have attached to this email a draft version of the meeting notes from 11-18. Please review and have any comments back to me by January 19th. You may also let me know at our meeting next Wednesday as well. Also, if you are coming to next weeks meetings and you have not let me know yet, please do so, I am ordering lunches tomorrow. I hope everyone had a wonderful holiday and I will see you next week. Thanks, Alison



2005-11-18 draft  
Meeting Minut...

Alison Guth  
Licensing Coordinator  
Kleinschmidt Associates  
101 Trade Zone Drive  
Suite 21A  
West Columbia, SC 29170  
P: (803) 822-3177  
F: (803) 822-3183

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**SCE&G Training Center  
November 18, 2005**

Draft acg 1-4-06

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**ATTENDEES:**

Alison Guth, Kleinschmidt Associates	Dave Anderson, Kleinschmidt Associates
Randy Mahan, SCANA Services, Inc.	Tommy Boozer, SCE&G
David Hancock, SCE&G	George Duke, LMHC
Van Hoffman, SCANA Services, Inc.	Jim Devereaux, SCE&G
Tim Vinson, SCDNR	Bill Marshall, SCDNR
Steve Bell, Lake Watch	Alan Axson, Columbia Fire
Gerrit Jobsis, American Rivers, CCL	Michael Waddell, Trout Unlimited
Dick Christie, SCDNR	Irvin Pitts, SCPRT
Tony Bebber, SCPRT	Joy Downs, LMA

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**HOMEWORK ITEMS:**

- Each entity will list the issues and goals they feel are valuable and important – forward to Dave Anderson
- Review the ICD and list of study requests
- Read about the SCORP through the online website

**AGENDA ITEMS FOR NEXT MEETING:**

- Tommy Boozer will give an update on recreation around Lake Murray and associated issues
- Tony Bebber will give a brief explanation on the SCORP
- The group will begin discussion on the issues and goals that were submitted to Dave Anderson

**DATE OF NEXT MEETING:**      **January 11, 2006 at 9:00 a.m.**  
**Located at the Lake Murray Training Center**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**SCE&G Training Center  
November 18, 2005**

Draft acg 1-4-06

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Alan Stuart opened the meeting and gave a short recap of the previous resource conservation groups. He encouraged those who have not yet seen the Operations Presentation given by Lee Xanthakos to come to the January 12<sup>th</sup> quarterly public meeting. Alan noted that the RCG meetings were generally scheduled in the beginning of the month due to agency conflicts with other Relicensings, whose meetings are generally focused at the end of the month.

The group began discussion on the merging of the Recreation and Safety Resource groups. Randy Mahan noted that some concerns arose when joining these groups due to the fact that the Recreation group will potentially be discussing quite a few land use issues that may not directly tie in to safety. When posed a question about what he believed the groups would cover, Tommy Boozer answered that the recreation group would most likely be dealing with land issues and what entities were in charge with handling certain issues around the lake. Joy Downs noted that LMA would like to see the safety group meeting even after Relicensing to discuss safety related issues. The group concluded that it may be best to keep the groups separate and break up the Lake and River issues on the agenda into morning and afternoon sessions. If a combined meeting was necessary then it could be arranged for. Alan noted that it may be important for the Recreation RCG members to read the Safety meeting notes.

The group briefly discussed the need for more law enforcement personnel to attend. Dick Christie pointed out that the group should keep in mind that the Technical Working Committees (TWC) will include members of the DNR law enforcement who might not have time to attend RCG meetings.

Alan noted they had received the second set of comments on the Operating Procedures, and a revised set of the operating procedures will be sent out in the following weeks. Bill Marshall mentioned that the LSSRAC had a comment on the Operating procedures that was in reference to the time of the day during which the meetings were held. He noted that there were individuals who would like to be involved, but could not do so due to work conflicts. One individual then asked if it would be out of the question for agency personnel to come after hours. Dick Christie replied that although it was not completely out of the question, the group needed to remember that the agencies are juggling quite a few things and there is a need to keep the agency personnel involved in this process because their input is very important.

One suggestion that was made during the meeting was for group members to have the opportunity to add items to the meeting minutes after the meeting was over. The group decided that if you have

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**SCE&G Training Center  
November 18, 2005**

Draft acg 1-4-06

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any additional comments you can add it to a section at the end of the meeting minutes that was specified as "Additional Comments".

The group began to discuss the draft mission statement and add upon it. A question arose as to what the SCORP was. Tony Bebber noted that it was revised every five years and is a document used to allocated funds. He noted that it contained quite a bit of information that could help identify goals for the recreation group. Tony was asked to give a brief presentation on the SCORP at the next meeting.

One individual asked whether they could submit comments on issues that would then be posted on the website. Alan responded that comments on the milestone documents and such would be posted on the website, however, comments on particular issues need to expressed within the RCG, that it was in fact part of the purpose of the RCGs.

After a short lunch break, Alan passed out a list of study requests relating to recreation that were compiled from all of the requests that were received. A homework item included a review of the study requests in order to ensure that everyone's requests were properly covered and expressed. Alan also pointed out that if anyone feels a presentation is needed to educate the group on a particular issue then to please make that request. Tommy Boozer was asked to give an update on recreation, listing problems and issues. He noted that one of the things that they were doing was working with a landscape architect to look at the area on the Lexington side of the dam where the construction will be. He also added that they will have a recreation map that shows all the existing recreation sites and also lists future recreational sites and impromptu areas.

In closing, the group discussed some of the homework items for next time. Randy Mahan pointed out that it may be a good idea to go online and read about the SCORP. The group also decided that it would be good for each entity to prioritize their interests and have them ready for discussion by the next meeting. Dave Anderson noted that he would send out an email to group members regarding this following the meeting.

The group decided that the next Recreation meeting would occur on January 11, 2006 at 9:00 at the Training Center.

Meeting Adjourned

Attached below is the agenda for this meeting:

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RESOURCE GROUP**

**SCE&G Training Center  
November 18, 2005**

Draft acg 1-4-06

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**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**November 18, 2005  
9:30 AM  
Lake Murray Training Center**

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- **9:35 to 9:45** Introduction
    - SCE&G and KA Staff
    - Resource Agency Representatives
    - NGO Representatives
    - Individuals
  - **9:45 to 10:15** Purpose of Resource Groups and Discussion on Combining Recreation and Safety RCGs
  - **10:15 to 10:45** Discuss Recreation RCG Procedures
  - **10:45 to 11:45** Develop Recreation RCG Mission Statement
  - **11:45 to 12:45** Lunch
  - **12:45 to 1:30** Develop List of Homework Assignments
  - **1:30 to 2:00** Develop an Agenda for Next Meeting and Set Next Meeting Date
- Adjourn

## Kacie Jensen

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**From:** Alison Guth  
**Sent:** Tuesday, September 11, 2007 8:28 AM  
**To:** Van Hoffman; Bill Marshall; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Jennifer Hand; Jim Cumberland ; Joy Downs; Kelly Maloney; Lee Barber; Malcolm Leaphart; Marty Phillips; Steve Bell; Tim Vinson; Tommy Boozer; Tony Beber; Alison Guth; Alan Stuart  
**Cc:** Alan Stuart; 'Bill Argentieri (bargentieri@Scana.com)'  
**Subject:** Agenda for Thursday

Hello All,

Attached is the Agenda for Thursday, along with the Recreation Working Documents. Copies will also be provided at the meeting. If you have not already RSVP'ed, please do so. Thanks, Alison



2007-09-13 Recreation RCG  
creation Managemen/orking Documen...

**Alison Guth**

**Licensing Coordinator**

**Kleinschmidt Associates**

204 Caughman Farm Lane, Suite 301

Lexington, SC 29072

Phone 803-951-2077

Fax 803-951-2124



**Saluda Hydro Relicensing  
Recreation Management Technical Working Committee**

**Meeting Agenda**

**September 13, 2007**

**9:30 AM**

**Panera Bread Conference Room**

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- **9:30 to 10:30** Review of Recreation Studies (Recreation Assessment, Boat Density, Draft Spring Addendum)
- **10:30 to 10:45** BREAK
- **10:45 to 11:15** Review of Example Recreation Plans
- **11:15 to 12:00** Standard Process Questions 6 through 11
- **12:00 to 1:00** LUNCH (Working, if necessary)
- **1:00 to 1:30** Draft Recreation Plan

Adjourn



# Recreation Resource Conservation Group

## Working Documents

| [September 10, 2007](#)



## Recreation Resource Conservation Group Work Plan

FINAL

<b>Facilitator:</b>		
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com
<b>Members:</b>		
Name	Organization	E-mail
Alan Axson	Columbia Fire Department	cfdwaxson@columbiasc.net
Alan Stuart	KA	alan.stuart@kleinschmidtusa.com
Alison Guth	KA	alison.guth@kleinschmidtusa.com
Amanda Hill	USFWS	amanda_hill@fws.gov
Bill Argentieri	SCE&G	bargentieri@scana.com
Bill Marshall	Lower Saluda Scenic River Advisory Council, DNR	marshallb@dnr.sc.gov
Charlene Coleman	American Whitewater	cheetahrk@yahoo.com
Charles (Charlie) Rentz		flyhotair@greenwood.net
David Hancock	SCE&G	dhancock@scana.com
Dick Christie	SCDNR	dchristie@infoave.net
George Duke	LMHC	kayakduke@bellsouth.net
Gerrit Jobsis	Coastal Conservation League & American Rivers	gerritj@scccl.org; gjobsis@americanrivers.org
Guy Jones	River Runner Outdoor Center	guyjones@sc.rr.com
Irvin Pitts	SCPRT	ipitts@scprt.com
James A. Smith	LMA	bkawasi@sc.rr.com
Jeff Duncan	National Park Service	jeff_duncan@nps.gov
Jennifer O'Rourke	South Carolina Wildlife Federation	jenno@scwf.org
Jennifer Summerlin	Kleinschmidt Associates	jennifer.summerlin@kleinschmidtusa.com
Jim Devereaux	SCE&G	jdevereaux@scana.com
JoAnn Butler	resident	jbutler@scana.com
Joy Downs	Lake Murray Assn.	elymay2@aol.com
Karen Kustafik	City of Columbia Parks and Recreation	kakustafik@columbiasc.net
Keith Ganz-Sarto		keith_ganz_sarto@hotmail.com
Kelly Maloney	Kleinschmidt Associates	kelly.maloney@kleinschmidtusa.com
Larry Michalec	Lake Murray Homeowners Coalition	lmichalec@aol.com
Larry Turner	SCDHEC	turnerle@dhec.sc.gov
Leroy M. Barber Jr.	LMA	lbarber@sc.rr.com
Malcolm Leaphart	Trout Unlimited	malcolml@mailbox.sc.edu
Mark Leao	USFWS	mark_leao@fws.gov
Marty Phillips	Kleinschmidt Associates	marty.phillips@kleinschmidtusa.com
Michael Waddell	TU - Saluda River Chapter	mwaddell@esri.sc.edu
Miriam S. Atria	Capitol City Lake Murray Country	miriam@lakemurraycountry.com
Norman Ferris	Trout Unlimited	norm@sc.rr.com
Patricia Wendling	LMA	wwending@sc.rr.com
Patrick Moore	SCCCL AR	patrickm@scccl.org
Ralph Crafton	LMA	crafton@usit.net
Randy Mahan	SCANA	rmahan@scana.com
Richard Mikell	Adventure Carolina	adventurec@mindspring.com
Stanley Yalicki	LMA	joyyalicki@aol.com
Steve Bell	Lake Murray Watch	bellsteve9339@bellsouth.net
Suzanne Rhodes	SC Wildlife Federation	suzrhodes@juno.com
Tim Vinson	SCDNR	vinsont@dnr.sc.gov
Tom Brooks	Newberry Co.	tbrooks@newberrycounty.net
Tommy Boozer	SCE&G	tboozer@scana.com
Tony Bebbber	SCPRT	tbebbber@scprt.com
Van Hoffman	SCANA Land Mgt.	vhoffman@scana.com

## Recreation Resource Conservation Group Work Plan

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### Mission Statement

The mission of the Recreation RCG is to ensure adequate and environmentally-balanced public recreational access and opportunities related to the Saluda Hydroelectric Project for the term of the new license. The objective is to assess the recreational needs associated with the lower Saluda River and Lake Murray and to develop a comprehensive recreation plan to address the recreation needs of the public for the term of the new license. This will be accomplished by collecting and developing necessary information, understanding interests and issues, and developing consensus-based recommendations.

### Identified Issues

- ensure that recreational facilities and opportunities are protected and enhanced for current and future users, on and near the lake and river
  - boating access, including future access on Lexington side of lake
  - non-boating access
  - paddling access
  - security at recreation facilities
  - sufficient egress points on lower Saluda River
  - fishing opportunities for non-boaters
- conservation of lands
  - protect the scenic integrity of the Project
  - provide wildlife habitat areas
  - provide formal and informal (impromptu areas) recreational opportunities
    - consideration of special recreation designation areas classification (e.g., Two Bird Cove and Hurricane Hole)
- using the concept of adaptive management in future recreation planning
- river flows
  - safe recreational opportunities should be available on the lower Saluda River through daily flow release schedules and consensus-based flow rates
  - lack of scheduled recreation flows for the lower Saluda River
  - management of river flows to improve safety for river users (coordinate with Safety RCG)
  - minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)
- lack of a communication system that would encompass information to better inform the public of existing and projected conditions regarding lake levels and river flows as related to anticipated hydro operations and maintenance
- protection of the cold water fishery on the lower Saluda River
- impacts of lake level on recreational use of the lake
- consideration of The Lower Saluda River Corridor Plan and the Lower Saluda Scenic River Corridor Plan Update and their related public access sites and greenway-trail concepts

## Recreation Resource Conservation Group Work Plan

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### RCG Responsibilities

- Utilizing and modifying the Standard Process for evaluating and addressing recreation management and access issues specific to the Saluda Project, including developing a vision statement for the Project.
- Identifying specific areas where lake and river levels, river flows, and/or lake and river level fluctuations may be adversely affecting recreation including the nature and timing of the effect (e.g., access to sections of water, access to facilities, and aesthetics).
- Working with the Operations Resource Conservation Group to identify “reasonable” (based on hydrologic, structural, and other limitations identified) changes in Project operations that would benefit recreation.
- Working with appropriate RCGs to coordinate actions on issues of mutual interests such as river flows, lake levels, conservation of lands, and the siting and management of recreational facilities.
- Identifying any studies, if applicable, that need to be performed for identifying and/or evaluating (1) changes to Project operations, (2) enhancements to existing facilities, and (3) creation of new facilities to provide for public recreational access and opportunities.
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding modifications to facilities or current Project operations, and provide recommendations for future recreation access and facilities.

### Tasks and Products

- **Task 1** – Utilize the stepwise process diagram and solution principles to guide the planning process for addressing recreation management issues at the Saluda Project.
  - Final Process Diagram and Solution Principles
- **Task 2** – Develop a Vision Statement for the Saluda Project.
  - Final Vision Statement
- **Task 3** – Review the operational constraints and current operations of the Saluda Project (see Initial Consultation Document).
- **Task 4** – Answer the list of questions on the Standard Process Form in order to characterize the existing and potential future condition of access and lake levels and river flows – from a recreation setting perspective.
  - Final Standard Process Form
- **Task 5** – Review stakeholder requests for particular studies and/or enhancement measures to ensure that these are incorporated into study planning, if applicable
  - Final Study Plans and Possible Mitigation Measures
- **Task 6** – Develop and recommend operation scenarios to the Operations RCG for analysis. These scenarios should reflect initial thinking on potential solutions and be designed to narrow the focus of Task 10 below. Analysis by the Operations RCG will focus on an assessment of potential recreational impacts associated with any suggested changes to operations.
  - RCG Recommendations
- **Task 7** – Discuss results of the Operations RCG analyses.

## Recreation Resource Conservation Group Work Plan

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- **Task 8** – Develop study designs/methods/plans and review agreed upon studies, literature reviews, etc.
  - Final Study Plans
- **Task 9** – Check the solution principles to ensure proposed study plans are consistent.
  - Final Study Plans
- **Task 10** – Provide recommendations for Project operations and recreation access and facilities to be considered in conjunction with all ecological (including water quality), recreational, and safety issues.
  - RCG Recommendations
- **Task 11** – Develop a consensus based Recreation Plan for the Saluda Project that addresses all of the issues and tasks identified above.
  - Final Recreation Plan

### **Schedule**

**Late 2005/Early 2006**—Finalize Mission Statement, Standard Process Form, Solution Principles, and Work Plan

**Mid-2006**—Complete identification of studies, literature reviews, etc. that need to be completed to address issues and tasks identified in the Work Plan

**Late 2006**—Begin compilation of existing information, review preliminary study results, and draft an outline of the Recreation Plan

**2007**—Complete any studies identified in Task 8 and review results; draft recommendations to SHRG, complete draft Recreation Plan

**2008**—Finalize Recreation Plan and provide comments on Draft License Application

### **Possible Mitigation Measures to be Considered**

- creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on the north bank of the river connecting Saluda Shoals Park to Gardendale Landing and Riverbanks Zoo; and a park/preserve on the south side of river at Twelve-mile Creek
- creation of a state park on the south side of the reservoir
- creation of a multi-lane boating facility that can accommodate large tournaments
- consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.
- consideration of conservation easements on large tracts of land within the PBL

## Recreation Vision Statement for the Saluda Project

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The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, aesthetic values, cultural resources, and public recreational opportunities on the reservoir and the lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of Lake Murray and the lower Saluda River, and ensure adequate facilities and public access are provided. Given the size of the reservoir/hydro-project area, it is felt that it can continue to support a diversity of recreation opportunities. Recognizing that needs and demands will change, recreational uses will be monitored and managed to balance access/uses with the protection of natural resources and environmental quality; and planning for new facilities and management schemes will remain adaptive to changes.

Recreational opportunities for Lake Murray and the lower Saluda River over the next 30 to 50 years of the pending new FERC license for SCE&G should incorporate the following attributes:

- Recreational sites and access areas on the lake and the river should be adequate to allow for the continued rapid population growth in the Midlands over the term of the new license based on surveys of the public and input from the stakeholders and public.
- Sites should be spaced around the lake and along the river corridor to provide legal public access to the different geographic sections of both.
- Uncrowded conditions should be available most of the time at the sites, with natural viewscapes and provisions for most of the current and anticipated popular recreational activities incorporated into the overall provisions.
- Patrols and/or assistance for emergencies should be provided, though not necessarily manned, such as adequate phone boxes.
- Safe recreational opportunities should be available for boaters on the lake with adequate lake levels for the navigational markers, and on the river with release levels that are not life-threatening to the average person.
- The recommendations of the Lower Saluda Scenic River Advisory Council should be implemented to reflect the broad community-based consensus for river access, with consideration of additional river access to areas where trespassing is now the only way to enter an area.

Improvements to be considered at the Saluda Project include:

- Evaluation of SCE&G-owned Project lands for possible reclassification for recreation activities.
- Providing appropriate operations and maintenance of public recreation facilities.
- Optimizing the capacity of existing public recreation facilities to accommodate existing and future demand.

## **Recreation Vision Statement for the Saluda Project**

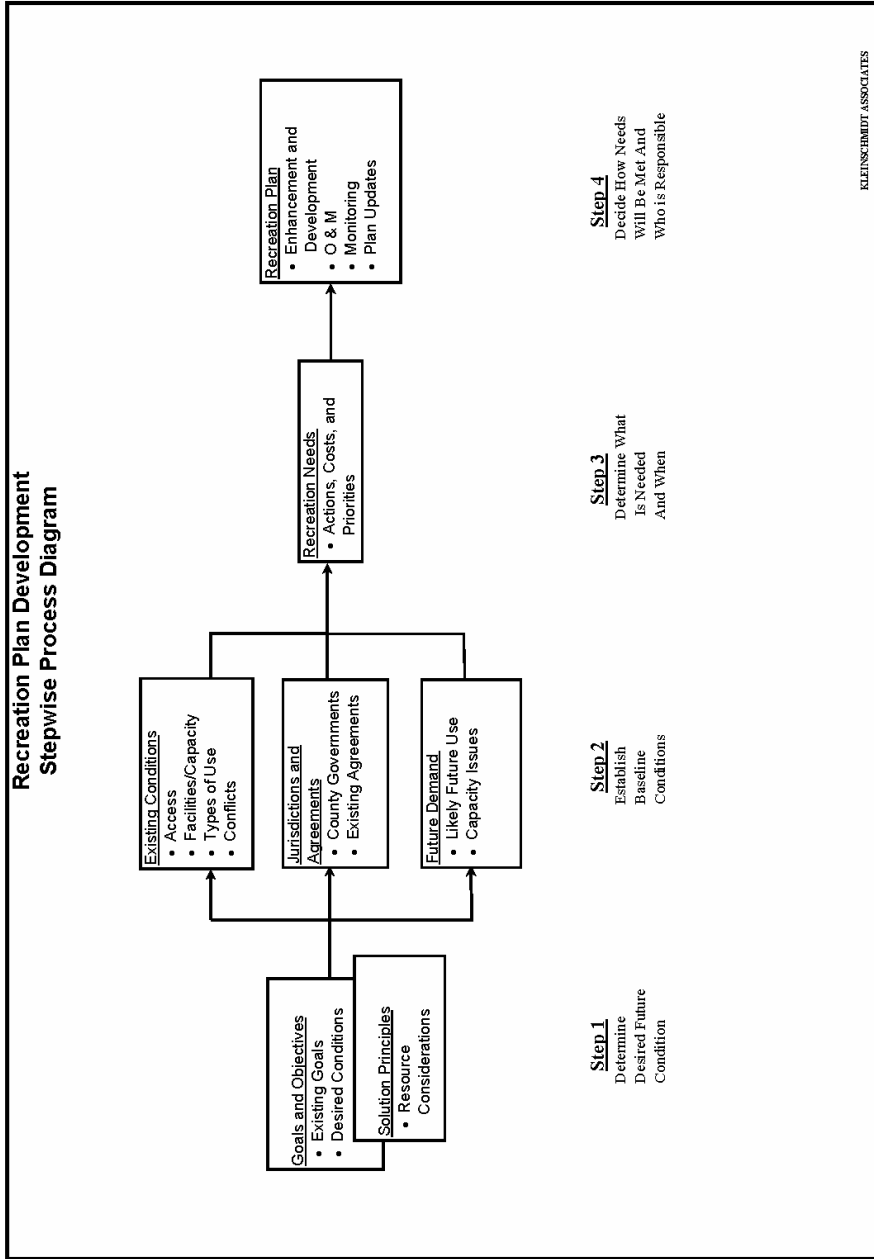
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- Improving access and safety in the public waters below the dam and minimizing impacts of project operations on downstream recreation, recognizing the need to meet power generation, and downstream flow responsibilities of Saluda.
- Managing lake level drawdowns so as to optimize safety and recreational opportunities.
- Managing river flows so as to optimize safety and recreational opportunities.
- Ensuring public access areas for the non-boating public remain available along the lake and river shorelines.
- Development of new facilities in accordance with the comprehensive plan as the need arises.
- Evaluation of other properties and potential partnerships as needed to meet the mission statement.



## Stepwise Process Diagram

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## Solution Principles

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Consideration of new recreational facilities should be based on demonstrated need and the potential impact on existing facilities.

1. Priority should be given to demonstrated need within the FERC project boundary.
2. Priority should be given to recreational proposals where multiple stakeholders offer significant participation.
3. Recreational facilities should appeal to a broad public.
4. Reasonable access for the disabled should be provided.
5. Recreational needs should be prioritized for the project including a schedule of proposed improvements so that all costs are not in the first few years of the new license.
6. The improvement or expansion of existing recreational facilities should be considered first.
7. Additional recreational studies (if needed) should be only of sufficient scope and duration to provide necessary information to develop issue solutions.
8. Consensus based solutions are preferred over studies, unless solutions cannot be developed with existing information.
9. A process should be developed to adjust proposed improvements over the 30+ year time frame approximately every 7 to 10 years to account for changing needs. This should include the ability to trade a new needed facility for a proposed (but not built) facility of approximately the same cost.
10. Sufficient “future recreational” land should be set aside now to handle the recreational needs of 30+ years.

Preferred consideration will be given to ideas that:

- do not promote facilities that would adversely impact existing commercial operations;
- identify actual recreational needs that are not filled by existing facilities;
- receive broad public support;
- expand existing recreational facilities prior to developing green field sites;
- require doing recreational studies only if consensus cannot be reached with existing information (It is preferred to put financial resources into recreational facilities and opportunities that benefit the overall Project, rather than fund unnecessary/subjective studies).

## Standard Process Form

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The following is a list of standard questions designed to help characterize existing recreation resources and aid in development of an appropriate recreation plan for the Saluda Project. Questions pertaining to recreation management are categorized according to the four-step recreation plan stepwise process diagram developed for the project. Questions pertaining to reservoir levels and downstream flows are listed following the facility management material.

### **STEP 1 – DETERMINE DESIRED FUTURE CONDITION**

1. Identify Lake Murray and/or Lower Saluda River (LSR) qualities important to keep and any qualities that need changes.

Qualities to keep include the fishing, hunting, and wildlife watching opportunities associated with the Project. The presence of natural shoreline, islands, and riverbanks are aesthetically pleasing and promote a sense of solitude. The balance between public/private recreational access to the project should be maintained. The shoreline management program is an important means of protecting these qualities and should continue for the term of the new license. The safety and security of recreational users should also be preserved as part of the overall recreational experience. While the lake has good water quality at the present time, we should strive to maintain and improve the water quality of the lake.

There are other qualities that some stakeholders would like to change. These include the water level stability on the lake to provide year-round access to a majority of shoreline property owners. The quality of amenities and access should be improved for recreational users. The recreational experience on the lower Saluda River could also be enhanced by providing minimum flows to protect the health of the river. These flows should be targeted at meeting state standards for dissolved oxygen in the tailrace and river and providing aquatic habitat. The impacts of unscheduled releases from the Project should also be addressed through some combination of providing more predictable flows, managing the rate of water level rise, and/or improving the warning system on the river.

The Project should also continue to provide reasonably affordable, reliable energy to SCE&G's service area.

2. Are there unique characteristics of Lake Murray and/or the LSR relative to other reservoirs/tailraces in the area?

The location of Lake Murray and the lower Saluda River near the metropolitan area of Columbia, SC is a unique characteristic of the Project. Due to the extensive shore line of the reservoir and the amount of Project lands, the Shoreline Management Plan provides a variety of recreational access. The reservoir is also relatively uninterrupted by bridges, unlike other lakes in the vicinity.

Other distinguishing characteristics of the Project include the purple martin habitat on Lunch Island and the trout and striped bass fishery and whitewater paddling opportunities in the lower Saluda River.

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## Standard Process Form

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3. What is the overall vision for Lake Murray and/or the LSR, in terms of recreation experiences and opportunities?

The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, aesthetic values, cultural resources, and public recreational opportunities on the reservoir and the lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of Lake Murray and the lower Saluda River, and ensure adequate facilities and public access are provided. Given the size of the reservoir/hydro-project area, it is felt that it can continue to support a diversity of recreation opportunities. Recognizing that needs and demands will change, recreational uses will be monitored and managed to balance access/uses with the protection of natural resources and environmental quality; and planning for new facilities and management schemes will remain adaptive to changes.

4. Are there sensitive biological or cultural resources associated with the Project that need to be considered? Where are these resources located and are there seasonal sensitivities (e.g., nesting or spawning times, etc.)?

There lands in environmentally sensitive areas that have been identified in the current shoreline management plans. There are also natural/undeveloped lands that provide valuable wildlife habitat.

There is some concern over migrating fish on the lower Saluda and Congaree Rivers. A unique cold water fishery also exists in the lower Saluda River. Rocky shoals spider lilies have also been located in the confluence area. There are also bald eagles, woodstorks, and purple martins in the vicinity of the Project.

Numerous cultural resources also exist in the Project vicinity.

Details about these resources will be described in the various resource conservation groups.

5. Identify specific goals and objectives for managing recreation at Lake Murray and/or in the LSR.

Recreational sites and access areas on the lake and the river should be adequate to allow for the continued rapid population growth in the Midlands over the term of the new license based on surveys of the public and input from the stakeholders and public.

Sites should be spaced around the lake and along the river corridor to provide legal public access to the different geographic sections of both.

Uncrowded conditions should be available most of the time at the sites, with natural viewsapes and provisions for most of the current and anticipated popular recreational activities incorporated into the overall provisions.

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## Standard Process Form

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Patrols and/or assistance for emergencies should be provided, though not necessarily manned, such as adequate phone boxes.

Safe recreational opportunities should be available for boaters on the lake with adequate lake levels for the navigational markers, and on the river with release levels that are not life-threatening to the average person.

The recommendations of the Lower Saluda Scenic River Advisory Council should be implemented to reflect the broad community-based consensus for river access, with consideration of additional river access to areas where trespassing is now the only way to enter an area.

### **STEP 2 – ESTABLISH BASELINE CONDITIONS**

6. What is the nature of existing recreational access to Lake Murray and the LSR?
- How many public accessible, developed recreation sites are there?

15 SCE&G owned sites on Lake Murray: 3 on the lower Saluda River  
31 public marinas on Lake Murray

- Where are they located/how are they distributed around the Project?

See the Saluda Recreation Map

- Of these publicly accessible access sites how many are owned and operated by public versus private entities and how are they supervised?

2 of the SCE&G owned sites on Lake Murray are managed by other entities: Dreher Island State Parks is managed by South Carolina Parks, Recreation and Tourism and Larry L. Koon Boat Landing is managed by South Carolina Department of Natural Resources.

1 of the SCE&G owned sites on the LSR (Saluda Shoals Regional Park) is managed by the Irmo-Chapin Recreation Commission.

The 31 public marinas are managed by various commercial entities.

- How many sites, open to the public, provide boat access to the reservoir and the LSR?

12 of the SCE&G owned sites on Lake Murray provide boat access; 21 of the public marinas provide boat access.

3 of the sites on the LSR provide boat access.

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**Standard Process Form**

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e. How many provide shoreline fishing?

6 of the SCE&G owned sites on Lake Murray have formal fishing docks/piers.

1 of the SCE&G owned sites on the LSR has a formal fishing dock/pier.

f. Identify the most heavily used facilities.

The most used Lake Murray sites during the 2006 recreation season were Dreher Island State Park (116,680 recreation days or 25 percent of total use), Bundrick Island (94,580 recreation days or 20 percent of total use), Dam Site (54,460 recreation days or 12 percent of total use), and Larry Koon (54,080 recreation days or 12 percent of total use).

The most used LSR sites were Saluda Shoals Park (135,050 recreation days or 58 percent of total use on the lower Saluda River), Mill Race B (37,950 recreation days or 16 percent of total use), Metts Landing (24,520 recreation days or 11 percent of total use) and Mill Race A (22,980 recreation days or 10 percent of total use).

g. Are there informal, undeveloped use areas? Where are they?

There are 23 informal sites on Lake Murray. Their locations are shown on the Saluda Recreation Map.

There are 2 informal access areas on the LSR, but they are located outside the project boundary. They are located upstream of the Riverbanks Zoo (Mill Race A) and downstream of the Zoo (Mill Race B).

7. What types of existing developed facilities are there?

a. Enumerate boat ramps, restrooms, docks, and other facilities.

There are a total of: 351 picnic tables, 201 grills, 55 shelters, 44 trash cans, 38 restrooms (34 permanent), 12 boat launches (with 23 lanes), 10 courtesy docks and 6 fishing piers on Lake Murray.

There are a total of: 50 picnic tables, 6 grills, 4 shelters, 27 trash cans, 3 restrooms (3 permanent), 2 boat launches (with 3 lanes), 3 carry-in launches, and 1 fishing pier on the LSR.

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b. What is the existing capacity at each site?

<b>Public Access Sites</b>	<b>Vehicle Spaces</b>	<b>Vehicle/Trailer Spaces</b>	<b>ADA Spaces</b>	<b>Total Number of Parking Spaces</b>
<u>Dam</u>	<u>72</u>	<u>106</u>	<u>3</u>	<u>181</u>
<u>Parksite</u>	<u>339</u>	<u>0</u>	<u>4</u>	<u>343</u>
<u>Larry Koon</u>	<u>8</u>	<u>39</u>	<u>2</u>	<u>49</u>
<u>Shull Island</u>	<u>0</u>	<u>8</u>	<u>0</u>	<u>8</u>
<u>Murray Shores</u>	<u>26</u>	<u>24</u>	<u>0</u>	<u>50</u>
<u>Riverbend</u>	<u>49</u>	<u>35</u>	<u>0</u>	<u>84</u>
<u>Higgins Bridge</u>	<u>0</u>	<u>8</u>	<u>0</u>	<u>8</u>
<u>Kempson Bridge</u>	<u>16</u>	<u>16</u>	<u>0</u>	<u>16</u>
<u>Lake Murray Estates Park</u>	<u>0</u>	<u>22</u>	<u>0</u>	<u>22</u>
<u>Macedonia Church</u>	<u>12</u>	<u>0</u>	<u>0</u>	<u>12</u>
<u>Sunset</u>	<u>12</u>	<u>14</u>	<u>0</u>	<u>28</u>
<u>Rocky Point</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>3</u>
<u>Dreher Island State Park</u>	<u>418</u>	<u>177</u>	<u>14</u>	<u>619</u>
<u>Hilton</u>	<u>8</u>	<u>27</u>	<u>2</u>	<u>37</u>
<u>Saluda Shoals Park</u>	<u>435</u>	<u>10</u>	<u>18</u>	<u>463</u>
<u>Mett's Landing</u>	<u>5</u>	<u>18</u>	<u>2</u>	<u>25</u>
<u>Gardendale</u>	<u>40</u>	<u>0</u>	<u>0</u>	<u>40</u>
<u>Millrace A</u>	<u>45</u>	<u>0</u>	<u>0</u>	<u>45</u>
<u>Millrace B</u>	<u>64</u>	<u>0</u>	<u>0</u>	<u>64</u>

c. What is the general condition of each site and its facilities?

Condition at SCE&G owned sites were rated on a scale from 1 to 5 where 1 equals "poor" and 5 equals "excellent".

<b>Public Access Sites</b>	<b>Poor</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Excellent</b>
<u>Dam</u>	<u>2%</u>	<u>3%</u>	<u>29%</u>	<u>31%</u>	<u>35%</u>
<u>Parksite</u>	<u>5%</u>	<u>5%</u>	<u>22%</u>	<u>36%</u>	<u>31%</u>
<u>Larry Koon</u>	<u>4%</u>	<u>2%</u>	<u>17%</u>	<u>28%</u>	<u>50%</u>
<u>Shull Island</u>	<u>8%</u>	<u>5%</u>	<u>10%</u>	<u>29%</u>	<u>48%</u>
<u>Bundrick Island</u>	<u>6%</u>	<u>12%</u>	<u>33%</u>	<u>28%</u>	<u>22%</u>
<u>Murray Shores</u>	<u>1%</u>	<u>6%</u>	<u>25%</u>	<u>39%</u>	<u>30%</u>
<u>Riverbend</u>	<u>5%</u>	<u>7%</u>	<u>25%</u>	<u>35%</u>	<u>29%</u>
<u>Higgins Bridge</u>	<u>3%</u>	<u>11%</u>	<u>49%</u>	<u>24%</u>	<u>14%</u>
<u>Kempson Bridge</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>18%</u>	<u>82%</u>
<u>Lake Murray Estates Park</u>	<u>0%</u>	<u>0%</u>	<u>6%</u>	<u>51%</u>	<u>43%</u>
<u>Macedonia Church</u>	<u>0%</u>	<u>0%</u>	<u>17%</u>	<u>8%</u>	<u>75%</u>
<u>Sunset</u>	<u>0%</u>	<u>0%</u>	<u>5%</u>	<u>32%</u>	<u>63%</u>

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**Standard Process Form**

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<b>Public Access Sites</b>	<b>Poor</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Excellent</b>
<u>Rocky Point</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>100%</u>	<u>0%</u>
<u>Dreher Island State Park</u>	<u>1%</u>	<u>3%</u>	<u>6%</u>	<u>20%</u>	<u>71%</u>
<u>Hilton</u>	<u>0%</u>	<u>1%</u>	<u>0%</u>	<u>11%</u>	<u>88%</u>
<u>Saluda Shoals Park</u>	<u>0%</u>	<u>0%</u>	<u>5%</u>	<u>17%</u>	<u>78%</u>
<u>Mett's Landing</u>	<u>0%</u>	<u>1%</u>	<u>17%</u>	<u>48%</u>	<u>34%</u>
<u>Gardendale</u>	<u>3%</u>	<u>7%</u>	<u>34%</u>	<u>38%</u>	<u>17%</u>
<u>Millrace A</u>	<u>17%</u>	<u>8%</u>	<u>43%</u>	<u>19%</u>	<u>13%</u>
<u>Millrace B</u>	<u>6%</u>	<u>13%</u>	<u>40%</u>	<u>27%</u>	<u>14%</u>

d. Ideas for improving existing facilities.

To be determined

8. Describe notable recreation activities on Lake Murray and/or the LSR.  
 a. List recreation activities currently occurring and identify most prominent activities.

Lake Murray:

<b>Activity</b>	<b>% of Use</b>
<b><u>Water-Based Activities</u></b>	
<u>Bank Fishing</u>	<u>14%</u>
<u>Boat Fishing</u>	<u>37%</u>
<u>Pier/Dock Fishing</u>	<u>2%</u>
<u>Canoeing/Kayaking</u>	<u>0%</u>
<u>Jet Skiing</u>	<u>3%</u>
<u>Motor Boating</u>	<u>8%</u>
<u>Pontoon/Party Boating</u>	<u>6%</u>
<u>Sailing</u>	<u>0%</u>
<u>Waterskiing/Tubing/Tow</u>	<u>2%</u>
<u>Swimming</u>	<u>8%</u>
<b><u>Water-Based Activities Total</u></b>	<b><u>80%</u></b>
<b><u>Land-Based Activities</u></b>	
<u>Bicycling</u>	<u>0%</u>
<u>Camping</u>	<u>3%</u>
<u>Event</u>	<u>0%</u>
<u>Picnicking</u>	<u>5%</u>
<u>Playground</u>	<u>0%</u>
<u>Sightseeing</u>	<u>3%</u>
<u>Sunbathing</u>	<u>1%</u>
<u>Walking/Hiking/Backpacking</u>	<u>2%</u>
<u>Other</u>	<u>4%</u>

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<u>Activity</u>	<u>% of Use</u>
<b><u>Land-Based Activities Total</u></b>	<b><u>20%</u></b>

Other activities that were not seen at public recreation sites, but occur on the reservoir include sailing and waterfowl hunting.

Lower Saluda River (does not include Mill Race A and Mill Race B, which are outside the project boundary):

<u>Activity</u>	<u>% of Use</u>
<b><u>Water-Based Activities</u></b>	
Bank Fishing	9%
Boat Fishing	11%
Pier/Dock Fishing	1%
Wading Fishing	0%
Flatwater Canoe/Kayak	13%
Rafting	0%
tubing/Floating	5%
Whitewater Canoe/Kayak	7%
Swimming	4%
<b><u>Water-Based Activities Total</u></b>	<b><u>51%</u></b>
<b><u>Land-Based Activities</u></b>	
Bicycling	3%
Camping	0%
Dog Walking	7%
Event	3%
Nature Study/Wildlife	1%
Picnicking	1%
Playground/Spraypark	6%
Sightseeing	12%
Sunbathing	0%
Walking/Hiking/Backpacking	5%
Other	9%
<b><u>Land-Based Activities Total</u></b>	<b><u>49%</u></b>

**Comment:** Do you have data yet to back this up?

**Deleted:** ¶  
 Greatest activity is independent family recreation, including many forms of boating, waterskiing, swimming/sunbathing, fishing, picnicking, and camping.¶  
 Solitary wade fishing in river.¶  
 Bank fishing at public sites and impromptu sites in the lake and river.¶  
 Small and large bass tournaments.¶  
 Motor boating¶  
 Sailing¶  
 Fishing from boats¶  
 Fishing from banks¶  
 Wade fishing¶  
 Swimming and sunning¶  
 Picnicking¶  
 Canoeing and kayaking (flatwater and whitewater)¶  
 Floating with tubes and rafts¶  
 Waterfowl hunting¶  
 Walking, biking, skating, wildlife watching at Saluda Shoals Park and soon to be developed Three Rivers Greenway.

**Inserted:** Greatest activity is independent family recreation

**Inserted:** , including many forms of boating, waterskiing, swimming/sunbathing, fishing, picnicking, and camping.¶  
 Solitary wade fishing in river.¶  
 Bank fishing at public sites and impromptu sites in the lake and river.¶  
 Small and large bass tournaments.

**Inserted:** Motor boating¶  
 Sailing¶  
 Fishing from boats¶  
 Fishing from banks¶  
 Wade fishing¶  
 Swimming and sunning¶  
 Picnicking¶  
 Canoeing and kayaking (flatwater and whitewater)¶  
 Floating with tubes and rafts

**Inserted:** ¶  
 Waterfowl hunting¶  
 Walking, biking, skating, wildlife watching at Saluda Shoals Park and soon to be developed Three Rivers Greenway.

**Deleted:** 12

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**Deleted:** 12

b. Where are these uses occurring, and are they concentrated in certain areas?

See Table D-1 and Table E-1 in the Recreation Assessment Study Report.

There are some unique activities that were not captured in the surveys of public site users. These include waterfowl hunting, which takes place mostly in the upper reservoir due to legislative restrictions regarding hunting near residential development, and wade fishing, which is concentrated at Sandy Beach, Corley Island, and the Oh Brother/Ocean Boulevard rapids section below the I-26 bridge.

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- c. Identify existing impediments to these activities, if any.

Dramatic river fluctuations are impediments to water-based recreational activities along the lower Saluda River.

9. Are there known management issues associated with use?

- a. Are there areas of congestion, and if so where?

- b. Are there known conflicts between users, and if so where and when?

Fishing tournaments are disruptive to other boaters and residents. There needs to be an established, enforced protocol for organizing fishing tournaments.

Jet skis and large motorboats are disruptive to anglers, other boaters, and residents.

Kayakers are often called upon to rescue rock people near Zoo.

- c. Are there other known management issues, such as littering, trespassing, etc.?

Enforcement of established rules are limited by funding, staffing, and political boundaries.

- d. Are there known issues regarding recreational safety?

Wade fishing, canoeing/kayaking, and other water contact and bank use is often dangerous due to river fluctuations in water levels on the Lower Saluda River.

10. What is the expected future demand for recreation activities at Lake Murray?

- a. Will existing facility capacity likely be exceeded, and if so where and when?  
b. Would accommodating this demand be consistent with the long-term vision for the reservoir?  
c. Will demand introduce new or additional congestion, conflicts, or other management issues?

11. Identify current local benefits from recreation and any local detriments.

Better quality of life, outdoor experiences, physical fitness, and mental health benefits. Commercial enterprises rent and/or sell boating, fishing, and other equipment, provide services, and stimulate the local/regional economy.

### **STEP 3 – DETERMINE WHAT IS NEEDED AND WHEN**

12. Ideas for better or different access, consistent with Step 2 above.

13. Potential facility enhancements or upgrades, consistent with Step 2 above.

**Deleted:** ¶  
Lower Saluda River supports all above activities except sailing¶  
Whitewater boating concentrated on Saluda River below I-26 Bridge¶  
Swimming and sunning on Lower Saluda concentrated at Riverbanks Zoo area; and will expand upriver when greenway trail opens in 2007¶  
Wade fishing concentrated at shoal areas of lower River: at least four areas along river¶  
Waterfowl hunting – mostly in the upper lake due to legislative restrictions regarding residential development.¶

**Inserted:** ¶  
Lower Saluda River supports all above activities except sailing¶  
Whitewater boating concentrated on Saluda River below I-26 Bridge¶  
Swimming and sunning on Lower Saluda concentrated at Riverbanks Zoo area; and will expand upriver when greenway trail opens in 2007¶  
Wade fishing concentrated at shoal areas of lower River: at least four areas along river

**Inserted:** ¶  
Waterfowl hunting – mostly in the upper lake due to legislative restrictions regarding residential development.

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¶

**Deleted:** Proposed barriers near dam may limit fishing/boating in river.¶

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- 14. Potential new facilities, or other management actions, consistent with Step 2 above.
- 15. What are the priorities regarding identified needs both in terms of resources and time? How do priorities compare across the entire Project?

**STEP 4 – DECIDE HOW NEEDS WILL BE MET AND WHO IS RESPONSIBLE**

**QUESTIONS REGARDING RESERVOIR LEVELS**

16. How is the Project currently operated and what are the typical reservoir levels during key recreation seasons?

- SCE&G operates Saluda Hydroelectric Project as a multi-purpose project. The seasonal changes in elevations provide hydroelectric generation, maintenance of downstream water quality, a unique tailrace fishery, and municipal/industrial water supply.
- SCE&G has a verbal agreement with SCDHEC for a minimum flow of 180 cfs.
- During the low DO season which generally runs from late June to early December, SCE&G will try to maintain a minimum flow of 400 – 500 cfs to help maintain a higher level of DO in the Lower Saluda River.
- From April through the end of August the lake is operated near the normal operating high water level of el. 358 ft Plant Datum (PD). Maximum full pool is el. 360 PD.
- Drawdown begins near the end of August or early September and ends in late December near the winter pool level of 350 - 352 ft PD. This allows additional storage capacity in anticipation of the late winter and early spring rainy season. In recent years, the lake has been managed for a minimum winter pool level of approximately 354 ft PD in response to the requests of stakeholder groups.
- At the beginning of January the lake is allowed to refill so it will be at the normal operating high water level of 358 ft. PD by April.
- The plant normally operates for contingency reserve to meet our obligation to the Virginia/Carolinas Reserve Sharing Group (VACAR), a member of the Southeastern Electric Reliability Council (SERC), which is governed by the North American Electric Reliability Council (NERC).
- In anticipation of heavy rains from a tropical storm or hurricane, the plant will generate as necessary to manage the lake level. Power generation is increased to provide lake level management normally from September through December.
- Low lake levels can cause concern for lake residents, commercial establishments, and boaters due to their impacts on recreation. As the lake levels drop, more impacts are recognizable. A lake elevation of 356 ft PD was recognized as optimal in the Lake Murray Association September 2005 Lake Murray User Survey and in Lake Murray Homeowners Coalition surveys. According to these surveys, when the lake drops below elevation 352 ft PD more serious impacts to recreation occur.

17. Are there changes to Project operations that you would like to see addressed to improve the overall value of the reservoir, and how specifically would such changes benefit recreation?

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**Deleted:** , system reserve, and emergency generation requirements

**Deleted:** <#>Power generation

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**Inserted:** <#> increased to allow SCE&G to meet their obligations of contingency reserve

**Deleted:** <#>increased to allow SCE&G to meet their obligations of contingency reserve responsibility as part of our VACAR agreement with neighboring utilities and provide lake level management normally from September through December.¶ Low water levels (below \_\_\_ ft.) causes concern by many lake residents, commercial establishments, and boaters – year round but especially during peak season.

**Inserted:** <#>responsibility

**Inserted:** <#>as part of our VACAR agreement with neighboring utilities and provide lake level management normally from September through December.

**Inserted:** Low water levels (below \_\_\_ ft.) causes concern by many lake residents, commercial establishments, and boaters – year round but especially during peak season.

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- Current reservoir level operations balance the multi-purpose use of the reservoir. Maintaining the existing reservoir level fluctuations would allow for continued water level management through daily and weekly power generation operations however recreation would see no additional benefits. Conversely, limiting the seasonal fluctuation may have recreational benefits but other project purposes would be compromised (power generation, water level management, water quality maintenance, and aquatic weed control).
- Higher lake levels will increase, improve and enhance recreational opportunities.

**Deleted:** <#>What minimum lake elevation will provide recreational benefits during each season of the year?¶

18. What are the impacts of seasonal and/or daily variations in reservoir level?

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- There are no large daily fluctuations in reservoir levels at the Saluda Hydroelectric Project (there are large fluctuations in the lower Saluda River water level). However, daily fluctuations in lake level could create a potential safety issue.
- Weekly and seasonal fluctuations in lake level may have an effect on recreation access.

**Deleted:** that can occur without adversely affecting the overall value of the project (including impoundment objectives such as recreation, fish and wildlife, flood control, generation, navigation, etc.)

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19. What are the reservoir levels at which recreation problems tend to occur (may be different for different locations or problems)?

- SCE&G already extended boat ramps at several of their public access parks to accommodate a water level down to el. 345 ft PD.
- Buoys function more appropriately when lake levels are at 354 ft PD or higher.

**Deleted:** <#>There appears to be a potential impact to recreational resources when the lake level is lower (below \_\_\_ ft.)¶

**Inserted:** <#>There appears to be a potential impact to recreational resources when the lake level is lower

**Inserted:** <#> (below \_\_\_ ft.)

20. When (i.e., what time of year) and how frequently do recreational problems occur related to reservoir levels?

**Inserted:** <#>¶ SCE&G already extended boat ramps at several of their public access parks to accommodate a water level down to el. 345 ft PD.

- In general, the operation of Saluda Hydroelectric Project has been consistent throughout the years except for 1990, 1996, 2002 – 2004, and 2006. During those years the lake level was lowered to around el. 345 – 348 ft PD for the following project maintenance requirements:  
1990 – Intake towers maintenance  
1996 – Hydrilla control as requested by SCDNR  
2002 – 2004 – FERC Order for safety during dam remediation project  
2006 – Upstream riprap repair

**Deleted:** ¶

**Deleted:** <#>Some navigational hazards (unmarked) occur when levels drop below \_\_\_ ft.¶

**Inserted:** <#>Some navigational hazards (unmarked) occur when levels drop below \_\_\_ ft.

- It may be necessary to lower the lake level to around el. 345 ft PD in the future for maintenance of project structures, managing lake resources, installing new recreational access, or other extraordinary circumstances.

**Inserted:** <#>¶

**Deleted:** will

- Seasonal variations occur depending on rainfall and upstream water flow.

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**Inserted:** and installing new recreational access

21. Why are operating water levels important to the operation of the project and the overall system?

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- The Saluda Hydroelectric Project is a multi-purpose reservoir. The changes in water level have many beneficial impacts both upstream and downstream of the dam.
- The project is used to meet our contingency reserve capacity obligation as part of the VACAR agreement. This is for a loss on our own system or by one of our neighboring Reserve Sharing Group utilities.

**Deleted:** The current operating water levels are critical for the project to meet its required purposes.

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- Electricity (inexpensive, clean, renewable)
- Electric system ancillary services (transmission line maintenance & overload protection, security resource for VCS Nuclear Station)
- Navigation support
- Boating opportunities
- Municipal and industrial water supply

22. Are there state or federal operating requirements that stipulate specific operating goals?

- SCE&G and SCDHEC have an agreement to discharge a minimum flow or 180 cfs from the project.
- Article 12 of the FERC license requires that reservoir levels and discharge from storage be controlled by reasonable rules and regulations of the Commission for the protection of life, health, and property and for other beneficial public uses including recreational purposes.
- Exhibit H of the latest FERC license application identifies the lower lake level to be Elev. 350 ft PD during normal flow years and 345 ft PD during low flow years.
- Our McMeekin Generating Station NPDES permit requires a minimum of 2,500 cfs discharge from Saluda Hydro prior to discharging the fossil plant circulating water return directly into the Lower Saluda River.
- NERC/SERC/VACAR Agreements – SCE&G primarily uses Saluda to meet its reserve capacity requirements.

**Deleted:** <#>Trout fishery¶  
<#>Downstream water quality and aquatic habitat¶

**Inserted:** <#>Trout fishery¶  
<#>Downstream water quality and aquatic habitat¶  
Municipal and industrial water supply

**Deleted:** <#>Downstream recreation.¶

**Inserted:** <#>Downstream recreation.

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**Deleted:** Elev.

### QUESTIONS REGARDING DOWNSTREAM FLOWS

23. Are there riverine recreation opportunities below the dam? If yes, move to additional questions, if not, stop.

Yes, trout fishing (wading, bank, boat), striper fishing (wading, bank, boat), canoeing/kayaking, tubing, sunbathing/swimming/rock hopping, picnicking, walking/hiking, bicycling, wildlife watching.

24. Do we know how different flow levels affect recreation opportunities and specific recreation activities?

25. Can opportunities be enhanced by modifying releases, and in what way?

Predictable flows would make it safer, easier to fish/boat/swim in the river. It would also enhance the commercial aspects of boating/fishing in the river (allow outfitters/guides known times they could take paying customers into the water safely).

26. How would modified releases affect upstream lake levels?

27. How would suggested modified downstream flows affect project operations at the project and at upstream and downstream projects?

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## Standard Process Form

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28. Are there additional concerns with regard to state and federal requirements or existing ecological issues that limit suggested changes to downstream flows?

There are concerns about bank erosion due to high flows.

There are concerns about water quality/habitat for aquatic organisms due to low flows or continuous flows.

29. How binding is the VACAR agreement and when does it expire? (I notice that it is not listed in the state/federal operating requirements in Question 22).

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## Kacie Jensen

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**From:** Dave Anderson  
**Sent:** Wednesday, September 05, 2007 5:46 PM  
**To:** Van Hoffman; Bill Marshall; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Jennifer Hand; Jim Cumberland ; Joy Downs; Kelly Maloney; Lee Barber; Malcolm Leaphart; Marty Phillips; Steve Bell; Tim Vinson; Tommy Boozer; Tony Beber; Alison Guth; Alan Stuart  
**Cc:** 'Bill Argentieri'  
**Subject:** Example Recreation Plans

Recreation Management TWC Members:

In preparation for next weeks meeting, I have compiled several recreation plans that have been submitted to, and approved by, the FERC. I thought this may give you some idea of what to expect out of our recreation plan and give us some discussion points for next week (i.e., what do you like/dislike about these?). If anyone has any others they would like to distribute to the group, feel free.

Since most recreation plans include lots of maps and images, the file sizes of sending all of these is huge (23 mb). I have compiled them into one zip file to download from our FTP site. You should be able to click on this link and choose "save it to disk" or something like that depending on your operating system. If you have any trouble retrieving the file, let me know.

[file://ftp://ftp.kleinschmidtusa.com/Saluda\\_Rec\\_Report/Example\\_Rec\\_Plans.zip](file://ftp://ftp.kleinschmidtusa.com/Saluda_Rec_Report/Example_Rec_Plans.zip)

I will be sending around an updated "working document" later this week.

See you next week,

Dave

P.S. Your comments on the Spring Addendum are due by September 10th.

## Kacie Jensen

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**From:** Dave Anderson  
**Sent:** Thursday, August 30, 2007 4:06 PM  
**To:** Van Hoffman; Bill Marshall; Dave Anderson; David Hancock; Dick Christie (dchristie@comporium.net); George Duke; Jennifer Hand; Jim Cumberland ; Joy Downs; Kelly Maloney; Lee Barber; Malcolm Leaphart; Marty Phillips; Steve Bell; Tim Vinson; Tommy Boozer; Tony Beber; Alison Guth; Alan Stuart  
**Subject:** Recreation Management TWC Meeting

Recreation Management TWC Members,

I realize it has been quite a while since we last met, but now that all of the studies are either completed or nearing completion, it is time for us to reconvene.

Our next meeting will be on Thursday, September 13th at 9:30 am. The Lake Murray Training Center was all booked up, so we are going to try a new meeting place, the Panera Bread on Harbison Blvd. in Irmo.

The purpose of the meeting is to review the studies (Recreation Assessment, Boat Density, Spring Addendum) we have been working on and to develop a method for the drafting of the Recreation Plan. I will be sending out an updated "working documents" prior to our meeting to focus our time. We should be able to finish prior to 12 noon, but are planning on lunch in case we need the extra time.

Please let Alison know if you will be able to make it so we can plan accordingly for lunch.

Below is a link to the Panera Bread. The address is 1007 Bower Parkway, Columbia, SC 29212 in case you want to look it up yourself.

Dave

<http://maps.google.com/maps?f=q&hl=en&geocode=&q=1007+Bower+Parkway,+Columbia,+SC+29212&sll=37.0625,-95.677068&sspn=46.630055,81.738281&ie=UTF8&ll=34.068516,-81.164203&spn=0.01198,0.019956&t=h&z=16&om=1>



## Kacie Jensen

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**From:** Kelly Maloney  
**Sent:** Tuesday, May 08, 2007 1:38 PM  
**To:** 'Tony Bebber'; 'Bill Argentieri'; 'Bill Marshall'; 'Charlene Coleman'; Dave Anderson; 'Guy Jones'; 'J. Hamilton Hagood'; Jennifer Summerlin; 'Karen Kustafik'; Kelly Maloney; 'Malcolm Leaphart'; 'Mike Waddell'; 'Patrick Moore'  
**Subject:** Schedules

All,

I will be sending out invitation letters, itineraries and directions later this week after all participants have been identified. In the meantime, however, I wanted to inform everyone of the schedule for planning purposes:

- May 16 - Expert Panel Focus Group Meeting  
When: 7:00 pm to 9:00 pm  
Where: Saluda Shoals Park, Environmental Education Center
- May 17 - 20 - Flow Assessment Evaluations  
When: 8:00 am to between 11:00 am and 3:00 pm (depending on when folks get off the water)  
Where: Meet at Mill Race A (right side of Riverbanks Zoo parking lot) in the AM and at the end of the evaluation

I hope that this helps to inform everyone of the when's and where's of the activities next week. As I stated previously, I will send out more formal directions and information later this week.

Thank you,  
Kelly Maloney

**Kacie Jensen**

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**From:** Bill Marshall [MarshallB@dnr.sc.gov]  
**Sent:** Tuesday, May 08, 2007 10:44 AM  
**To:** Kelly Maloney; Tony Bebber; BARGENTIERI@scana.com; Charlene Coleman; Dave Anderson; Guy Jones; J. Hamilton Hagood; Jennifer Summerlin; Karen Kustafik; Malcolm Leaphart; Mike Waddell; Patrick Moore  
**Cc:** Dick Christie; Stuart Greeter  
**Subject:** RE: Flow Study Events - May 16 - 20

Kelly,

From the DNR, Stuart Greeter and I will participate in the recreational flow study for the Saluda hydro project. I plan to participate in activities on each day, May 16-20. Stuart Greeter is not available on May 19 and 20 but can participate on May 16-18.

I may be able to get additional DNR staff person involved if that would be helpful and I do understand that you want/prefer people who can participate on all dates.

My proposal for my own participation (and those who will join me) is that we paddle the river from Gardendale landing to Gervais Street on each flow date. For each flow, we can evaluate for the river for recreational boating and for wade fishing and rock hopping, if needed. To evaluate for wading and rock hopping, we would get out of boats at Ocean Blvd/Oh Brother, Stacy's Ledge, Mill Race, and Shandon Rapids and assess the suitability of wading and traversing the river channel on foot.

At this point, we plan to supply our own equipment and shuttles.

Thanks,

Bill Marshall

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**From:** Kelly Maloney [mailto:Kelly.Maloney@KleinschmidtUSA.com]  
**Sent:** Monday, May 07, 2007 10:56 AM  
**To:** Kelly Maloney; Tony Bebber; Bill Argentieri; Bill Marshall; Charlene Coleman; Dave Anderson; Guy Jones; J. Hamilton Hagood; Jennifer Summerlin; Karen Kustafik; Malcolm Leaphart; Mike Waddell; Patrick Moore  
**Subject:** RE: Flow Study Events - May 16 - 20

Everyone,

I apologize for the second email but I feel that I need to clarify the study plan. We will be undertaking a controlled flow evaluation for the four flows identified the week before last (700 cfs, 1,100 cfs, 2,500 cfs, and 4,000 cfs). To the extent possible based on your availability, I need everyone's participation in ALL four flow events. If a flow is not favorable to your activity (if the water is too high or too low to reasonably participate in your activity), then we have an "observation" situation. In other words, just because a flow is not favorable to a particular activity does not mean that we do not need input. In this situation, participants will be asked to observe the flow from land from the same access site and complete a survey accordingly. In a boating situation, we would ask that you observe the river from different vantage points/access sites along your route and complete a survey.

I look forward to hearing from everyone.

Thank you,  
Kelly

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

**From:** Kelly Maloney

**Sent:** Monday, May 07, 2007 10:11 AM

**To:** 'Tony Bebbber'; 'Bill Argentieri'; 'Bill Marshall'; 'Charlene Coleman'; Dave Anderson; 'Guy Jones'; 'J. Hamilton Hagood'; Jennifer Summerlin; 'Karen Kustafik'; Kelly Maloney; 'Malcolm Leaphart'; 'Mike Waddell'; 'Patrick Moore'

**Subject:** Flow Study Events - May 16 - 20

Good morning, Everyone,

I hope this email finds you well. I wanted to send a reminder to everyone that I need the following information from you by Friday, May 11 at the latest:

Focus Group - May 16:

- o Name(s) of individuals from your organization/constituency that will be participating in the focus group on May 16. We are trying to keep the group size manageable and intimate. Therefore, I ask that there be a maximum of two representatives for each organization/constituency.

Flow Evaluations - May 17 - 20:

- o Name(s) of individuals from your organization/constituency that will be participating in the flow evaluations on May 17 - May 20.
- o Dates of availability for each individual on your list - I need to know whether or not folks can participate in all four flow dates. We may need to drop the May 17 flow evaluation if we do not have enough participation.
- o The activity(ies) in which you and your constituents will be participating/observing.
- o Any equipment needs you may have (canoe or kayak, life jacket, waders, etc.). We expect that most individuals will have/provide their own equipment, however, we will provide equipment, as necessary. Everyone needs to have a life jacket (Coast Guard approved - Type III or Type V with a minimum buoyancy of 15 lbs.
- o The access site(s) you and your constituents prefer to use during the flow evaluations. You will be required to utilize the same site every day of the flow study. We want to have a broad representation of river locations and reaches so I may need to shift folks' locations as necessary to accomplish this. If you are boating, I will need to know your anticipated put-in and take-out locations.

If I do not hear from you this week, I will assume that you and your constituents will not be represented during the focus group or flow evaluations. I will be sending everyone an itinerary for both the focus group and flow evaluations later this week so everyone will know the who, what, when, where and how of next week's events. Please let me know if you have any questions or concerns.

Thank you,  
Kelly Maloney

## Kacie Jensen

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**From:** Kelly Maloney  
**Sent:** Monday, May 07, 2007 10:56 AM  
**To:** Kelly Maloney; 'Tony Bebber'; 'Bill Argentieri'; 'Bill Marshall'; 'Charlene Coleman'; Dave Anderson; 'Guy Jones'; 'J. Hamilton Hagood'; Jennifer Summerlin; 'Karen Kustafik'; 'Malcolm Leaphart'; 'Mike Waddell'; 'Patrick Moore'  
**Subject:** RE: Flow Study Events - May 16 - 20

Everyone,

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I look forward to hearing from everyone.

Thank you,  
Kelly

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

**From:** Kelly Maloney  
**Sent:** Monday, May 07, 2007 10:11 AM  
**To:** 'Tony Bebber'; 'Bill Argentieri'; 'Bill Marshall'; 'Charlene Coleman'; Dave Anderson; 'Guy Jones'; 'J. Hamilton Hagood'; Jennifer Summerlin; 'Karen Kustafik'; Kelly Maloney; 'Malcolm Leaphart'; 'Mike Waddell'; 'Patrick Moore'  
**Subject:** Flow Study Events - May 16 - 20

Good morning, Everyone,

I hope this email finds you well. I wanted to send a reminder to everyone that I need the following information from you by Friday, May 11 at the latest:

Focus Group - May 16:

- Name(s) of individuals from your organization/constituency that will be participating in the focus group on May 16. We are trying to keep the group size manageable and intimate. Therefore, I ask that there be a maximum of two representatives for each organization/constituency.

Flow Evaluations - May 17 - 20:

- Name(s) of individuals from your organization/constituency that will be participating in the flow evaluations on May 17 - May 20.
- Dates of availability for each individual on your list - I need to know whether or not folks can participate in all four flow dates. We may need to drop the May 17 flow evaluation if we do not have enough participation.
- The activity(ies) in which you and your constituents will be participating/observing.
- Any equipment needs you may have (canoe or kayak, life jacket, waders, etc.). We expect that most individuals will have/provide their own equipment, however, we will provide equipment, as necessary. Everyone needs to have a life jacket (Coast Guard approved - Type III or Type V with a minimum buoyancy of 15 lbs).
- The access site(s) you and your constituents prefer to use during the flow evaluations. You will be required to utilize the same site every day of the flow study. We want to have a broad representation of river locations and reaches so I may need to shift folks' locations as necessary to accomplish this. If you are boating, I will need to know your anticipated put-in and take-out locations.

If I do not hear from you this week, I will assume that you and your constituents will not be represented during the focus group or flow evaluations. I will be sending everyone an itinerary for both the focus group and flow evaluations later this week so everyone will know the who, what, when, where and how of next week's events. Please let me know

if you have any questions or concerns.

Thank you,  
Kelly Maloney

## Kacie Jensen

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**From:** Kelly Maloney  
**Sent:** Monday, May 07, 2007 10:11 AM  
**To:** 'Tony Bebber'; 'Bill Argentieri'; 'Bill Marshall'; 'Charlene Coleman'; Dave Anderson; 'Guy Jones'; 'J. Hamilton Hagood'; Jennifer Summerlin; 'Karen Kustafik'; Kelly Maloney; 'Malcolm Leaphart'; 'Mike Waddell'; 'Patrick Moore'  
**Subject:** Flow Study Events - May 16 - 20

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- Name(s) of individuals from your organization/constituency that will be participating in the flow evaluations on May 17 - May 20.
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- The activity(ies) in which you and your constituents will be participating/observing.
- Any equipment needs you may have (canoe or kayak, life jacket, waders, etc.). We expect that most individuals will have/provide their own equipment, however, we will provide equipment, as necessary. Everyone needs to have a life jacket (Coast Guard approved - Type III or Type V with a minimum buoyancy of 15 lbs.
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If I do not hear from you this week, I will assume that you and your constituents will not be represented during the focus group or flow evaluations. I will be sending everyone an itinerary for both the focus group and flow evaluations later this week so everyone will know the who, what, when, where and how of next week's events. Please let me know if you have any questions or concerns.

Thank you,  
Kelly Maloney

**Kacie Jensen**

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**From:** LEAPHART,JR., MALCOLML [MALCOLML@mailbox.sc.edu]  
**Sent:** Thursday, April 12, 2007 11:57 AM  
**To:** Dave Anderson; Kelly Maloney  
**Cc:** Alan Stuart; mwaddell@esri.sc.edu  
**Subject:** RE: Downstream Flows Study Update

Dave, Kelly:

**APRIL**

Please note that the Safety RCG is scheduled to meet next Wednesday, April 18, with the quarterly meetings on the 19th. Would suggest the focus groups meeting in another less busy week - unless you schedule the focus groups for the afternoon of April 18 as the Safety meeting ends?? Otherwise, only the evening of April 17 is 'doable' for the focus groups for Mike Waddell and I as we are both out of town on April 20.

**MAY**

As I noted before, Mike will represent TU for the onsite evaluation the week of May 14-20, in addition to the May 10 & 11 IFIM TWC field trips, while I am out of town. He will also coordinate with the local TU chapter if others are needed for those.

---

**From:** Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]  
**Sent:** Wed 4/11/2007 1:41 PM  
**To:** Kelly Maloney; Tony Bebbler; Bill Argentieri; Bill Marshall; Charlene Coleman; Dave Anderson; Guy Jones; J. Hamilton Hagood; Jennifer Summerlin; Karen Kustafik; Kelly Maloney; LEAPHART,JR., MALCOLML; Patrick Moore  
**Cc:** Alan Stuart  
**Subject:** RE: Downstream Flows Study Update

I just wanted to send a quick note to remind everyone that Kelly is waiting on nearly everyone to respond about possible meeting dates next week to have a focus group (17th, 18th, or morning of 20th). We are also looking to have the on-site evaluation the week of May 14 and need to know if this is doable.

Dave

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

**From:** Kelly Maloney  
**Sent:** Friday, April 06, 2007 2:16 PM  
**To:** Tony Bebbler; Bill Argentieri; Bill Marshall; Charlene Coleman; Dave Anderson; Guy Jones; J. Hamilton Hagood; Jennifer Summerlin; Karen Kustafik; Kelly Maloney; Malcolm Leaphart; Patrick Moore  
**Cc:** Alan Stuart  
**Subject:** Downstream Flows Study Update

Downstream Flows TWC,

Good afternoon. I hope this email finds you well. As several of you have posed questions and inquiries as to the status of the Downstream Recreation Flow Assessment, we thought we would provide a progress report. I have provided an update below on the various phases outlined in the Downstream Recreation Flow Assessment Study Plan:

11/12/2007

### Phase I - Literature Review and Desktop Analysis

This component of the study is ongoing and will continue through the duration. So far, we have compiled a fair amount of literature pertaining to recreation on the lower Saluda River including the Three Rivers Greenway Plan, South Carolina Statewide Comprehensive Outdoor Recreation Plan (SCORP), the Lower Saluda Scenic River Corridor Plan and Update, the Draft 2006 Saluda Recreation Assessment, and lower Saluda River creel surveys. In addition, we have collected hydrologic data from the USGS.

### Phase II – Focus Group and Field Reconnaissance

Expert Panel Focus Group - We would like to schedule this fairly soon as input received during the focus group will help us to determine what flows should be evaluated during the on-site reconnaissance. The members of the Downstream Flows TWC, and additional experienced recreational users and resources experts, as needed, will comprise the focus group. Please provide information regarding your availability for a focus group meeting on the afternoon or evening of April 17, the afternoon or evening of April 18 or the morning of April 20. Please also provide any suggestions you may have for additional individuals who should be invited to participate in the focus group panel.

Expert Panel On-site Evaluation – We would also like to schedule this effort soon. We are tentatively looking at the week of May 14 through May 20. We anticipate that this will be a combination of a land and water-based reconnaissance whereby participants will engage in a variety of activities (paddling, angling) or observe recreation sites with specific activities in mind (swimming, rock hopping) to provide input on the appropriateness of each flow level for the specific activity in which that individual is participating or observing. There will be three flows provided which will be discussed and finalized during the expert panel focus group. Tentatively, we anticipate requesting a flow of 1,000 cfs or less (indicated in TWC meeting notes as being most appropriate for boating, swimming, rock hopping and wade angling), a flow of 2,500 cfs (indicated in TWC meeting notes as being most appropriate for boating, tubing and bank angling), and a flow of 5,000 cfs (indicated in TWC meeting notes and American Whitewater as most appropriate for whitewater paddling).

Rate of Change Video Documentation - A high flow rate of change event (18,000 cfs) was video documented on January 31, 2007. The surveyor was stationed at Mill Race rapids from approximately 7:00 am to about 12:30 pm to capture both the water rise and a duration of maximum stage

### Phase III – Field Data Collection

Level Logger Deployment and Data Collection - The level loggers, which record the stage (in feet) and temperature every minute, were deployed at the 8 sites detailed in the study plan. The level loggers were installed during the week of January 15 and removed during the week of February 19. Data was collected from January 22 through February 22 and includes the following flow events:

Monday, January 22 – 12,000 cfs – 5:49 AM  
Tuesday, January 23 – 10,000 cfs – 5:56 AM  
Wednesday, January 24 – 8,000 cfs – 5:49 AM  
Tuesday, January 30 – 14,000 cfs – 6:11 AM  
Wednesday, January 31 – 18,000 cfs – 6:10 AM  
Thursday, February 1 – 16,000 cfs – 6:10 AM  
Tuesday, February 6 – 14,000 cfs – 5:00 AM  
Tuesday, February 6 – 1,000 cfs – 6:00 PM  
Wednesday, February 7 – 2,000 cfs – 5:55 PM  
Thursday, February 8 – 3,000 cfs – 3:55 AM  
Tuesday, February 13 – 4,000 cfs – 6:03 AM  
Wednesday, February 14 – 5,000 cfs – 5:00 PM



Thursday, February 15 – 6,000 cfs – 4:00 AM

Level Logger Analysis - Analysis of the level logger data, in conjunction with USGS hydrologic data, as per the study plan is ongoing.

We hope that this helps to clarify the status of the Downstream Recreation Flow Assessment Study Plan. If you have any additional questions or concerns, do not hesitate to contact me or Dave Anderson.

Thank you,  
Kelly Maloney


## Kacie Jensen

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**From:** Alison Guth  
**Sent:** Thursday, March 29, 2007 2:25 PM  
**To:** Tim Vinson; Alan Stuart; Bertina Floyd; Bill Argentieri; Dave Anderson; Dick Christie; Joy Downs; Lee Barber; Steve Bell  
**Subject:** Lake Levels TWC Final Notes

Hello All,

Attached is the final set of meeting notes for the Lake Levels TWC meeting on February 14th. I have also attached the Recreation Working Document with the group edits. Thanks, Alison

  
2007-2-14 final Meeting Minute...    Recreation RCG Working Documen...

**Alison Guth**  
**Licensing Coordinator**  
**Kleinschmidt Associates**  
**101 Trade Zone Drive**  
**Suite 21A**  
**West Columbia, SC 29170**  
**P: (803) 822-3177**  
**F: (803) 822-3183**

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RCG  
Lake Levels TWC**

**SCE&G Lake Murray Training Center  
February 14, 2007**

Final acg 3-29-07

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**ATTENDEES:**

Alison Guth, Kleinschmidt Associates      Bill Argentieri, SCE&G  
Joy Downs, LMA                                      Steve Bell, Lake Murray Watch  
Bertina Floyd, Lake Murray Homeowners Coalition

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Alison Guth opened the meeting and noted that the discussion would be regarding the Reservoir Levels section of the Recreation Standard Process Form. She asked what additional information was needed to answer the questions specified in the document. The group noted that they would like to go through the questions and update the items when necessary. Bill Argentieri fielded questions on the responses that he provided in the document and the group collectively made additions and wording changes. Steve Bell indicated that he believed more information was needed on how SCE&G makes operation decisions based on the flow forecasting models. He noted that he would not like to see the lake drop in September unless there was an approaching hurricane. Bill replied that in the fall they usually aim for an elevation based on the flow model and generate in a systematic manner to reach the desired elevation. He continued to explain that in the spring the dispatchers prefer the lake level to be around 350' to 352' in order to prepare for the spring rain events.

In addition to discussion on the Standard Process Form, the group had brief discussion on the operations model. It was noted that this group would make lake level recommendations back to the Recreation RCG, which would then make lake level recommendations to the Operations group for input into the HEC ResSim model. The group noted that there would be other factors that would help determine what the lake level would be best, such as the results from the IFIM studies. Joy noted that according to the Lake Murray Association user surveys, an elevation of 354' would meet the recreation needs of most of the individuals surveyed.

The group concluded the additions and changes to Standard Process Form and adjourned. The group would meet again when necessary.

# Recreation Resource Conservation Group

## Working Documents

March 29, 2007

**Deleted:** March 1, 2007

**Inserted:** March 1, 2007

**Deleted:** February 22, 2007

**Inserted:** February 22, 2007

**Deleted:** December 5, 2006



## Recreation Resource Conservation Group Work Plan

FINAL

<b>Facilitator:</b>		
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com
<b>Members:</b>		
Name	Organization	E-mail
Alan Axson	Columbia Fire Department	cfdwaxson@columbiasc.net
Alan Stuart	KA	alan.stuart@kleinschmidtusa.com
Alison Guth	KA	alison.guth@kleinschmidtusa.com
Amanda Hill	USFWS	amanda_hill@fws.gov
Bill Argentieri	SCE&G	bargentieri@scana.com
Bill Marshall	Lower Saluda Scenic River Advisory Council, DNR	marshallb@dnr.sc.gov
Charlene Coleman	American Whitewater	cheetahrk@yahoo.com
Charles (Charlie) Rentz		flyhotair@greenwood.net
David Hancock	SCE&G	dhancock@scana.com
Dick Christie	SCDNR	dchristie@infoave.net
George Duke	LMHC	kayakduke@bellsouth.net
Gerrit Jobsis	Coastal Conservation League & American Rivers	gerritj@scccl.org; gjobsis@americanrivers.org
Guy Jones	River Runner Outdoor Center	guyjones@sc.rr.com
Irvin Pitts	SCPRT	ipitts@scprt.com
James A. Smith	LMA	bkawasi@sc.rr.com
Jeff Duncan	National Park Service	jeff_duncan@nps.gov
Jennifer O'Rourke	South Carolina Wildlife Federation	jenno@scwf.org
Jennifer Summerlin	Kleinschmidt Associates	jennifer.summerlin@kleinschmidtusa.com
Jim Devereaux	SCE&G	jdevereaux@scana.com
JoAnn Butler	resident	jbutler@scana.com
Joy Downs	Lake Murray Assn.	elymay2@aol.com
Karen Kustafik	City of Columbia Parks and Recreation	kakustafik@columbiasc.net
Keith Ganz-Sarto		keith_ganz_sarto@hotmail.com
Kelly Maloney	Kleinschmidt Associates	kelly.maloney@kleinschmidtusa.com
Larry Michalec	Lake Murray Homeowners Coalition	lmichalec@aol.com
Larry Turner	SCDHEC	turnerle@dhec.sc.gov
Leroy M. Barber Jr.	LMA	lbarber@sc.rr.com
Malcolm Leaphart	Trout Unlimited	malcolml@mailbox.sc.edu
Mark Leao	USFWS	mark_leao@fws.gov
Marty Phillips	Kleinschmidt Associates	marty.phillips@kleinschmidtusa.com
Michael Waddell	TU - Saluda River Chapter	mwaddell@esri.sc.edu
Miriam S. Atria	Capitol City Lake Murray Country	miriam@lakemurraycountry.com
Norman Ferris	Trout Unlimited	norm@sc.rr.com
Patricia Wendling	LMA	wwending@sc.rr.com
Patrick Moore	SCCCL AR	patrickm@scccl.org
Ralph Crafton	LMA	crafton@usit.net
Randy Mahan	SCANA	rmahan@scana.com
Richard Mikell	Adventure Carolina	adventurec@mindspring.com
Stanley Yalicki	LMA	joyyalicki@aol.com
Steve Bell	Lake Murray Watch	bellsteve9339@bellsouth.net
Suzanne Rhodes	SC Wildlife Federation	suzrhodes@juno.com
Tim Vinson	SCDNR	vinsont@dnr.sc.gov
Tom Brooks	Newberry Co.	tbrooks@newberrycounty.net
Tommy Boozer	SCE&G	tboozer@scana.com
Tony Bebbber	SCPRT	tbebbber@scprt.com
Van Hoffman	SCANA Land Mgt.	vhoffman@scana.com

## Recreation Resource Conservation Group Work Plan

FINAL

### Mission Statement

The mission of the Recreation RCG is to ensure adequate and environmentally-balanced public recreational access and opportunities related to the Saluda Hydroelectric Project for the term of the new license. The objective is to assess the recreational needs associated with the lower Saluda River and Lake Murray and to develop a comprehensive recreation plan to address the recreation needs of the public for the term of the new license. This will be accomplished by collecting and developing necessary information, understanding interests and issues, and developing consensus-based recommendations.

### Identified Issues

- ensure that recreational facilities and opportunities are protected and enhanced for current and future users, on and near the lake and river
  - boating access, including future access on Lexington side of lake
  - non-boating access
  - paddling access
  - security at recreation facilities
  - sufficient egress points on lower Saluda River
  - fishing opportunities for non-boaters
- conservation of lands
  - protect the scenic integrity of the Project
  - provide wildlife habitat areas
  - provide formal and informal (impromptu areas) recreational opportunities
    - consideration of special recreation designation areas classification (e.g., Two Bird Cove and Hurricane Hole)
- using the concept of adaptive management in future recreation planning
- river flows
  - safe recreational opportunities should be available on the lower Saluda River through daily flow release schedules and consensus-based flow rates
  - lack of scheduled recreation flows for the lower Saluda River
  - management of river flows to improve safety for river users (coordinate with Safety RCG)
  - minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)
- lack of a communication system that would encompass information to better inform the public of existing and projected conditions regarding lake levels and river flows as related to anticipated hydro operations and maintenance
- protection of the cold water fishery on the lower Saluda River
- impacts of lake level on recreational use of the lake
- consideration of The Lower Saluda River Corridor Plan and the Lower Saluda Scenic River Corridor Plan Update and their related public access sites and greenway-trail concepts

## Recreation Resource Conservation Group Work Plan

FINAL

### RCG Responsibilities

- Utilizing and modifying the Standard Process for evaluating and addressing recreation management and access issues specific to the Saluda Project, including developing a vision statement for the Project.
- Identifying specific areas where lake and river levels, river flows, and/or lake and river level fluctuations may be adversely affecting recreation including the nature and timing of the effect (e.g., access to sections of water, access to facilities, and aesthetics).
- Working with the Operations Resource Conservation Group to identify “reasonable” (based on hydrologic, structural, and other limitations identified) changes in Project operations that would benefit recreation.
- Working with appropriate RCGs to coordinate actions on issues of mutual interests such as river flows, lake levels, conservation of lands, and the siting and management of recreational facilities.
- Identifying any studies, if applicable, that need to be performed for identifying and/or evaluating (1) changes to Project operations, (2) enhancements to existing facilities, and (3) creation of new facilities to provide for public recreational access and opportunities.
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding modifications to facilities or current Project operations, and provide recommendations for future recreation access and facilities.

### Tasks and Products

- **Task 1** – Utilize the stepwise process diagram and solution principles to guide the planning process for addressing recreation management issues at the Saluda Project.
  - Final Process Diagram and Solution Principles
- **Task 2** – Develop a Vision Statement for the Saluda Project.
  - Final Vision Statement
- **Task 3** – Review the operational constraints and current operations of the Saluda Project (see Initial Consultation Document).
- **Task 4** – Answer the list of questions on the Standard Process Form in order to characterize the existing and potential future condition of access and lake levels and river flows – from a recreation setting perspective.
  - Final Standard Process Form
- **Task 5** – Review stakeholder requests for particular studies and/or enhancement measures to ensure that these are incorporated into study planning, if applicable
  - Final Study Plans and Possible Mitigation Measures
- **Task 6** – Develop and recommend operation scenarios to the Operations RCG for analysis. These scenarios should reflect initial thinking on potential solutions and be designed to narrow the focus of Task 10 below. Analysis by the Operations RCG will focus on an assessment of potential recreational impacts associated with any suggested changes to operations.
  - RCG Recommendations
- **Task 7** – Discuss results of the Operations RCG analyses.

## Recreation Resource Conservation Group Work Plan

FINAL

- **Task 8** – Develop study designs/methods/plans and review agreed upon studies, literature reviews, etc.
  - Final Study Plans
- **Task 9** – Check the solution principles to ensure proposed study plans are consistent.
  - Final Study Plans
- **Task 10** – Provide recommendations for Project operations and recreation access and facilities to be considered in conjunction with all ecological (including water quality), recreational, and safety issues.
  - RCG Recommendations
- **Task 11** – Develop a consensus based Recreation Plan for the Saluda Project that addresses all of the issues and tasks identified above.
  - Final Recreation Plan

### **Schedule**

**Late 2005/Early 2006**—Finalize Mission Statement, Standard Process Form, Solution Principles, and Work Plan

**Mid-2006**—Complete identification of studies, literature reviews, etc. that need to be completed to address issues and tasks identified in the Work Plan

**Late 2006**—Begin compilation of existing information, review preliminary study results, and draft an outline of the Recreation Plan

**2007**—Complete any studies identified in Task 8 and review results; draft recommendations to SHRG, complete draft Recreation Plan

**2008**—Finalize Recreation Plan and provide comments on Draft License Application

### **Possible Mitigation Measures to be Considered**

- creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on the north bank of the river connecting Saluda Shoals Park to Gardendale Landing and Riverbanks Zoo; and a park/preserve on the south side of river at Twelve-mile Creek
- creation of a state park on the south side of the reservoir
- creation of a multi-lane boating facility that can accommodate large tournaments
- consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.
- consideration of conservation easements on large tracts of land within the PBL



## Recreation Vision Statement for the Saluda Project

FINAL

The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, aesthetic values, cultural resources, and public recreational opportunities on the reservoir and the lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of Lake Murray and the lower Saluda River, and ensure adequate facilities and public access are provided. Given the size of the reservoir/hydro-project area, it is felt that it can continue to support a diversity of recreation opportunities. Recognizing that needs and demands will change, recreational uses will be monitored and managed to balance access/uses with the protection of natural resources and environmental quality; and planning for new facilities and management schemes will remain adaptive to changes.

Recreational opportunities for Lake Murray and the lower Saluda River over the next 30 to 50 years of the pending new FERC license for SCE&G should incorporate the following attributes:

- Recreational sites and access areas on the lake and the river should be adequate to allow for the continued rapid population growth in the Midlands over the term of the new license based on surveys of the public and input from the stakeholders and public.
- Sites should be spaced around the lake and along the river corridor to provide legal public access to the different geographic sections of both.
- Uncrowded conditions should be available most of the time at the sites, with natural viewscapes and provisions for most of the current and anticipated popular recreational activities incorporated into the overall provisions.
- Patrols and/or assistance for emergencies should be provided, though not necessarily manned, such as adequate phone boxes.
- Safe recreational opportunities should be available for boaters on the lake with adequate lake levels for the navigational markers, and on the river with release levels that are not life-threatening to the average person.
- The recommendations of the Lower Saluda Scenic River Advisory Council should be implemented to reflect the broad community-based consensus for river access, with consideration of additional river access to areas where trespassing is now the only way to enter an area.

Improvements to be considered at the Saluda Project include:

- Evaluation of SCE&G-owned Project lands for possible reclassification for recreation activities.
- Providing appropriate operations and maintenance of public recreation facilities.
- Optimizing the capacity of existing public recreation facilities to accommodate existing and future demand.

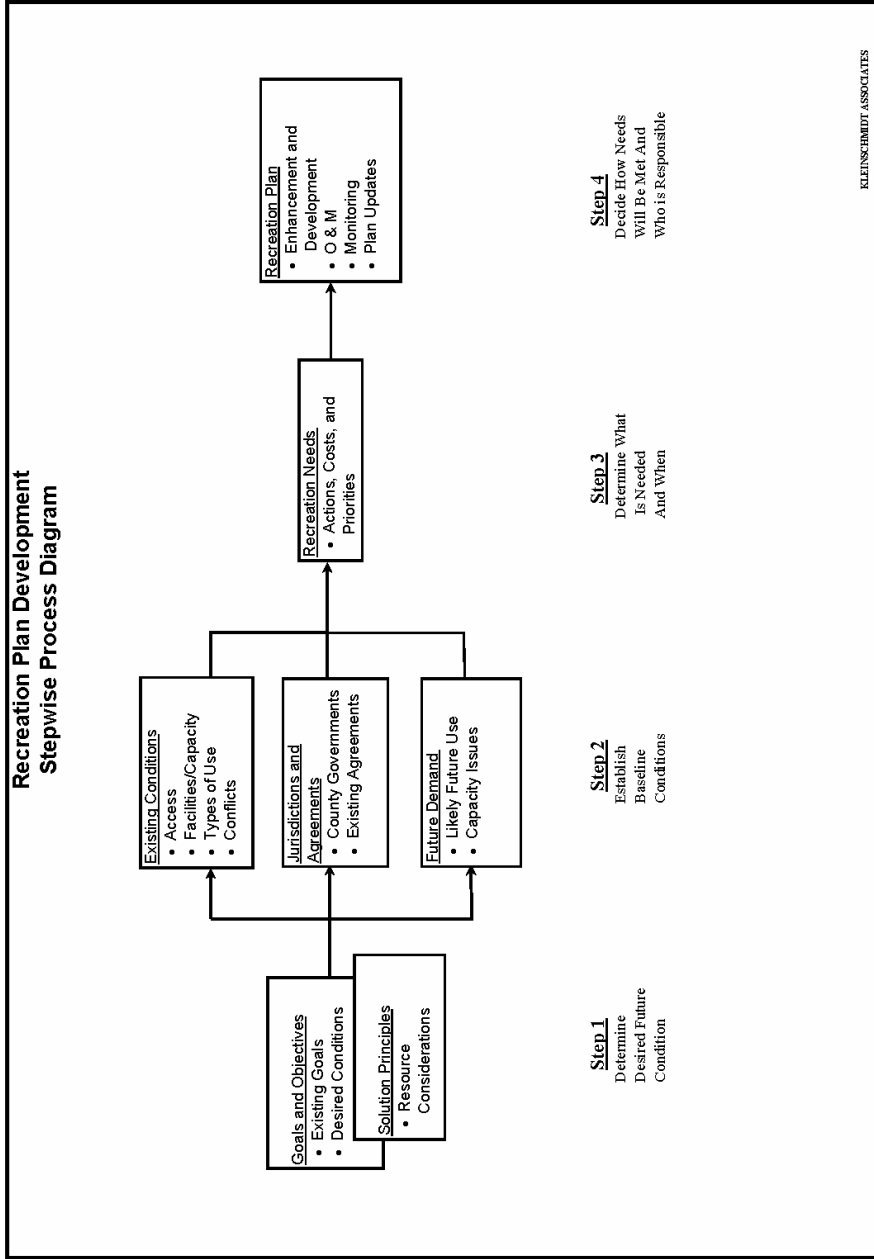
## **Recreation Vision Statement for the Saluda Project**

FINAL

- Improving access and safety in the public waters below the dam and minimizing impacts of project operations on downstream recreation, recognizing the need to meet power generation, and downstream flow responsibilities at Saluda.
- Managing lake level drawdowns so as to optimize safety and recreational opportunities.
- Managing river flows so as to optimize safety and recreational opportunities.
- Ensuring public access areas for the non-boating public remain available along the lake and river shorelines.
- Development of new facilities in accordance with the comprehensive plan as the need arises. Evaluation of other properties and potential partnerships as needed to meet the mission statement

## Stepwise Process Diagram

FINAL



## Solution Principles

FINAL

Consideration of new recreational facilities should be based on demonstrated need and the potential impact on existing facilities.

1. Priority should be given to demonstrated need within the FERC project boundary.
2. Priority should be given to recreational proposals where multiple stakeholders offer significant participation.
3. Recreational facilities should appeal to a broad public.
4. Reasonable access for the disabled should be provided.
5. Recreational needs should be prioritized for the project including a schedule of proposed improvements so that all costs are not in the first few years of the new license.
6. The improvement or expansion of existing recreational facilities should be considered first.
7. Additional recreational studies (if needed) should be only of sufficient scope and duration to provide necessary information to develop issue solutions.
8. Consensus based solutions are preferred over studies, unless solutions cannot be developed with existing information.
9. A process should be developed to adjust proposed improvements over the 30+ year time frame approximately every 7 to 10 years to account for changing needs. This should include the ability to trade a new needed facility for a proposed (but not built) facility of approximately the same cost.
10. Sufficient "future recreational" land should be set aside now to handle the recreational needs of 30+ years.

Preferred consideration will be given to ideas that:

- do not promote facilities that would adversely impact existing commercial operations;
- identify actual recreational needs that are not filled by existing facilities;
- receive broad public support;
- expand existing recreational facilities prior to developing green field sites;
- require doing recreational studies only if consensus cannot be reached with existing information (It is preferred to put financial resources into recreational facilities and opportunities that benefit the overall Project, rather than fund unnecessary/subjective studies).

## Standard Process Form

DRAFT

The following is a list of standard questions designed to help characterize existing recreation resources and aid in development of an appropriate recreation plan for the Saluda Project. Questions pertaining to recreation management are categorized according to the four-step recreation plan stepwise process diagram developed for the project. Questions pertaining to reservoir levels and downstream flows are listed following the facility management material.

### **STEP 1 – DETERMINE DESIRED FUTURE CONDITION**

1. Identify Lake Murray and/or Lower Saluda River (LSR) qualities important to keep and any qualities that need changes.

Qualities to keep include the fishing, hunting, and wildlife watching opportunities associated with the Project. The presence of natural shoreline, islands, and riverbanks are aesthetically pleasing and promote a sense of solitude. ~~The balance between public/private recreational access to the project should be maintained.~~ The shoreline management program is an important means of protecting these qualities and should continue for the term of the new license. The safety and security of recreational users should also be preserved as part of the overall recreational experience. ~~While the lake has good water quality at the present time, we should strive to maintain and improve the water quality of the lake.~~

**Deleted:** Maintain a b

~~There are other qualities that some stakeholders would like to change. These include the water level stability on the lake to provide year-round access to a majority of shoreline property owners. The quality of amenities and access should be improved for recreational users. The recreational experience on the lower Saluda River could also be enhanced by providing minimum flows to protect the health of the river. These flows should be targeted at meeting state standards for dissolved oxygen in the tailrace and river and providing aquatic habitat. The impacts of unscheduled releases from the Project should also be addressed through some combination of providing more predictable flows, managing the rate of water level rise, and/or improving the warning system on the river.~~

**Deleted:** Maintaining and/or improving the water quality of Lake Murray.¶

The Project should also continue to provide reasonably affordable, reliable energy to SCE&G's service area.

2. Are there unique characteristics of Lake Murray and/or the LSR relative to other reservoirs/tailraces in the area?

The location of Lake Murray and the lower Saluda River near the metropolitan area of Columbia, SC is a unique characteristic of the Project. ~~Due to the extensive shoreline of the reservoir and the amount of Project lands, the Shoreline Management Plan provides a variety of recreational access.~~ The reservoir is also relatively uninterrupted by bridges, unlike other lakes in the vicinity.

**Deleted:** T

**Deleted:** managed through the Shoreline Management Plan

**Deleted:** This may be to amount of project lands.

Other distinguishing characteristics of the Project include the purple martin habitat on Lunch Island and the trout and striped bass fishery and whitewater paddling opportunities in the lower Saluda River.

## Standard Process Form

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3. What is the overall vision for Lake Murray and/or the LSR, in terms of recreation experiences and opportunities?

The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, aesthetic values, cultural resources, and public recreational opportunities on the reservoir and the lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of Lake Murray and the lower Saluda River, and ensure adequate facilities and public access are provided. Given the size of the reservoir/hydro-project area, it is felt that it can continue to support a diversity of recreation opportunities. Recognizing that needs and demands will change, recreational uses will be monitored and managed to balance access/uses with the protection of natural resources and environmental quality; and planning for new facilities and management schemes will remain adaptive to changes.

4. Are there sensitive biological or cultural resources associated with the Project that need to be considered? Where are these resources located and are there seasonal sensitivities (e.g., nesting or spawning times, etc.)?

There lands in environmentally sensitive areas that have been identified in the current shoreline management plans. There are also natural/undeveloped lands that provide valuable wildlife habitat.

There is some concern over migrating fish on the lower Saluda and Congaree Rivers. A unique cold water fishery also exists in the lower Saluda River. Rocky shoals spider lilies have also been located in the confluence area. There are also bald eagles, woodstorks, and purple martins in the vicinity of the Project.

Numerous cultural resources also exist in the Project vicinity.

Details about these resources will be described in the various resource conservation groups.

5. Identify specific goals and objectives for managing recreation at Lake Murray and/or in the LSR.

Recreational sites and access areas on the lake and the river should be adequate to allow for the continued rapid population growth in the Midlands over the term of the new license based on surveys of the public and input from the stakeholders and public.

Sites should be spaced around the lake and along the river corridor to provide legal public access to the different geographic sections of both.

Uncrowded conditions should be available most of the time at the sites, with natural viewsapes and provisions for most of the current and anticipated popular recreational activities incorporated into the overall provisions.

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Patrols and/or assistance for emergencies should be provided, though not necessarily manned, such as adequate phone boxes.

Safe recreational opportunities should be available for boaters on the lake with adequate lake levels for the navigational markers, and on the river with release levels that are not life-threatening to the average person.

The recommendations of the Lower Saluda Scenic River Advisory Council should be implemented to reflect the broad community-based consensus for river access, with consideration of additional river access to areas where trespassing is now the only way to enter an area.

### **STEP 2 – ESTABLISH BASELINE CONDITIONS**

6. What is the nature of existing recreational access to Lake Murray and the LSR?
  - a. How many public accessible, developed recreation sites are there?
  - b. Where are they located/how are they distributed around the Project?
  - c. Of these publicly accessible access sites how many are owned and operated by public versus private entities and how are they supervised?
  - d. How many sites, open to the public, provide boat access to the reservoir and the LSR?
  - e. How many provide shoreline fishing?
  - f. Identify the most heavily used facilities.
  - g. Are there informal, undeveloped use areas? Where are they?
7. What types of existing developed facilities are there?
  - a. Enumerate boat ramps, restrooms, docks, and other facilities.
  - b. What is the existing capacity at each site?
  - c. What is the general condition of each site and its facilities?
  - d. Ideas for improving existing facilities.
8. Describe notable recreation activities on Lake Murray and/or the LSR.
  - a. List recreation activities currently occurring and identify most prominent activities.

Greatest activity is independent family recreation, including many forms of boating, waterskiing, swimming/sunbathing, fishing, picnicking, and camping.

Solitary wade fishing in river.

Bank fishing at public sites and impromptu sites in the lake and river.

Small and large bass tournaments.

Motor boating

Sailing

Fishing from boats

Fishing from banks

Wade fishing

Swimming and sunning

**Comment:** Do you have data yet to back this up?

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Picnicking

Canoeing and kayaking (flatwater and whitewater)

Floating with tubes and rafts

Waterfowl hunting

Walking, biking, skating, wildlife watching at Saluda Shoals Park and soon to be developed

Three Rivers Greenway.

- b. Where are these uses occurring, and are they concentrated in certain areas?

Lower Saluda River supports all above activities except sailing

Whitewater boating concentrated on Saluda River below I-26 Bridge

Swimming and sunning on Lower Saluda concentrated at Riverbanks Zoo area; and will expand upriver when greenway trail opens in 2007

Wade fishing concentrated at shoal areas of lower River: at least four areas along river

Waterfowl hunting – mostly in the upper lake due to legislative restrictions regarding residential development.

- c. Identify existing impediments to these activities, if any.

Dramatic river fluctuations are impediments to recreational activities along the lower Saluda River.

Proposed barriers near dam may limit fishing/boating in river.

9. Are there known management issues associated with use?

- a. Are there areas of congestion, and if so where?

- b. Are there known conflicts between users, and if so where and when?

Fishing tournaments are disruptive to other boaters and residents. There needs to be an established, enforced protocol for organizes fishing tournaments.

Jet skis and large motorboats are disruptive to anglers, other boaters, and residents.

Kayakers are often called upon to rescue rock people near Zoo.

- c. Are there other known management issues, such as littering, trespassing, etc.?

Enforcement of established rules are limited by funding, staffing, and political boundaries.

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- d. Are there known issues regarding recreational safety?

Wade fishing, canoeing/kayaking, and other water contact and bank use is often dangerous due to river fluctuations in water levels on the Lower Saluda River.

10. What is the expected future demand for recreation activities at Lake Murray?

- a. Will existing facility capacity likely be exceeded, and if so where and when?

- b. Would accommodating this demand be consistent with the long-term vision for the reservoir?



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- c. Will demand introduce new or additional congestion, conflicts, or other management issues?

11. Identify current local benefits from recreation and any local detriments.

Better quality of life, outdoor experiences, physical fitness, and mental health benefits. Commercial enterprises rent and/or sell boating, fishing, and other equipment, provide services, and stimulate the local/regional economy.

### **STEP 3 – DETERMINE WHAT IS NEEDED AND WHEN**

12. Ideas for better or different access, consistent with Step 2 above.

13. Potential facility enhancements or upgrades, consistent with Step 2 above.

14. Potential new facilities, or other management actions, consistent with Step 2 above.

15. What are the priorities regarding identified needs both in terms of resources and time? How do priorities compare across the entire Project?

### **STEP 4 – DECIDE HOW NEEDS WILL BE MET AND WHO IS RESPONSIBLE**

#### **QUESTIONS REGARDING RESERVOIR LEVELS**

16. How is the Project currently operated and what are the typical reservoir levels during key recreation seasons?

- SCE&G operates Saluda Hydroelectric Project as a multi-purpose project. The seasonal changes in elevations provide hydroelectric generation, maintenance of downstream water quality, a unique tailrace fishery, and municipal/industrial water supply.
- SCE&G has a verbal agreement with SCDHEC for a minimum flow of 180 cfs.
- During the low DO season which generally runs from late June to early December, SCE&G will try to maintain a minimum flow of 400 – 500 cfs to help maintain a higher level of DO in the Lower Saluda River.
- From April through the end of August the lake is operated near the normal operating high water level of el. 358 ft Plant Datum (PD). Maximum full pool is el. 360.
- Drawdown begins near the end of August or early September and ends in late December near the winter pool level of 350 - 352 ft PD. This allows additional storage capacity in anticipation of the late winter and early spring rainy season. In recent years, the lake has been managed to a minimum winter pool level of approximately 354' in response to the requests of stakeholder groups.
- At the beginning of January the lake is allowed to refill during the rainy season so it will be at the normal operating high water level of 358 ft. PD by April.

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- The plant normally schedules power operations for contingency reserve to meet our obligation to the Virginia/Carolinas Reserve Sharing Group (VACAR), a member of the Southeastern Electric Reliability Council (SERC), which is governed by the North American Electric Reliability Council (NERC).
- During the fall, in anticipation of heavy rains from a tropical storm or hurricane, the plant will generate as necessary to manage the lake level. Power generation is increased to provide lake level management normally from September through December.
- Low lake levels can cause concern for lake residents, commercial establishments, and boaters due to their impacts on recreation. As the lake levels drop, more impacts are recognizable. A lake elevation of 356' was recognized as optimal in the Lake Murray Association September 2005 Lake Murray User Survey and in Lake Murray Homeowners Coalition surveys. According to these surveys, when the lake drops below elevation 352' more serious impacts to recreation occur.

17. Are there changes to Project operations that you would like to see addressed to improve the overall value of the reservoir, and how specifically would such changes benefit recreation?

- Current reservoir level operations balance the multi-purpose use of the reservoir. Maintaining the existing reservoir level fluctuations would allow for continued water level management through daily and weekly power generation operations however recreation would see no additional benefits. Conversely, limiting the seasonal fluctuation may have recreational benefits but other project purposes would be compromised (power generation, water level management, water quality maintenance, and aquatic weed control).
- Higher lake levels will increase, improve and enhance recreational opportunities.

18. What are the impacts of seasonal and/or daily variations in reservoir level.

- There are no large daily fluctuations in reservoir levels at the Saluda Hydroelectric Project (there are large fluctuations in the Lower Saluda River water level). However, daily fluctuations in lake level could create a potential safety issue.
- Weekly and seasonal fluctuations in lake level may have an effect on recreation.

19. What are the reservoir levels at which recreation problems tend to occur (may be different for different locations or problems)?

- SCE&G already extended boat ramps at several of their public access parks to accommodate a water level down to el. 345 ft PD.
- Buoys function more appropriately when lake levels are at 354' or higher.

20. When (i.e., what time of year) and how frequently do recreational problems occur related to reservoir levels?

- In general, the operation of Saluda Hydroelectric Project has been consistent throughout the years except for 1990, 1996, 2002 – 2004, and 2006. During those years the lake level was lowered to around el. 345 – 348 ft PD for the following project maintenance requirements:  
1990 – Intake towers maintenance

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Power generation

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**Deleted:** increased to allow SCE&G to meet their obligations of contingency reserve responsibility as part of our VACAR agreement with neighboring utilities and provide lake level management normally from September through December.¶  
<#>Low water levels (below \_\_\_ ft.) causes concern by many lake residents, commercial establishments, and boaters – year round but especially during peak season.¶

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**Inserted:** increased to allow SCE&G to meet their obligations of contingency reserve

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**Inserted:** <#>Some navigational (... [8]

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1996 – Hydrilla control as requested by SCDNR

2002 – 2004 – FERC Order for safety during dam remediation project

2006 – Upstream riprap repair

- It may be necessary to lower the lake level to around el. 345 ft PD in the future for maintenance of project structures, managing lake resources, installing new recreational access or other extraordinary circumstances.
- Seasonal variations occur depending on rainfall and upstream water flow.

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21. Why are operating water levels important to the operation of the project and the overall system?

- The Saluda Hydroelectric Project is a multi-purpose reservoir. The changes in water level have many beneficial impacts both upstream and downstream of the dam :
- The project is used to meet our contingency reserve capacity obligation as part of the VACAR agreement. This is for a loss on our own system or by one of our neighboring Reserve Sharing Group utilities.
- Electricity (inexpensive, clean, renewable)
- Electric system ancillary services (transmission line maintenance & overload protection, security resource for VCS Nuclear Station)
- Navigation support
- Boating opportunities
- Municipal and industrial water supply

**Deleted:** The current operating water levels are critical for the project to meet its required purposes.

22. Are there state or federal operating requirements that stipulate specific operating goals?

- SCE&G and SCDHEC have an agreement to discharge a minimum flow or 180 cfs from the project.
- Article 12 of the FERC license requires that reservoir levels and discharge from storage be controlled by reasonable rules and regulations of the Commission for the protection of life, health, and property and for other beneficial public uses including recreational purposes.
- Exhibit H of the latest FERC license application identifies the lower lake level to be Elev. 350 during normal flow years and Elev. 345 during low flow years.
- Our McMeekin Generating Station NPDES permit requires a minimum of 2,500 cfs discharge from Saluda Hydro prior to discharging the fossil plant circulating water return directly into the Lower Saluda River.
- NERC/SERC/VACAR Agreements – SCE&G primarily uses Saluda to meet its reserve capacity requirements.

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<#>Downstream water quality and aquatic habitat¶  
Municipal and industrial water supply

**Deleted:** <#>Downstream recreation.¶

**Inserted:** <#>Downstream recreation.

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### QUESTIONS REGARDING DOWNSTREAM FLOWS

23. Are there riverine recreation opportunities below the dam? If yes, move to additional questions, if not, stop.

Yes, trout fishing (wading, bank, boat), striper fishing (wading, bank, boat), canoeing/kayaking, tubing, sunbathing/swimming/rock hopping, picnicking, walking/hiking, bicycling, wildlife watching.

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24. Do we know how different flow levels affect recreation opportunities and specific recreation activities?

25. Can opportunities be enhanced by modifying releases, and in what way?

Predictable flows would make it safer, easier to fish/boat/swim in the river. It would also enhance the commercial aspects of boating/fishing in the river (allow outfitters/guides known times they could take paying customers into the water safely).

26. How would modified releases affect upstream lake levels?

27. How would suggested modified downstream flows affect project operations at the project and at upstream and downstream projects?

28. Are there additional concerns with regard to state and federal requirements or existing ecological issues that limit suggested changes to downstream flows?

There are concerns about bank erosion due to high flows.  
There are concerns about water quality/habitat for aquatic organisms due to low flows or continuous flows.

29. How binding is the VACAR agreement and when does it expire? (I notice that it is not listed in the state/federal operating requirements in Question 22).

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**Page 6: [1] Inserted** **Tony Bebber** **2/13/2007 10:47 AM**

Low water levels (below \_\_\_ ft.) causes concern by many lake residents, commercial establishments, and boaters – year round but especially during peak season.

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**Page 6: [2] Deleted** **Alison Guth** **2/22/2007 10:09 AM**

What minimum lake elevation will provide recreational benefits during each season of the year?

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**Page 6: [3] Deleted** **Alison Guth** **2/22/2007 10:13 AM**

that can occur without adversely affecting the overall value of the project (including impoundment objectives such as recreation, fish and wildlife, flood control, generation, navigation, etc.)?

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**Page 6: [4] Deleted** **Alison Guth** **2/22/2007 10:17 AM**

There appears to be a potential impact to recreational resources when the lake level is lower (below \_\_\_ ft.).

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**Page 6: [5] Inserted** **Bill Argentieri** **6/13/2006 4:18 PM**

There appears to be a potential impact to recreational resources when the lake level is lower

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**Page 6: [6] Inserted** **Bill Argentieri** **6/13/2006 4:18 PM**

SCE&G already extended boat ramps at several of their public access parks to accommodate a water level down to el. 345 ft PD.

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**Page 6: [7] Deleted** **Alison Guth** **2/22/2007 10:17 AM**

Some navigational hazards (unmarked) occur when levels drop below \_\_\_ ft.

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**Page 6: [8] Inserted** **Tony Bebber** **2/13/2007 10:49 AM**

Some navigational hazards (unmarked) occur when levels drop below \_\_\_ ft.

## Kacie Jensen

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**From:** Alison Guth  
**Sent:** Wednesday, March 07, 2007 11:36 AM  
**To:** Alison Guth; 'Van Hoffman'; Alan Stuart; Alison Guth; 'Amanda Hill'; 'Andy Miller'; 'Bertina Floyd'; 'Bill Argentieri'; 'Bill East'; 'Bill Marshall'; 'Bill Mathias'; 'btrump@scana.com'; 'Carl Sundius'; 'Charlie Compton'; 'Charlie Rentz'; 'Chris Page'; 'Daniel Tufford'; 'David Allen'; 'David Hancock'; 'Dee Dee Simmons'; 'Dick Christie'; 'Don Tyler'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Hank McKellar'; 'Irvin Pitts (ipitts@scprt.com)'; 'Jennifer O'Rourke'; 'John Frick'; 'Joy Downs'; 'Kim Westbury'; 'Kit Oswald'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Laura Boos (laura.mccary@gmail.com)'; 'Linda Lester'; 'Linda Schneider'; 'Mark Leao'; 'Mary Kelly'; 'Michael Murrell'; 'Mike Duffy'; 'Mike Summer (msummer@scana.com)'; 'Mike Waddell'; 'Parkin Hunter'; 'Patricia Wendling'; 'Patrick Moore'; 'Phil Hamby'; 'Ralph Crafton'; 'Randal Shealy'; 'Randy Mahan'; 'Regis Parsons (rparsons12@alltel.net)'; 'Rhett Bickley'; 'Richard Kidder'; 'Robert Keener (SKEENER@sc.rr.com)'; 'Ron Ahle'; 'Ronald Scott'; 'Roy Parker'; 'ryanity@scana.com'; 'Sheri Armstrong'; 'Steve Bell'; 'Suzanne Rhodes'; 'Synthia Williams'; 'Theresa Powers'; 'Tom Brooks'; 'Tom Ruple'; 'Tommy Boozer'; 'Tony Bebbler'; 'J. Ryan'; 'Alan Axson'; 'Bill Brebner'; 'Charlene Coleman'; 'Dave Anderson'; 'Guy Jones'; 'Jeff Duncan'; 'Jennifer Summerlin'; 'Jim Devereaux'; 'JoAnn Butler'; 'Karen Kustafik'; 'Keith Ganz-Sarto'; 'Kelly Maloney'; 'Lee Barber'; 'Malcolm Leaphart'; 'Marty Phillips'; 'Miriam Atria'; 'Norman Ferris'; 'Richard Mikell'; 'Stan Jones (sjones@imichotels.net)'; 'Tim Vinson'  
**Cc:** Dave Anderson  
**Subject:** RE: Draft Feb. 7th notes

Hello all,

Attached is the final set of meeting notes from the February 7th Lake & Land and Recreation Meeting. Thanks, Alison



2007-2-7 final  
meeting notes -...

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

**From:** Alison Guth  
**Sent:** Tuesday, February 20, 2007 4:39 PM  
**To:** Van Hoffman; Alan Stuart; Alison Guth; Amanda Hill; Andy Miller; Bertina Floyd; Bill Argentieri; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Carl Sundius; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; David Hancock; Dee Dee Simmons; Dick Christie; Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; Irvin Pitts (ipitts@scprt.com); Jennifer O'Rourke; John Frick; Joy Downs; Kim Westbury; Kit Oswald; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Linda Lester; Linda Schneider; Mark Leao; Mary Kelly; Michael Murrell; Mike Duffy; Mike Summer (msummer@scana.com); Mike Waddell; Parkin Hunter; Patricia Wendling; Patrick Moore; Phil Hamby; Ralph Crafton; Randal Shealy; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Rhett Bickley; Richard Kidder; Robert Keener (SKEENER@sc.rr.com); Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; Sheri Armstrong; Steve Bell; Suzanne Rhodes; Synthia Williams; Theresa Powers; Tom Brooks; Tom Ruple; Tommy Boozer; Tony Bebbler; J. Ryan; Alan Axson; Bill Brebner; Charlene Coleman; Dave Anderson; Guy Jones; Jeff Duncan; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Lee Barber; Malcolm Leaphart; Marty Phillips; Miriam Atria; Norman Ferris; Richard Mikell; Stan Jones (sjones@imichotels.net); Tim Vinson  
**Cc:** Dave Anderson  
**Subject:** Draft Feb. 7th notes

Hello All

Attached are the draft meeting notes from the February 7th Lake and Land Management and Recreation RCG's meeting. Please have any corrections or additions to these notes back to me by March 6th for finalization. Thanks, Alison

<< File: 2007-2-7 draft Meeting Minutes -Lake and Land & Recreation.doc >>

**Alison Guth**

Licensing Coordinator  
**Kleinschmidt Associates**  
101 Trade Zone Drive  
Suite 21A  
West Columbia, SC 29170  
P: (803) 822-3177  
F: (803) 822-3183

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
LAKE AND LAND MANAGEMENT and RECREATION RCGs MEETING**

**SCE&G Lake Murray Training Center  
February 7, 2007**

Final acg 3-7-07

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**ATTENDEES:**

Alison Guth, Kleinschmidt Associates	Bill Argentieri, SCE&G
Alan Stuart, Kleinschmidt Associates	Tony Bebbber, SCPRT
Lee Barber, LMA	Joy Downs, LMA
Stan Jones, CALM	John Altenberg, Sea Tow, CALM
Tammy Wright, CALM	Archie Trawick Jr., CALM, Jakes Landing
Bill Brebner, Yacht Cove Owners	George Duke, LMHOC
John Frick, landowner	Bill Shipley, CALM
Joe Agnew, CALM	Charlie Higgins, CALM, Holland's Marina
Jon Dukes, Lake Murray Boat Club, CALM	Edie Beaver, CALM, Lake Murray Vacation
Angie Walston, CALM, Lake Murray Vac.	Randy Walston, Acapulco, Lake Murray Vacation.
Donnie LeJohn, Spinners Marina	Suzanne Rhodes, SC Wildlife Fed.
Steve Bell, Lake Murray Watch	George King, landowner
Dave Anderson, Kleinschmidt Associates	Tommy Boozer, SCE&G
David Hancock, SCE&G	Kim Westbury, Saluda County
Teresa Powers, Newberry County	Jenn O'Rourke, SC Wildlife Federation
Carl Sundias, CALM, South Shore Marina	Bill Mathias – LMPS

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**HOMEWORK:**

- Dave Anderson– To issue recreation assessment to Recreation Management TWC
- Dave Anderson- Provide examples of recreation plans from other projects to the RCG.

**DATE OF NEXT MEETING:**

**TBA**

***Review of Recreation Assessment in Quarterly Public Meeting on April 19<sup>th</sup> at 10:00 am and 7:00 pm***

**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

**Presentation by the Commerce Association of Lake Murray:**



Dave Anderson of Kleinschmidt Associates opened the meeting and the group began with introductions. Dave noted that the first item on the agenda included a presentation from the Commerce Association of Lake Murray (CALM) (link to presentation at [http://www.saludahydrolicense.com/documents/SCEGpresentation4\\_000.ppt](http://www.saludahydrolicense.com/documents/SCEGpresentation4_000.ppt)). Carl Sundias of South Shore Marina, and a member of CALM, began the presentation. He proceeded to describe the membership of the organization and noted that it not only consisted of marina operators, but other local businesses affected by the lake. Carl explained that the group had collectively developed a mission statement and he proceeded to review the mission statement with the group. After Carl had reviewed the mission of the CALM, Stan Jones of Lighthouse Marina reviewed some of the goals of the group. Stan explained that they were working with the Grow Boating Initiative which would provide boating infrastructure grants. He also reviewed how marinas help to improve the economy and meet the needs of the community. In conclusion, the CALM made a formal request of the Recreation RCG that the moratorium on multi slip dock permits be amended to allow permit applications at existing commercial marinas.

After the presentation, the floor was opened for questions. Dave asked about the Grow Boating Initiative and if it was related to the national "Take Me Fishing" campaign. Carl and Stan indicated that they do not believe that the two are related and they explained that much of the funding for this initiative comes from portions of boat sales. Lee Barber asked how the work of the CALM aligned with the work of other agencies. Stan explained that they were willing to work with other groups to provide boats or facilities for smart boating courses and such.

The group had a brief discussion on boating safety and David Hancock of SCE&G asked if any of the marina operators have licensed captains that offer basic training on boat operation. A few of the marina operators indicated that they were licensed captains or knew of licensed captains that could assist their patrons. Many of the marina operators noted that they helped individuals who appeared to be having trouble or were inexperienced. Tommy Boozer noted that this may be an important item to note in the Safety RCG.

Tommy asked Stan for a little background on the requirements by DHEC in order to receive the clean marina certification. Stan noted that DHEC has just begun to fully develop the criteria; however, he anticipates that Lighthouse Marina will receive its certification this month. He explained that once a marina is certified, DHEC will do testing to make sure that water quality is maintained. Stan further noted that the Commerce Association has also received grants for new pump out facilities, many of which will be pump out boats.

Dave noted that a concern of the Recreation RCG was regarding recreational access to the reservoir and asked the Commerce Association for their opinion regarding current public access to the lake. Carl noted that the marinas have a difficult time competing with the free ramps, which has, in turn, started to put some of the smaller marinas out of business. Carl noted that they do feel the public needs more access, however once more free public access is put in place, the commercial marinas struggle to compete. Dave noted that the RCG's and TWC's do consider the impacts to commercial operators in their discussions. Tommy pointed out that FERC requires SCE&G to fulfill certain needs regarding recreational access, to which SCE&G must comply in order to protect their license. However, Tommy further noted that any access SCE&G provides is basic and does not include the amenities that the marinas provide, such as fuel or food.

The group briefly discussed the CALM's request for an amendment to the moratorium on multi-slip dock permits. Carl noted that the existing commercial marinas would like to perform upgrades and safety improvements that would require the lifting of the moratorium for existing facilities. Tommy noted that this was something that they would consider.

**Lake and Land Management Group Update:**

The group reconvened after a short break and Alan provided the group with an update on Lake and Land Management. Alan explained that the TWC had been meeting quite frequently and building on the existing Shoreline Management Plan section by section. Alan noted that the draft SMP would progress from the TWC to the RCG to SCE&G management for approval. From that point, Alan explained, the SMP would go out for public comment. Alan asked the CALM to submit any comments that they had so far on the SMP documents as soon as they could. The CALM noted that they could have any comments on the draft documents submitted to the Alison Guth by the end of March. Alan noted that the TWC has thus far attempted to introduce the needs of the commercial marinas; however, it will be very helpful if the commercial marinas can provide the group with specific needs.

Alan continued to explain what the Lake and Land Management group has been discussing. Dave noted that one item that overlapped both Recreation and Lake and Land groups was the issue of the designation of Two-Bird Cove and Hurricane Hole Cove as special recreation areas. This issue, however, was specifically being dealt with under the Lake and Land group.

**Adaptive Management in FERC Licenses:**

After lunch, Dave provided the group with a presentation on Adaptive Management in the context of FERC licenses. The presentation can be viewed at <http://www.saludahydrolicense.com/documents/2007-02-07AdaptiveManagement.ppt> . Dave noted that adaptive management is a relatively new principle in ecological fields, and the first example of adaptive management being used in a FERC license occurred around 10 years ago. As Dave proceeded through the presentation, he pointed out where the Recreation RCG stood within the adaptive management procedures (in the Planning Stage).

**Update on Recreation RCG and TWC's:**

There was group discussion on Recreation Plans, and Dave noted that he would send out an example of a recreation plan to the group. In regards to the drafting of a Recreation Plan for Lake Murray, Dave suggested that the Recreation Management TWC take the lead on this. The group agreed that that was acceptable. Dave explained that the Recreation Plan for Lake Murray would need to be drafted by the end of 2007 and finalized by early 2008. Dave explained that the results of the recreation assessment study would be needed for the drafting of the recreation plan. The results of the recreation assessment study would be presented at the April 19<sup>th</sup> Quarterly Public Meeting. Dave also mentioned that the Recreation RCG would convene in April to view the results of the boating density study and the recreation assessment. He explained that the Recreation Management TWC should anticipate bi-weekly conference calls/meetings during the next several months. Dave noted that the Downstream Flows TWC would probably meet sometime in the fall and the Lake Levels TWC would convene in the next couple weeks.

The group concluded discussions noting that the Lake and Land and Recreation group would be working close together during the land rebalancing process. The group adjourned.

## Kacie Jensen

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**From:** Alison Guth  
**Sent:** Thursday, February 22, 2007 1:21 PM  
**To:** Alison Guth; Tim Vinson; Alan Stuart; Bertina Floyd; Bill Argentieri; Dave Anderson; Dick Christie; Joy Downs; Lee Barber; Steve Bell  
**Subject:** Lake Levels TWC notes and Standard Process form additions/changes

Hello All,

Below I have attached the meeting notes that I have written up for the Lake Levels TWC, as well as the changes to the Standard Process Form that we discussed in our meeting. Please review the changes to the process form to ensure that they cover all of the items we discussed. All my changes have been placed in "track changes"; however, since there have been many reviewers to this document, I have de-selected some of the reviewers whose changes do not affect our sections. Please have any changes to the Standard Process Form, or the meeting notes back to me by March 8. Thanks, Alison



Recreation RCG 2007-2-14 draft  
Working Documen... Meeting Minute...

**Alison Guth**  
**Licensing Coordinator**  
**Kleinschmidt Associates**  
**101 Trade Zone Drive**  
**Suite 21A**  
**West Columbia, SC 29170**  
**P: (803) 822-3177**  
**F: (803) 822-3183**

# Recreation Resource Conservation Group

## Working Documents

February 22, 2007

**Deleted:** February 21, 2007

**Inserted:** February 21, 2007

**Deleted:** December 5, 2006



## Recreation Resource Conservation Group Work Plan

FINAL

<b>Facilitator:</b>		
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com
<b>Members:</b>		
Name	Organization	E-mail
Alan Axson	Columbia Fire Department	cfdwaxson@columbiasc.net
Alan Stuart	KA	alan.stuart@kleinschmidtusa.com
Alison Guth	KA	alison.guth@kleinschmidtusa.com
Amanda Hill	USFWS	amanda_hill@fws.gov
Bill Argentieri	SCE&G	bargentieri@scana.com
Bill Marshall	Lower Saluda Scenic River Advisory Council, DNR	marshallb@dnr.sc.gov
Charlene Coleman	American Whitewater	cheetahrk@yahoo.com
Charles (Charlie) Rentz		flyhotair@greenwood.net
David Hancock	SCE&G	dhancock@scana.com
Dick Christie	SCDNR	dchristie@infoave.net
George Duke	LMHC	kayakduke@bellsouth.net
Gerrit Jobsis	Coastal Conservation League & American Rivers	gerritj@scccl.org; gjobsis@americanrivers.org
Guy Jones	River Runner Outdoor Center	guyjones@sc.rr.com
Irvin Pitts	SCPRT	ipitts@scprt.com
James A. Smith	LMA	bkawasi@sc.rr.com
Jeff Duncan	National Park Service	jeff_duncan@nps.gov
Jennifer O'Rourke	South Carolina Wildlife Federation	jenno@scwf.org
Jennifer Summerlin	Kleinschmidt Associates	jennifer.summerlin@kleinschmidtusa.com
Jim Devereaux	SCE&G	jdevereaux@scana.com
JoAnn Butler	resident	jbutler@scana.com
Joy Downs	Lake Murray Assn.	elymay2@aol.com
Karen Kustafik	City of Columbia Parks and Recreation	kakustafik@columbiasc.net
Keith Ganz-Sarto		keith_ganz_sarto@hotmail.com
Kelly Maloney	Kleinschmidt Associates	kelly.maloney@kleinschmidtusa.com
Larry Michalec	Lake Murray Homeowners Coalition	lmichalec@aol.com
Larry Turner	SCDHEC	tumerle@dhec.sc.gov
Leroy M. Barber Jr.	LMA	lbarber@sc.rr.com
Malcolm Leaphart	Trout Unlimited	malcolml@mailbox.sc.edu
Mark Leao	USFWS	mark_leao@fws.gov
Marty Phillips	Kleinschmidt Associates	marty.phillips@kleinschmidtusa.com
Michael Waddell	TU - Saluda River Chapter	mwaddell@esri.sc.edu
Miriam S. Atria	Capitol City Lake Murray Country	miriam@lakemurraycountry.com
Norman Ferris	Trout Unlimited	norm@sc.rr.com
Patricia Wendling	LMA	wwending@sc.rr.com
Patrick Moore	SCCCL AR	patrickm@scccl.org
Ralph Crafton	LMA	crafton@usit.net
Randy Mahan	SCANA	rmahan@scana.com
Richard Mikell	Adventure Carolina	adventurec@mindspring.com
Stanley Yalicki	LMA	joyyalicki@aol.com
Steve Bell	Lake Murray Watch	bellsteve9339@bellsouth.net
Suzanne Rhodes	SC Wildlife Federation	suzrhodes@juno.com
Tim Vinson	SCDNR	vinsont@dnr.sc.gov
Tom Brooks	Newberry Co.	tbrooks@newberrycounty.net
Tommy Boozer	SCE&G	tboozer@scana.com
Tony Bebber	SCPRT	tbebber@scprt.com
Van Hoffman	SCANA Land Mgt.	vhoffman@scana.com

## Recreation Resource Conservation Group Work Plan

FINAL

### Mission Statement

The mission of the Recreation RCG is to ensure adequate and environmentally-balanced public recreational access and opportunities related to the Saluda Hydroelectric Project for the term of the new license. The objective is to assess the recreational needs associated with the lower Saluda River and Lake Murray and to develop a comprehensive recreation plan to address the recreation needs of the public for the term of the new license. This will be accomplished by collecting and developing necessary information, understanding interests and issues, and developing consensus-based recommendations.

### Identified Issues

- ensure that recreational facilities and opportunities are protected and enhanced for current and future users, on and near the lake and river
  - boating access, including future access on Lexington side of lake
  - non-boating access
  - paddling access
  - security at recreation facilities
  - sufficient egress points on lower Saluda River
  - fishing opportunities for non-boaters
- conservation of lands
  - protect the scenic integrity of the Project
  - provide wildlife habitat areas
  - provide formal and informal (impromptu areas) recreational opportunities
    - consideration of special recreation designation areas classification (e.g., Two Bird Cove and Hurricane Hole)
- using the concept of adaptive management in future recreation planning
- river flows
  - safe recreational opportunities should be available on the lower Saluda River through daily flow release schedules and consensus-based flow rates
  - lack of scheduled recreation flows for the lower Saluda River
  - management of river flows to improve safety for river users (coordinate with Safety RCG)
  - minimum flows to provide for recreational navigation and to protect and enhance aquatic life in river (coordinate with Fish and Wildlife RCG)
- lack of a communication system that would encompass information to better inform the public of existing and projected conditions regarding lake levels and river flows as related to anticipated hydro operations and maintenance
- protection of the cold water fishery on the lower Saluda River
- impacts of lake level on recreational use of the lake
- consideration of The Lower Saluda River Corridor Plan and the Lower Saluda Scenic River Corridor Plan Update and their related public access sites and greenway-trail concepts

## Recreation Resource Conservation Group Work Plan

FINAL

### RCG Responsibilities

- Utilizing and modifying the Standard Process for evaluating and addressing recreation management and access issues specific to the Saluda Project, including developing a vision statement for the Project.
- Identifying specific areas where lake and river levels, river flows, and/or lake and river level fluctuations may be adversely affecting recreation including the nature and timing of the effect (e.g., access to sections of water, access to facilities, and aesthetics).
- Working with the Operations Resource Conservation Group to identify “reasonable” (based on hydrologic, structural, and other limitations identified) changes in Project operations that would benefit recreation.
- Working with appropriate RCGs to coordinate actions on issues of mutual interests such as river flows, lake levels, conservation of lands, and the siting and management of recreational facilities.
- Identifying any studies, if applicable, that need to be performed for identifying and/or evaluating (1) changes to Project operations, (2) enhancements to existing facilities, and (3) creation of new facilities to provide for public recreational access and opportunities.
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding modifications to facilities or current Project operations, and provide recommendations for future recreation access and facilities.

### Tasks and Products

- **Task 1** – Utilize the stepwise process diagram and solution principles to guide the planning process for addressing recreation management issues at the Saluda Project.
  - Final Process Diagram and Solution Principles
- **Task 2** – Develop a Vision Statement for the Saluda Project.
  - Final Vision Statement
- **Task 3** – Review the operational constraints and current operations of the Saluda Project (see Initial Consultation Document).
- **Task 4** – Answer the list of questions on the Standard Process Form in order to characterize the existing and potential future condition of access and lake levels and river flows – from a recreation setting perspective.
  - Final Standard Process Form
- **Task 5** – Review stakeholder requests for particular studies and/or enhancement measures to ensure that these are incorporated into study planning, if applicable
  - Final Study Plans and Possible Mitigation Measures
- **Task 6** – Develop and recommend operation scenarios to the Operations RCG for analysis. These scenarios should reflect initial thinking on potential solutions and be designed to narrow the focus of Task 10 below. Analysis by the Operations RCG will focus on an assessment of potential recreational impacts associated with any suggested changes to operations.
  - RCG Recommendations
- **Task 7** – Discuss results of the Operations RCG analyses.

## Recreation Resource Conservation Group Work Plan

FINAL

- **Task 8** – Develop study designs/methods/plans and review agreed upon studies, literature reviews, etc.
  - Final Study Plans
- **Task 9** – Check the solution principles to ensure proposed study plans are consistent.
  - Final Study Plans
- **Task 10** – Provide recommendations for Project operations and recreation access and facilities to be considered in conjunction with all ecological (including water quality), recreational, and safety issues.
  - RCG Recommendations
- **Task 11** – Develop a consensus based Recreation Plan for the Saluda Project that addresses all of the issues and tasks identified above.
  - Final Recreation Plan

### **Schedule**

**Late 2005/Early 2006**—Finalize Mission Statement, Standard Process Form, Solution Principles, and Work Plan

**Mid-2006**—Complete identification of studies, literature reviews, etc. that need to be completed to address issues and tasks identified in the Work Plan

**Late 2006**—Begin compilation of existing information, review preliminary study results, and draft an outline of the Recreation Plan

**2007**—Complete any studies identified in Task 8 and review results; draft recommendations to SHRG, complete draft Recreation Plan

**2008**—Finalize Recreation Plan and provide comments on Draft License Application

### **Possible Mitigation Measures to be Considered**

- creation of public access sites and greenway-trail concepts as proposed in the Lower Saluda River Corridor Plans of 1990 and 2000, which include a linear park and trail system on the north bank of the river connecting Saluda Shoals Park to Gardendale Landing and Riverbanks Zoo; and a park/preserve on the south side of river at Twelve-mile Creek
- creation of a state park on the south side of the reservoir
- creation of a multi-lane boating facility that can accommodate large tournaments
- consideration of a boat ramp for small trailered boats at Gardendale or further downstream, but above I26, to allow safer upstream motoring towards Hopes Ferry. Many boaters have carried in their heavy rigs for years at the Gardendale 'throw-in' to be able to more safely boat the Saluda.
- consideration of conservation easements on large tracts of land within the PBL



## Recreation Vision Statement for the Saluda Project

FINAL

The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, aesthetic values, cultural resources, and public recreational opportunities on the reservoir and the lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of Lake Murray and the lower Saluda River, and ensure adequate facilities and public access are provided. Given the size of the reservoir/hydro-project area, it is felt that it can continue to support a diversity of recreation opportunities. Recognizing that needs and demands will change, recreational uses will be monitored and managed to balance access/uses with the protection of natural resources and environmental quality; and planning for new facilities and management schemes will remain adaptive to changes.

Recreational opportunities for Lake Murray and the lower Saluda River over the next 30 to 50 years of the pending new FERC license for SCE&G should incorporate the following attributes:

- Recreational sites and access areas on the lake and the river should be adequate to allow for the continued rapid population growth in the Midlands over the term of the new license based on surveys of the public and input from the stakeholders and public.
- Sites should be spaced around the lake and along the river corridor to provide legal public access to the different geographic sections of both.
- Uncrowded conditions should be available most of the time at the sites, with natural viewscapes and provisions for most of the current and anticipated popular recreational activities incorporated into the overall provisions.
- Patrols and/or assistance for emergencies should be provided, though not necessarily manned, such as adequate phone boxes.
- Safe recreational opportunities should be available for boaters on the lake with adequate lake levels for the navigational markers, and on the river with release levels that are not life-threatening to the average person.
- The recommendations of the Lower Saluda Scenic River Advisory Council should be implemented to reflect the broad community-based consensus for river access, with consideration of additional river access to areas where trespassing is now the only way to enter an area.

Improvements to be considered at the Saluda Project include:

- Evaluation of SCE&G-owned Project lands for possible reclassification for recreation activities.
- Providing appropriate operations and maintenance of public recreation facilities.
- Optimizing the capacity of existing public recreation facilities to accommodate existing and future demand.

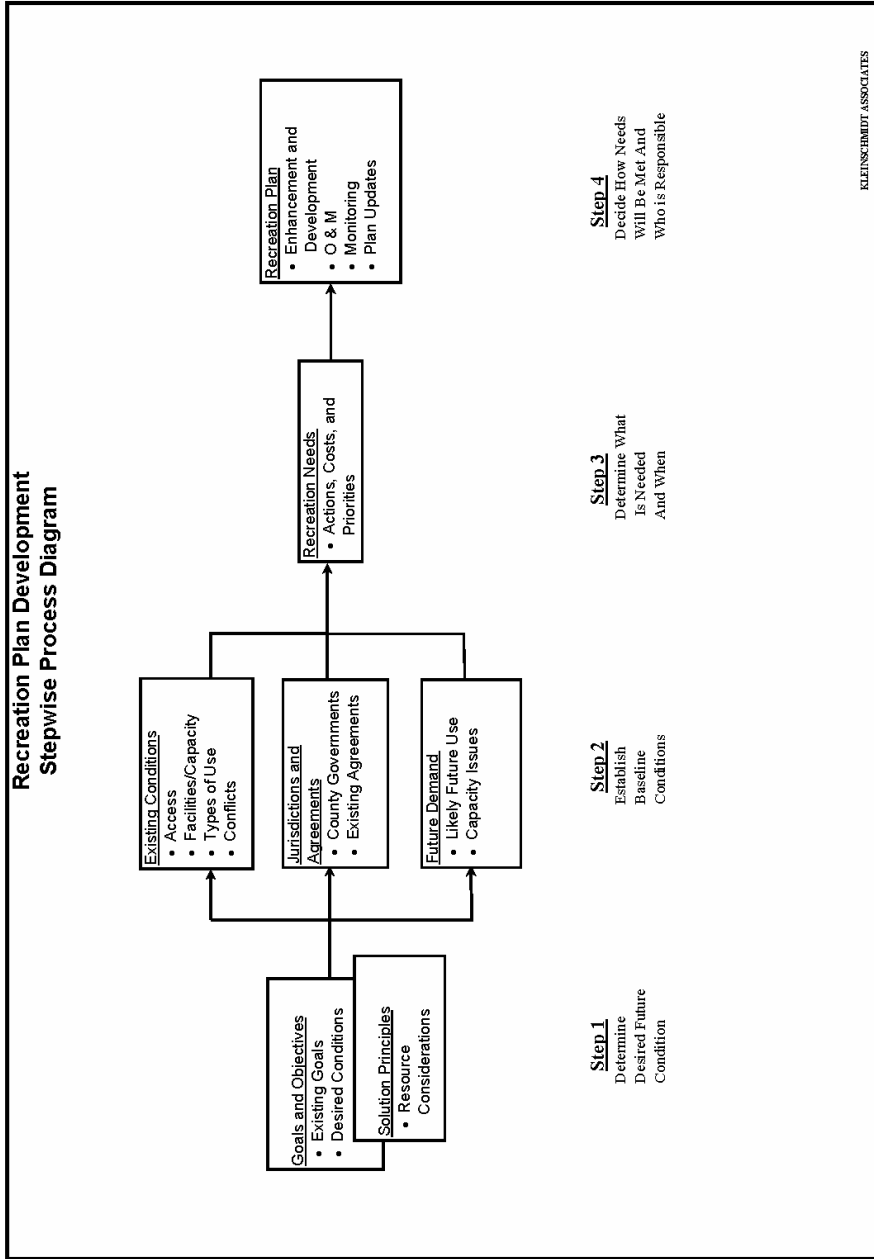
## **Recreation Vision Statement for the Saluda Project**

FINAL

- Improving access and safety in the public waters below the dam and minimizing impacts of project operations on downstream recreation, recognizing the need to meet power generation, and downstream flow responsibilities at Saluda.
- Managing lake level drawdowns so as to optimize safety and recreational opportunities.
- Managing river flows so as to optimize safety and recreational opportunities.
- Ensuring public access areas for the non-boating public remain available along the lake and river shorelines.
- Development of new facilities in accordance with the comprehensive plan as the need arises. Evaluation of other properties and potential partnerships as needed to meet the mission statement

## Stepwise Process Diagram

FINAL



## Solution Principles

FINAL

Consideration of new recreational facilities should be based on demonstrated need and the potential impact on existing facilities.

1. Priority should be given to demonstrated need within the FERC project boundary.
2. Priority should be given to recreational proposals where multiple stakeholders offer significant participation.
3. Recreational facilities should appeal to a broad public.
4. Reasonable access for the disabled should be provided.
5. Recreational needs should be prioritized for the project including a schedule of proposed improvements so that all costs are not in the first few years of the new license.
6. The improvement or expansion of existing recreational facilities should be considered first.
7. Additional recreational studies (if needed) should be only of sufficient scope and duration to provide necessary information to develop issue solutions.
8. Consensus based solutions are preferred over studies, unless solutions cannot be developed with existing information.
9. A process should be developed to adjust proposed improvements over the 30+ year time frame approximately every 7 to 10 years to account for changing needs. This should include the ability to trade a new needed facility for a proposed (but not built) facility of approximately the same cost.
10. Sufficient "future recreational" land should be set aside now to handle the recreational needs of 30+ years.

Preferred consideration will be given to ideas that:

- do not promote facilities that would adversely impact existing commercial operations;
- identify actual recreational needs that are not filled by existing facilities;
- receive broad public support;
- expand existing recreational facilities prior to developing green field sites;
- require doing recreational studies only if consensus cannot be reached with existing information (It is preferred to put financial resources into recreational facilities and opportunities that benefit the overall Project, rather than fund unnecessary/subjective studies).

## Standard Process Form

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The following is a list of standard questions designed to help characterize existing recreation resources and aid in development of an appropriate recreation plan for the Saluda Project. Questions pertaining to recreation management are categorized according to the four-step recreation plan stepwise process diagram developed for the project. Questions pertaining to reservoir levels and downstream flows are listed following the facility management material.

### **STEP 1 – DETERMINE DESIRED FUTURE CONDITION**

1. Identify Lake Murray and/or Lower Saluda River (LSR) qualities important to keep and any qualities that need changes.

Qualities to keep include the fishing, hunting, and wildlife watching opportunities associated with the Project. The presence of natural shoreline, islands, and riverbanks are aesthetically pleasing and promote a sense of solitude. The balance between public/private recreational access to the project should be maintained. The shoreline management program is an important means of protecting these qualities and should continue for the term of the new license. The safety and security of recreational users should also be preserved as part of the overall recreational experience. While the lake has good water quality at the present time, we should strive to maintain and improve the water quality of the lake.

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There are other qualities that some stakeholders would like to change. These include the water level stability on the lake to provide year-round access to a majority of shoreline property owners. The quality of amenities and access should be improved for recreational users. The recreational experience on the lower Saluda River could also be enhanced by providing minimum flows to protect the health of the river. These flows should be targeted at meeting state standards for dissolved oxygen in the tailrace and river and providing aquatic habitat. The impacts of unscheduled releases from the Project should also be addressed through some combination of providing more predictable flows, managing the rate of water level rise, and/or improving the warning system on the river.

**Deleted:** Maintaining and/or improving the water quality of Lake Murray.¶

The Project should also continue to provide reasonably affordable, reliable energy to SCE&G's service area.

2. Are there unique characteristics of Lake Murray and/or the LSR relative to other reservoirs/tailraces in the area?

The location of Lake Murray and the lower Saluda River near the metropolitan area of Columbia, SC is a unique characteristic of the Project. Due to the extensive shoreline of the reservoir and the amount of Project lands, the Shoreline Management Plan provides a variety of recreational access. The reservoir is also relatively uninterrupted by bridges, unlike other lakes in the vicinity.

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Other distinguishing characteristics of the Project include the purple martin habitat on Lunch Island and the trout and striped bass fishery and whitewater paddling opportunities in the lower Saluda River.

## Standard Process Form

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3. What is the overall vision for Lake Murray and/or the LSR, in terms of recreation experiences and opportunities?

The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, aesthetic values, cultural resources, and public recreational opportunities on the reservoir and the lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of Lake Murray and the lower Saluda River, and ensure adequate facilities and public access are provided. Given the size of the reservoir/hydro-project area, it is felt that it can continue to support a diversity of recreation opportunities. Recognizing that needs and demands will change, recreational uses will be monitored and managed to balance access/uses with the protection of natural resources and environmental quality; and planning for new facilities and management schemes will remain adaptive to changes.

4. Are there sensitive biological or cultural resources associated with the Project that need to be considered? Where are these resources located and are there seasonal sensitivities (e.g., nesting or spawning times, etc.)?

There lands in environmentally sensitive areas that have been identified in the current shoreline management plans. There are also natural/undeveloped lands that provide valuable wildlife habitat.

There is some concern over migrating fish on the lower Saluda and Congaree Rivers. A unique cold water fishery also exists in the lower Saluda River. Rocky shoals spider lilies have also been located in the confluence area. There are also bald eagles, woodstorks, and purple martins in the vicinity of the Project.

Numerous cultural resources also exist in the Project vicinity.

Details about these resources will be described in the various resource conservation groups.

5. Identify specific goals and objectives for managing recreation at Lake Murray and/or in the LSR.

Recreational sites and access areas on the lake and the river should be adequate to allow for the continued rapid population growth in the Midlands over the term of the new license based on surveys of the public and input from the stakeholders and public.

Sites should be spaced around the lake and along the river corridor to provide legal public access to the different geographic sections of both.

Uncrowded conditions should be available most of the time at the sites, with natural viewsapes and provisions for most of the current and anticipated popular recreational activities incorporated into the overall provisions.

## Standard Process Form

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Patrols and/or assistance for emergencies should be provided, though not necessarily manned, such as adequate phone boxes.

Safe recreational opportunities should be available for boaters on the lake with adequate lake levels for the navigational markers, and on the river with release levels that are not life-threatening to the average person.

The recommendations of the Lower Saluda Scenic River Advisory Council should be implemented to reflect the broad community-based consensus for river access, with consideration of additional river access to areas where trespassing is now the only way to enter an area.

### **STEP 2 – ESTABLISH BASELINE CONDITIONS**

6. What is the nature of existing recreational access to Lake Murray and the LSR?
  - a. How many public accessible, developed recreation sites are there?
  - b. Where are they located/how are they distributed around the Project?
  - c. Of these publicly accessible access sites how many are owned and operated by public versus private entities and how are they supervised?
  - d. How many sites, open to the public, provide boat access to the reservoir and the LSR?
  - e. How many provide shoreline fishing?
  - f. Identify the most heavily used facilities.
  - g. Are there informal, undeveloped use areas? Where are they?
7. What types of existing developed facilities are there?
  - a. Enumerate boat ramps, restrooms, docks, and other facilities.
  - b. What is the existing capacity at each site?
  - c. What is the general condition of each site and its facilities?
  - d. Ideas for improving existing facilities.
8. Describe notable recreation activities on Lake Murray and/or the LSR.
  - a. List recreation activities currently occurring and identify most prominent activities.

Greatest activity is independent family recreation, including many forms of boating, waterskiing, swimming/sunbathing, fishing, picnicking, and camping.

Solitary wade fishing in river.

Bank fishing at public sites and impromptu sites in the lake and river.

Small and large bass tournaments.

Motor boating

Sailing

Fishing from boats

Fishing from banks

Wade fishing

Swimming and sunning

**Comment:** Do you have data yet to back this up?

## Standard Process Form

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Picnicking

Canoeing and kayaking (flatwater and whitewater)

Floating with tubes and rafts

Waterfowl hunting

Walking, biking, skating, wildlife watching at Saluda Shoals Park and soon to be developed

Three Rivers Greenway.

- b. Where are these uses occurring, and are they concentrated in certain areas?

Lower Saluda River supports all above activities except sailing

Whitewater boating concentrated on Saluda River below I-26 Bridge

Swimming and sunning on Lower Saluda concentrated at Riverbanks Zoo area; and will expand upriver when greenway trail opens in 2007

Wade fishing concentrated at shoal areas of lower River: at least four areas along river

Waterfowl hunting – mostly in the upper lake due to legislative restrictions regarding residential development.

- c. Identify existing impediments to these activities, if any.

Dramatic river fluctuations are impediments to recreational activities along the lower Saluda River.

Proposed barriers near dam may limit fishing/boating in river.

9. Are there known management issues associated with use?

- a. Are there areas of congestion, and if so where?

- b. Are there known conflicts between users, and if so where and when?

Fishing tournaments are disruptive to other boaters and residents. There needs to be an established, enforced protocol for organizes fishing tournaments.

Jet skis and large motorboats are disruptive to anglers, other boaters, and residents.

Kayakers are often called upon to rescue rock people near Zoo.

- c. Are there other known management issues, such as littering, trespassing, etc.?

Enforcement of established rules are limited by funding, staffing, and political boundaries.

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- d. Are there known issues regarding recreational safety?

Wade fishing, canoeing/kayaking, and other water contact and bank use is often dangerous due to river fluctuations in water levels on the Lower Saluda River.

10. What is the expected future demand for recreation activities at Lake Murray?

- a. Will existing facility capacity likely be exceeded, and if so where and when?

- b. Would accommodating this demand be consistent with the long-term vision for the reservoir?



## Standard Process Form

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- c. Will demand introduce new or additional congestion, conflicts, or other management issues?

11. Identify current local benefits from recreation and any local detriments.

Better quality of life, outdoor experiences, physical fitness, and mental health benefits. Commercial enterprises rent and/or sell boating, fishing, and other equipment, provide services, and stimulate the local/regional economy.

### **STEP 3 – DETERMINE WHAT IS NEEDED AND WHEN**

12. Ideas for better or different access, consistent with Step 2 above.

13. Potential facility enhancements or upgrades, consistent with Step 2 above.

14. Potential new facilities, or other management actions, consistent with Step 2 above.

15. What are the priorities regarding identified needs both in terms of resources and time? How do priorities compare across the entire Project?

### **STEP 4 – DECIDE HOW NEEDS WILL BE MET AND WHO IS RESPONSIBLE**

### **QUESTIONS REGARDING RESERVOIR LEVELS**

16. How is the Project currently operated and what are the typical reservoir levels during key recreation seasons?

- SCE&G operates Saluda Hydroelectric Project as a multi-purpose project. The seasonal changes in elevations provide hydroelectric generation, maintenance of downstream water quality, a unique tailrace fishery, and municipal/industrial water supply.
- SCE&G has a verbal agreement with SCDHEC for a minimum flow of 180 cfs.
- During the low DO season which generally runs from late June to early December, SCE&G will try to maintain a minimum flow of 400 – 500 cfs to help maintain a higher level of DO in the Lower Saluda River.
- From April through the end of August the lake is operated near the normal operating high water level of el. 358 ft Plant Datum (PD). Maximum full pool is el. 360.
- Drawdown begins near the end of August or early September and ends in late December near the winter pool level of 350 - 352 ft PD. This allows additional storage capacity in anticipation of the late winter and early spring rainy season. **In recent years, the lake has been managed to a minimum winter pool level of approximately 354' in response to the requests of stakeholder groups.**
- At the beginning of January the lake is allowed to refill during the rainy season so it will be at the normal operating high water level of 358 ft. PD by April.

## Standard Process Form

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- The plant normally schedules power operations for contingency reserve to meet our obligation to the Virginia/Carolinas Reserve Sharing Group (VACAR), a member of the Southeastern Electric Reliability Council (SERC), which is governed by the North American Electric Reliability Council (NERC).
- During the fall, in anticipation of heavy rains from a tropical storm or hurricane, the plant will generate as necessary to manage the lake level. Power generation is increased to provide lake level management normally from September through December.
- Low lake levels can cause concern for lake residents, commercial establishments, and boaters due to their impacts on recreation. As the lake levels drop, more impacts are recognizable. A lake elevation of 356' was recognized as optimal in the Lake Murray Association September 2005 Lake Murray User Survey and in Lake Murray Homeowners Coalition surveys. According to these surveys, when the lake drops below elevation 352' more serious impacts to recreation occur.

17. Are there changes to Project operations that you would like to see addressed to improve the overall value of the reservoir, and how specifically would such changes benefit recreation?

- Current reservoir level operations balance the multi-purpose use of the reservoir. Maintaining the existing reservoir level fluctuations would allow for continued water level management through daily and weekly power generation operations however recreation would see no additional benefits. Conversely, limiting the seasonal fluctuation may have recreational benefits but other project purposes would be compromised (power generation, water level management, water quality maintenance, and aquatic weed control).
- Higher lake levels will increase, improve and enhance recreational opportunities.

18. What are the impacts of seasonal and/or daily variations in reservoir level.

- There are no large daily fluctuations in reservoir levels at the Saluda Hydroelectric Project (there are large fluctuations in the Lower Saluda River water level). However, daily fluctuations in lake level could create a potential safety issue.
- Weekly and seasonal fluctuations in lake level may have an effect on recreation.

19. What are the reservoir levels at which recreation problems tend to occur (may be different for different locations or problems)?

- SCE&G already extended boat ramps at several of their public access parks to accommodate a water level down to el. 345 ft PD.
- Buoys function more appropriately when lake levels are at 354' or higher.

20. When (i.e., what time of year) and how frequently do recreational problems occur related to reservoir levels?

- In general, the operation of Saluda Hydroelectric Project has been consistent throughout the years except for 1990, 1996, 2002 – 2004, and 2006. During those years the lake level was lowered to around el. 345 – 348 ft PD for the following project maintenance requirements:  
 1990 – Intake towers maintenance

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## Standard Process Form

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1996 – Hydrilla control as requested by SCDNR

2002 – 2004 – FERC Order for safety during dam remediation project

2006 – Upstream riprap repair

- It ~~may~~ be necessary to lower the lake level to around el. 345 ft PD in the future for maintenance of project structures, managing lake resources, installing new recreational access ~~or other extraordinary circumstances~~.
- Seasonal variations occur depending on rainfall and upstream water flow.

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21. Why are ~~operating~~ water levels important to the operation of the project and the overall system?

- The Saluda Hydroelectric Project is a multi-purpose reservoir. The changes in water level have many beneficial impacts both upstream and downstream of the dam :
- The project is used to meet our contingency reserve capacity obligation as part of the VACAR agreement. This is for a loss on our own system or by one of our neighboring Reserve Sharing Group utilities.
- Electricity (inexpensive, clean, renewable)
- Electric system ancillary services (transmission line maintenance & overload protection, security resource for VCS Nuclear Station)
- Navigation support
- Boating opportunities
- Municipal and industrial water supply

**Deleted:** The current operating water levels are critical for the project to meet its required purposes.

22. Are there state or federal operating requirements that stipulate specific operating goals?

- SCE&G and SCDHEC have an agreement to discharge a minimum flow or 180 cfs from the project.
- Article 12 of the FERC license requires that reservoir levels and discharge from storage be controlled by reasonable rules and regulations of the Commission for the protection of life, health, and property and for other beneficial public uses including recreational purposes.
- Exhibit H of the latest FERC license application identifies the lower lake level to be Elev. 350 during normal flow years and Elev. 345 during low flow years.
- Our McMeekin Generating Station NPDES permit requires a minimum of 2,500 cfs discharge from Saluda Hydro prior to discharging the fossil plant circulating water return directly into the Lower Saluda River.
- NERC/SERC/VACAR Agreements – SCE&G primarily uses Saluda to meet its reserve capacity requirements.

**Deleted:** <#> Trout fishery¶  
<#>Downstream water quality and aquatic habitat¶

**Inserted:** <#> Trout fishery¶  
<#>Downstream water quality and aquatic habitat¶  
Municipal and industrial water supply

**Deleted:** <#>Downstream recreation.¶

**Inserted:** <#>Downstream recreation.

**Inserted:** <#>¶

**Formatted:** Bullets and Numbering

### QUESTIONS REGARDING DOWNSTREAM FLOWS

23. Are there riverine recreation opportunities below the dam? If yes, move to additional questions, if not, stop.

Yes, trout fishing (wading, bank, boat), striper fishing (wading, bank, boat), canoeing/kayaking, tubing, sunbathing/swimming/rock hopping, picnicking, walking/hiking, bicycling, wildlife watching.

## Standard Process Form

DRAFT

24. Do we know how different flow levels affect recreation opportunities and specific recreation activities?

25. Can opportunities be enhanced by modifying releases, and in what way?

Predictable flows would make it safer, easier to fish/boat/swim in the river. It would also enhance the commercial aspects of boating/fishing in the river (allow outfitters/guides known times they could take paying customers into the water safely).

26. How would modified releases affect upstream lake levels?

27. How would suggested modified downstream flows affect project operations at the project and at upstream and downstream projects?

28. Are there additional concerns with regard to state and federal requirements or existing ecological issues that limit suggested changes to downstream flows?

There are concerns about bank erosion due to high flows.  
There are concerns about water quality/habitat for aquatic organisms due to low flows or continuous flows.

29. How binding is the VACAR agreement and when does it expire? (I notice that it is not listed in the state/federal operating requirements in Question 22).

**Page 6: [1] Inserted** **Tony Bebber** **2/13/2007 10:47 AM**

Low water levels (below \_\_\_ ft.) causes concern by many lake residents, commercial establishments, and boaters – year round but especially during peak season.

**Page 6: [2] Deleted** **Alison Guth** **2/22/2007 10:09 AM**

What minimum lake elevation will provide recreational benefits during each season of the year?

**Page 6: [3] Deleted** **Alison Guth** **2/22/2007 10:13 AM**

that can occur without adversely affecting the overall value of the project (including impoundment objectives such as recreation, fish and wildlife, flood control, generation, navigation, etc.)?

**Page 6: [4] Deleted** **Alison Guth** **2/22/2007 10:17 AM**

There appears to be a potential impact to recreational resources when the lake level is lower (below \_\_\_ ft.).

**Page 6: [5] Inserted** **Bill Argentieri** **6/13/2006 4:18 PM**

There appears to be a potential impact to recreational resources when the lake level is lower

**Page 6: [6] Inserted** **Bill Argentieri** **6/13/2006 4:18 PM**

SCE&G already extended boat ramps at several of their public access parks to accommodate a water level down to el. 345 ft PD.

**Page 6: [7] Deleted** **Alison Guth** **2/22/2007 10:17 AM**

Some navigational hazards (unmarked) occur when levels drop below \_\_\_ ft.

**Page 6: [8] Inserted** **Tony Bebber** **2/13/2007 10:49 AM**

Some navigational hazards (unmarked) occur when levels drop below \_\_\_ ft.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
RECREATION RCG  
Lake Levels TWC**

**SCE&G Lake Murray Training Center  
February 14, 2007**

Draft acg 2-22-07

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**ATTENDEES:**

Alison Guth, Kleinschmidt Associates      Bill Argentieri, SCE&G  
Joy Downs, LMA                                      Steve Bell, Lake Murray Watch  
Bertina Floyd, Lake Murray Homeowners Coalition

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**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

Alison Guth opened the meeting and noted that the discussion would be regarding the Reservoir Levels section of the Recreation Standard Process Form. She asked what additional information was needed to answer the questions specified in the document. The group noted that they would like to go through the questions and update the items when necessary. Bill Argentieri fielded questions on the responses that he provided in the document and the group collectively made additions and wording changes. Steve Bell indicated that he believed more information was needed on how SCE&G makes operation decisions based on the flow forecasting models. He noted that he would not like to see the lake drop in September unless there was an approaching hurricane. Bill replied that in the fall they usually aim for an elevation based on the flow model and generate in a systematic manner to reach the desired elevation. He continued to explain that in the spring the dispatchers prefer the lake level to be around 350' to 352' in order to prepare for the spring rain events.

In addition to discussion on the Standard Process Form, the group had brief discussion on the operations model. It was noted that this group would make lake level recommendations back to the Recreation RCG, which would then make lake level recommendations to the Operations group for input into the HEC ResSim model. The group noted that there would be other factors that would help determine what the lake level would be best, such as the results from the IFIM studies. Joy noted that according to the Lake Murray Association user surveys, an elevation of 354' would meet the recreation needs of most of the individuals surveyed.

The group concluded the additions and changes to Standard Process Form and adjourned. The group would meet again when necessary.

## Kacie Jensen

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**From:** Dave Anderson  
**Sent:** Tuesday, February 20, 2007 3:49 PM  
**To:** Dave Anderson; 'Van Hoffman'; Dave Anderson; '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'  
**Cc:** Alan Stuart; 'Bill Argentieri'  
**Subject:** RE: Recreation Assessment Draft Report

I have distributed the report to most people on the TWC, but have not heard from some of you. I would suggest you secure a copy of the report, as the due date of March 2 for comments is approaching.

I have not heard from any of you about what day works best this week to have a conference call to discuss the issue of spring sampling. Is Friday at 10 AM EST a good time for everybody?

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

**From:** Dave Anderson  
**Sent:** Tuesday, February 13, 2007 3:23 PM  
**To:** Van Hoffman; Dave Anderson; 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  
**Cc:** Alan Stuart; Bill Argentieri  
**Subject:** Recreation Assessment Draft Report

Members of the Recreation Management TWC:

I am pleased to tell you that the draft of the Recreation Assessment Study Report is ready for your review. However, due to the large file size (10.6 mb), I have not attached it to this e-mail. If your e-mail is capable of handling this large of a file, please respond and I will send it under separate cover. The entire report (with appendices) is a PDF file.

I also have available a Microsoft Word version of the main body of the report that you can use if you wish to submit comments via the "track changes" tool. If you wish to submit your comments some other way (FAX, e-mail, etc.), please include the page number at the bottom of the report with your comment/edit so we may locate it in the original document. The Word version (without appendices) is 3.2 mb.

If you can't receive such a large file(s), please let me know as soon as possible and I can send you either a CD with the files, or we can post it to an FTP site where you can download them at your leisure.

Due dates for comments will be March 2 (two and a half weeks). However, I would like to have a conference call by next Friday, Feb. 23, to make a decision on whether additional sampling in the spring will be necessary. Please let me know by the end of the day tomorrow what date and time work best for you toward the end of next week (either Wednesday, Thursday, and Friday).

After March 2, I will schedule another meeting to go over the comments and any edits made to the report with the intention of finalizing the report by the end of March.

Let me know if you have any questions.

Dave

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
LAKE AND LAND MANAGEMENT and RECREATION RCGs MEETING**

**SCE&G Lake Murray Training Center  
February 7, 2007**

Draft acg 2-20-07

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**ATTENDEES:**

Alison Guth, Kleinschmidt Associates	Bill Argentieri, SCE&G
Alan Stuart, Kleinschmidt Associates	Tony Bebber, SCPRT
Lee Barber, LMA	Joy Downs, LMA
Stan Jones, CALM	John Altenberg, Sea Tow, CALM
Tammy Wright, CALM	Archie Trawick Jr., CALM, Jakes Landing
Bill Brebner, Yacht Cove Owners	George Duke, LMHOC
John Frick, landowner	Bill Shipley, CALM
Joe Agnew, CALM	Charlie Higgins, CALM, Holland's Marina
Jon Dukes, Lake Murray Boat Club, CALM	Edie Beaver, CALM, Lake Murray Vacation
Angie Walston, CALM, Lake Murray Vac.	Randy Walston, Acapulco, Lake Murray Vacation.
Donnie LeJohn, Spinners Marina	Suzanne Rhodes, SC Wildlife Fed.
Steve Bell, Lake Murray Watch	George King, landowner
Dave Anderson, Kleinschmidt Associates	Tommy Boozer, SCE&G
David Hancock, SCE&G	Kim Westbury, Saluda County
Teresa Powers, Newberry County	Jenn O'Rourke, SC Wildlife Federation
Carl Sundias, CALM, South Shore Marina	

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**HOMEWORK:**

- Dave Anderson– To issue recreation assessment to Recreation Management TWC

**DATE OF NEXT MEETING:**

**TBA**

***Review of Recreation Assessment in Quarterly Public Meeting on April 19<sup>th</sup> at 10:00 am and 7:00 pm***

**MEETING NOTES:**

*These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.*

**Presentation by the Commerce Association of Lake Murray:**

Dave Anderson of Kleinschmidt Associates opened the meeting and the group began with introductions. Dave noted that the first item on the agenda included a presentation from the



Commerce Association of Lake Murray (CALM) (link to presentation at [http://www.saludahydrorelicense.com/documents/SCEGpresentation4\\_000.ppt](http://www.saludahydrorelicense.com/documents/SCEGpresentation4_000.ppt)). Carl Sundias of South Shore Marina, and a member of CALM, began the presentation. He proceeded to describe the membership of the organization and noted that it not only consisted of marina operators, but other local businesses affected by the lake. Carl explained that the group had collectively developed a mission statement and he proceeded to review the mission statement with the group. After Carl had reviewed the mission of the CALM, Stan Jones of Lighthouse Marina reviewed some of the goals of the group. Stan explained that they were working with the Grow Boating Initiative which would provide boating infrastructure grants. He also reviewed how marinas help to improve the economy and meet the needs of the community. In conclusion, the CALM made a formal request of the Recreation RCG that the moratorium on multi slip dock permits be amended to allow permit applications at existing commercial marinas.

After the presentation, the floor was opened for questions. Dave asked about the Grow Boating Initiative and if it was related to the national Go Fishing Initiative. Carl and Stan indicated that they do not believe that the two are related and they explained that much of the funding for this initiative comes from portions of boat sales. Lee Barber asked how the work of the CALM aligned with the work of other agencies. Stan explained that they were willing to work with other groups to provide boats or facilities for smart boating courses and such.

The group had a brief discussion on boating safety and David Hancock of SCE&G asked if any of the marina operators have licensed captains that offer basic training on boat operation. A few of the marina operators indicated that they were licensed captains or knew of licensed captains that could assist their patrons. Many of the marina operators noted that they helped individuals who appeared to be having trouble or were inexperienced. Tommy Boozer noted that this may be an important item to note in the Safety RCG.

Tommy asked Stan for a little background on the requirements by DHEC in order to receive the clean marina certification. Stan noted that DHEC has just begun to fully develop the criteria; however, he anticipates that Lighthouse Marina will receive its certification this month. He explained that once a marina is certified, DHEC will do testing to make sure that water quality is maintained. Stan further noted that the Commerce Association has also received grants for new pump out facilities, many of which will be pump out boats.

Dave noted that a concern of the Recreation RCG was regarding recreational access to the reservoir and asked the Commerce Association for their opinion regarding current public access to the lake. Carl noted that the marinas have a difficult time competing with the free ramps, which has, in turn, started to put some of the smaller marinas out of business. Carl noted that they do feel the public needs more access, however once more free public access is put in place, the commercial marinas struggle to compete. Dave noted that the RCG's and TWC's do consider the impacts to commercial operators in their discussions. Tommy pointed out that FERC requires SCE&G to fulfill certain needs regarding recreational access, to which SCE&G must comply in order to protect their license. However, Tommy further noted that any access SCE&G provides is basic and does not include the amenities that the marinas provide, such as fuel or food.

The group briefly discussed the CALM's request for an amendment to the moratorium on multi-slip dock permits. Carl noted that the existing commercial marinas would like to perform upgrades and safety improvements that would require the lifting of the moratorium for existing facilities. Tommy noted that this was something that they would consider.

**Lake and Land Management Group Update:**

The group reconvened after a short break and Alan provided the group with an update on Lake and Land Management. Alan explained that the TWC had been meeting quite frequently and building on the existing Shoreline Management Plan section by section. Alan noted that the draft SMP would progress from the TWC to the RCG to SCE&G management for approval. From that point, Alan explained, the SMP would go out for public comment. Alan asked the CALM to submit any comments that they had so far on the SMP documents as soon as they could. The CALM noted that they could have any comments on the draft documents submitted to the Alison Guth by the end of March. Alan noted that the TWC has thus far attempted to introduce the needs of the commercial marinas; however, it will be very helpful if the commercial marinas can provide the group with specific needs.

Alan continued to explain what the Lake and Land Management group has been discussing. Dave noted that one item that overlapped both Recreation and Lake and Land groups was the issue of the designation of Two-Bird Cove and Hurricane Hole Cove as special recreation areas. This issue, however, was specifically being dealt with under the Lake and Land group.

#### **Adaptive Management in FERC Licenses:**

After lunch, Dave provided the group with a presentation on Adaptive Management in the context of FERC licenses. The presentation can be viewed at <http://www.saludahydrolicense.com/documents/2007-02-07AdaptiveManagement.ppt> . Dave noted that adaptive management is a relatively new principle in ecological fields, and the first example of adaptive management being used in a FERC license occurred around 10 years ago. As Dave proceeded through the presentation, he pointed out where the Recreation RCG stood within the adaptive management procedures (in the Planning Stage).

#### **Update on Recreation RCG and TWC's:**

There was group discussion on Recreation Plans, and Dave noted that he would send out an example of a recreation plan to the group. In regards to the drafting of a Recreation Plan for Lake Murray, Dave suggested that the Recreation Management TWC take the lead on this. The group agreed that that was acceptable. Dave explained that the Recreation Plan for Lake Murray would need to be drafted by the end of 2007 and finalized by early 2008. Dave explained that the results of the recreation assessment study would be needed for the drafting of the recreation plan. The results of the recreation assessment study would be presented at the April 19<sup>th</sup> Quarterly Public Meeting. Dave also mentioned that the Recreation RCG would convene in April to view the results of the boating density study and the recreation assessment. He explained that the Recreation Management TWC should anticipate bi-weekly conference calls/meetings during the next several months. Dave noted that the Downstream Flows TWC would probably meet sometime in the fall and the Lake Levels TWC would convene in the next couple weeks.

The group concluded discussions noting that the Lake and Land and Recreation group would be working close together during the land rebalancing process. The group adjourned.

## Kacie Jensen

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**From:** Alison Guth  
**Sent:** Tuesday, February 20, 2007 4:39 PM  
**To:** Van Hoffman; Alan Stuart; Alison Guth; Amanda Hill; Andy Miller; Bertina Floyd; Bill Argentieri; Bill East; Bill Marshall; Bill Mathias; btrump@scana.com; Carl Sundius; Charlie Compton; Charlie Rentz; Chris Page; Daniel Tufford; David Allen; David Hancock; Dee Dee Simmons ; Dick Christie; Don Tyler; George Duke; Gerrit Jobsis (American Rivers); Hank McKellar; Irvin Pitts (ipitts@scprt.com); Jennifer O'Rourke; John Frick; Joy Downs; Kim Westbury; Kit Oswald ; Larry Turner (turnerle@dhec.sc.gov); Laura Boos (laura.mccary@gmail.com); Linda Lester ; Linda Schneider ; Mark Leao; Mary Kelly; Michael Murrell; Mike Duffy; Mike Summer (msummer@scana.com); Mike Waddell; Parkin Hunter; Patricia Wendling; Patrick Moore; Phil Hamby ; Ralph Crafton; Randal Shealy; Randy Mahan; Regis Parsons (rparsons12@alltel.net); Rhett Bickley; Richard Kidder; Robert Keener (SKEENER@sc.rr.com); Ron Ahle; Ronald Scott; Roy Parker; ryanity@scana.com; Sheri Armstrong ; Steve Bell; Suzanne Rhodes; Synithia Williams; Theresa Powers; Tom Brooks; Tom Ruple; Tommy Boozer; Tony Bebbler; 'J. Ryan'; Alan Axson; Bill Brebner ; Charlene Coleman; Dave Anderson; Guy Jones; Jeff Duncan; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Lee Barber; Malcolm Leaphart; Marty Phillips; Miriam Atria; Norman Ferris; Richard Mikell; Stan Jones (sjones@imichotels.net); Tim Vinson  
**Cc:** Dave Anderson  
**Subject:** Draft Feb. 7th notes

Hello All

Attached are the draft meeting notes from the February 7th Lake and Land Management and Recreation RCG's meeting. Please have any corrections or additions to these notes back to me by March 6th for finalization. Thanks, Alison



2007-2-7 draft  
Meeting Minute...

**Alison Guth**  
**Licensing Coordinator**  
**Kleinschmidt Associates**  
**101 Trade Zone Drive**  
**Suite 21A**  
**West Columbia, SC 29170**  
**P: (803) 822-3177**  
**F: (803) 822-3183**

**Kacie Jensen**

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**From:** Alan Stuart  
**Sent:** Wednesday, February 14, 2007 12:01 PM  
**To:** LEAPHART,JR., MALCOLML; Dave Anderson; Van Hoffman; David Hancock; Dick Christie; George Duke; Jennifer Summerlin; Joy Downs; Kelly Maloney; Lee Barber; Marty Phillips; Patrick Moore; Steve Bell; Tim Vinson; Tommy Boozer; Tony Bebbler  
**Cc:** BARGENTIERI@scana.com; mwaddell@esri.sc.edu; marshallb@dnr.sc.gov; ahler@dnr.sc.gov  
**Subject:** RE: Recreation Assessment Draft Report

Hi Malcolm,

Here are a couple of the meeting minutes where we discussed the Downstream Flows Study Plan (which included the rate of change study). You attended one and it appears Mike Waddell attended one. If you look at the end of the notes (September 20, 2006) you provided a comment that states: "The draft, including the comments and replies, has evolved to an accurate document of the scope and intentions of the Downstream Flow Study as discussed at the past meetings".

Lot's going on and hard to keep things straight...Study is proceeding very well and ahead of schedule. All good news...Alan

<http://www.saludahydrorelicense.com/documents/2006-09-20DFTWCMeetingNotesFINAL.pdf>

<http://www.saludahydrorelicense.com/documents/2006-04-18DFTWCMeetingNotesFINAL.pdf>

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**From:** LEAPHART,JR., MALCOLML [mailto:MALCOLML@mailbox.sc.edu]  
**Sent:** Wed 2/14/2007 10:15 AM  
**To:** Dave Anderson; Van Hoffman; David Hancock; Dick Christie; George Duke; Jennifer Summerlin; Joy Downs; Kelly Maloney; Lee Barber; Marty Phillips; Patrick Moore; Steve Bell; Tim Vinson; Tommy Boozer; Tony Bebbler  
**Cc:** Alan Stuart; BARGENTIERI@scana.com; mwaddell@esri.sc.edu; marshallb@dnr.sc.gov; ahler@dnr.sc.gov  
**Subject:** RE: Recreation Assessment Draft Report

**STUDY REPORT:**

Why not just post on the relicensing website with the other study reports for the Recreation RCG - and send out a note of the posting with the link? However, iff there is a reason to send it via email, then I have a new personal email system at USC that is supposed to be more robust; so, let's give it a chance to be so. Send me the pdf please as I never could get the 'track changes' feature to work well, especially the 'cluttered' printouts they produce.

**RECREATIONAL FLOWS:**

What rec flow studies are underway that are referenced on the new SCE&G Flows website? Cannot find where those are documented on the relicensing website, or in past emails for either the Downstream Flow TWC or the Rec Management TWC that I am both a participant of. Would you please send out to all appropriate a web page link or a document that explains what is being done on each of the dates where flows are being released for study purposes?

Thanks.

---

**From:** Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]  
**Sent:** Tue 2/13/2007 4:22 PM  
**To:** Van Hoffman; Dave Anderson; David Hancock; Dick Christie; George Duke; Jennifer Summerlin; Joy Downs; Kelly Maloney; Lee Barber; LEAPHART,JR., MALCOLML; Marty Phillips; Patrick Moore; Steve Bell; Tim Vinson; Tommy Boozer; Tony Bebbler  
**Cc:** Alan Stuart; Bill Argentieri  
**Subject:** Recreation Assessment Draft Report

Members of the Recreation Management TWC:

I am pleased to tell you that the draft of the Recreation Assessment Study Report is ready for your review. However, due to the large file size (10.6 mb), I have not attached it to this e-mail. If your e-mail is capable of handling this large of a file, please respond and I will send it under separate cover. The entire report (with appendices) is a PDF file.

I also have available a Microsoft Word version of the main body of the report that you can use if you wish to submit comments via the "track changes" tool. If you wish to submit your comments some other way (FAX, e-mail, etc.), please include the page number at the bottom of the report with your comment/edit so we may locate it in the original document. The Word version (without appendices) is 3.2 mb.

If you can't receive such a large file(s), please let me know as soon as possible and I can send you either a CD with the files, or we can post it to an FTP site where you can download them at your leisure.

Due dates for comments will be March 2 (two and a half weeks). However, I would like to have a conference call by next Friday, Feb. 23, to make a decision on whether additional sampling in the spring will be necessary. Please let me know by the end of the day tomorrow what date and time work best for you toward the end of next week (either Wednesday, Thursday, and Friday).

After March 2, I will schedule another meeting to go over the comments and any edits made to the report with the intention of finalizing the report by the end of March.

Let me know if you have any questions.

Dave

## Kacie Jensen

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**From:** Alison Guth  
**Sent:** Tuesday, February 13, 2007 3:51 PM  
**To:** Tim Vinson; Alan Stuart; Bill Argentieri; Dave Anderson; Dick Christie; Joy Downs; Lee Barber; Steve Bell  
**Subject:** Lake Levels TWC

Hello All,

Just a reminder that we have a lake levels TWC tomorrow at the Lake Murray Training Center. This meeting will begin at 9:30, so please try to be on time. We only anticipate this meeting lasting until noon, so lunch will only be provided in the event we have a prolonged meeting. Thanks! Alison

**Alison Guth**

**Licensing Coordinator**

**Kleinschmidt Associates**

**101 Trade Zone Drive**

**Suite 21A**

**West Columbia, SC 29170**

**P: (803) 822-3177**

**F: (803) 822-3183**

Malcolm,

Your concern is noted; I assumed the topics were enough for participants to get the gist of what will be discussed. I will try to provide more detail in the future.

It looks like you have determined the morning session will be focusing on lake issues. The Commerce Association of Lake Murray is a group of marinas that requested a spot on the agenda to present their interest in the relicensing process. Alan's part will be to update the Recreation RCG on issues being discussed in Lake and Land Management that are of concern to the Recreation RCG. We decided to invite the Lake and Land Management RCG as these issues are pertinent to them as well.

The afternoon sessions are intended to refocus the RCG on the Recreation Plan and discuss the process of how the Recreation Plan will be drafted. I would encourage your attendance at this session as you are a member of the Recreation Management TWC as well.

As always, thanks for your comments and I look forward to seeing you next week.

Dave

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

**From:** LEAPHART,JR., MALCOLML [mailto:MALCOLML@mailbox.sc.edu]

**Sent:** Tuesday, January 30, 2007 11:11 AM

**To:** Alison Guth

**Cc:** Dave Anderson

**Subject:** FW: Agendas

resend with corrected addresses

---

**From:** LEAPHART,JR., MALCOLML  
**Sent:** Tue 1/30/2007 12:10 PM  
**To:** Alison.Guth@Kleinschmidt.com  
**Cc:** dave.anderson@kleinschmidt.com  
**Subject:** Agendas

Alison,

It would be very helpful if the agendas provided more detail, especially whether river or lake issues will be discussed. There was some discussion about splitting out the RCGs along those lines in the beginning, but those two key areas were combined; however, there are many with limited time that need to know if a meeting will be predominately one or the other. Most of us working stakeholders have to take annual leave or vacation days to attend the meetings, and just don't have enough of that time to attend all the meetings... so we have to pick and choose and then try to keep up via the meeting summaries what we miss. So keep that in mind when meetings are announced as more details on the agenda topics, and especially whether lake or river oriented, will help us in being at the meetings that we can contribute the most to.

Also, it is not clear why the Recreation and Lake and Land Management RCGs have been combined for February 7, especially with Ron Ahle out of town for several weeks who has been a key participant as the long time DNR staffer for Lake and Land Management. I would guess that the commercial marina topic is intended for both groups, but that wasn't stated... and again that format ties up a 'river oriented' participant in a session of lesser importance. At this point, my plans are to try to attend the afternoon sessions to key on Lower Saluda River issues... pending work which is busy now with several new projects. So, don't count me in for lunch and I'll come afterwards as I can.

## Kacie Jensen

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**Subject:** Updated: Recreation RCG & Lake and Land Management Joint Meeting  
**Location:** Lake Murray Training Center

**Start:** Wed 2/7/2007 9:30 AM  
**End:** Wed 2/7/2007 3:00 PM  
**Show Time As:** Tentative

**Recurrence:** (none)

**Meeting Status:** Not yet responded

**Required Attendees:** Lake & Land Management RCG; Lake & Land Mgt TWC; Recreation RCG

Hello All,

We will be having a Recreation and Lake and Land Management Joint RCG meeting on Wednesday, February 7th at 9:30. Due to the nature of some of the material that will be discussed, we felt that it was pertinent that both RCG's be involved. The agenda is attached below. Please RSVP for lunch and gate access by Thursday, February 1st. Thanks! Alison



2007-02-07  
Recreation RCG Agen.



**Saluda Hydro Relicensing  
Recreation Resource Conservation Group**

**Meeting Agenda**

**February 7, 2007**

**9:30 AM**

**Lake Murray Training Center**

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- **9:30 to 10:00** Introduction/Meeting Purpose (Dave Anderson)
  - **10:00 to 10:45** Presentation on Commercial Marinas (Commerce Association of Lake Murray)
  - **10:45 to 11:00** BREAK
  - **11:00 to 12:00** Lake and Land Management Issues (Alan Stuart)
  - **12:00 to 1:00** LUNCH
  - **1:00 to 1:45** Adaptive Management in the Context of FERC Licenses (Dave Anderson)
  - **1:45 to 2:00** BREAK
  - **2:00 to 2:30** Moving Forward on the Recreation Plan (Dave Anderson)
  - **2:30 to 2:45** Develop an Agenda for Next Meeting and Set Next Meeting Date
- Adjourn

