

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
Downstream Flows Technical Working Committee
SCE&G's Lake Murray training Center
June 11, 2008**

ATTENDEES:

Alan Stuart, Kleinschmidt Associates	Bill Argentieri, SCE&G
Matt Rice, American Rivers	Dave Anderson, Kleinschmidt Associates
Tony Bebber, SCPRT	Carl Bussells, Kleinschmidt Associates
Randy Mahan, SCANA Services	Ray Ammarell, SCE&G

ACTION ITEMS: Determine Recreational Flow Reductions for each of the four Low Inflow Protocol stages.

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 Anderson of Kleinschmidt Associates opened the meeting around 1:30, and proposed that recreational flows would be reduced by 25% overall with each drought stage, and by Stage IV, all recreational flows would be reduced to the minimum flow of 400 CFS. In other words, the proposed scheme was 100% for normal inflow, 75% for Stage I drought, 50% for Stage II, and so on.

Dave suggested that some non-event boating days should be reduced to 1-day events instead of 2-day for a Stage I drought. Matt, Tony, and Alan concluded that the main priorities for recreational flows should be Canoeing for Kids, Junior Olympics (USTWWR Prac.), Rescue Rodeo, and the Iceman Competition. These events were not reduced for Stage I. Dave and Bill explained that release times for higher flows will depend on where the event occurs because of the time the water takes to reach the event. After editing the spreadsheet tool used for examining different reduction scenarios, the group agreed that a reduction of 20% was agreeable for Stage I.

For Stage II, Bill proposed that recreational flows for a stage 2 event could be at 60% instead of 50%. Randy concurred and stated that a drop from Stage II to Stage III can be greater because a Stage III drought is less likely. In this case, the Low Inflow Protocol (LIP) recreational flow reduction scheme is 100% at normal, 80% at Stage I, 60% at Stage II, 25% at Stage III and 0% at Stage IV. For Stage II, all non-event boating days were removed, the White Water Festival was reduced to 1 day, and the Iceman Race was reduced to 1000 CFS. Bill noted that the spreadsheet will to be used as a guideline

during the annual recreational flows meeting. Matt added that flows should be adjusted depending on event turnout, cancellation, etc. He said that the Rescue Rodeo is a good signature for the Southeast and instigates tourism, and it should be a 2-day event.

Alan called Charlene Coleman for a word on the priority of events. She explained that she would prefer the order of priorities for a Stage III drought be Canoeing for Kids in May, then Junior Olympics, Rescue Rodeo, and Canoeing for Kids in October.

All agreed that all recreational events (except for wade fishing levels) will be cancelled during a Stage IV drought. The group agreed that the 32 “minimum” flow days in a Stage IV drought will still be “non-reserve” days.

In response to a request to provide flow release information on the Lower Saluda River website as soon as SCE&G is aware of a release, Bill noted that flow release information is already provided with as much advance notice as possible. Alan suggested that it would be helpful for the future recreational flow schedule to be available as a PDF. Tony added the recreational flow information could be combined into one page with attachments, informational boxes, or links, so users would only have to check one place.

The group discussed release patterns, and Bill noted that SCE&G has already tried to spread out flows for lake level management releases, such as releasing 4,000 CFS for 5 hours rather than 10,000 CFS for 2 hours. Matt added that this would be much safer and less harmful to wildlife.

Bill noted that ‘ramping’ was not favorable mainly because it could affect the siren system operation and people could be confused by trying to figure if a flow release is going to be ramped or not be ramped depending on the reason for a release. Tony noted that most river accidents and drowning are alcohol related. Everyone agreed that there must be a compromise between the two, so release patterns could be less extreme.

MEETING NOTES

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

**SCE&G Training Center
April 23, 2008**

Final ACG 8-11-08

ATTENDEES:

Alan Stuart, Kleinschmidt Associates	Bill Argentieri, SCE&G
Alan Axson, Cola. Fire Dept.	Karen Kustafic, Cola. Parks
Bill Marshall, SCDNR	Matt Rice, American Rivers
Jim Cumberland, CCL	Tony Bebbber, SCPRT
Vivianne Vejdani	

DATE: April 23, 2008

ACTION ITEMS

- Send the updated recreational flow spreadsheet out to committee members
Dave Anderson
- Develop a low inflow protocol for the Saluda Hydro Project
Kleinschmidt
- Determine flows to be eliminated for each stage of drought for the Lower Saluda River
Downstream Flows TWC members

INTRODUCTIONS AND DISCUSSION

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 opened the meeting and noted that the purpose of the meeting would be to review SCE&G's counter proposal to the stakeholders request for recreational flows for the lower Saluda River (LSR). Bill A. suggested that instead of having predetermined flows each year, maybe it would be better to set aside a predetermined acre/feet in the Lake for the recreational flows and determine flow allocation at the October Downstream Flows Recreation meeting. Bill A. noted that this may work out better if a future event such as an Olympic event comes about and there are no days available for the event, because all recreational flows have been predetermined.

Bill A. discussed SCE&G's responses to the Downstream Flows Recreation TWC stakeholders request for recreational flows. Bill noted that SCE&G has set aside a total of 62 days without Saluda's capacity counted towards their reserve obligation. He further explained that 11 of those days were set aside for swift water rescue, which leaves 51 days for recreational flows. The 51 days are partial days because it is more difficult to take Saluda out for a full day or multiple days. He explained that SCE&G is currently developing a low inflow protocol for the lower Saluda River and

once it has been finalized, SCE&G will follow through with the TWC's critical times. Bill A. noted in regards to the high or low boating flows, that SCE&G would prefer the 10:00 am to 4:00 pm because there is more likely to be a reserve need in the evening. Bill A. also explained that if scheduled recreation days were lost due to inclement weather, then they will not be able to reschedule make-up days.

In response to SCE&G's responses, Matt Rice noted that 51 days for recreational flows was a fair request, but had some concerns with the specific language. Particularly, he noted they were not comfortable with losing recreation days for "any other reason" as stated in SCE&G's response. He explained that they would like to develop acceptable language for this. Matt noted that the group would support up to 5 lost recreational days, but anything over 5 Matt noted should be made up.

In regards to ramping, Matt noted that they were not as concerned about ramping on recreational flows and reserve calls, as they were concerned about ramping for non-reserve operations such as lake level management. He noted that the lights and sirens should be calibrated for small rises and be activated by operations of the hydro with an appropriate lag time for each location. Matt suggested developing enforceable language for the last paragraph on ramping.

Matt requested that the times for wade fishing/swimming hours from May through October be changed to 8:00 am through 6:00 pm. Matt explained that this is when the river will be most heavily used by rock users and tubers etc.. Bill A. noted that earlier times were chosen because fisherman will most likely be on the river during these times. Matt explained he spoke with Mike Waddell and Malcolm Leaphart and they noted that most of the good fishing is in the winter months from November through April. Jim Cumberland requested that the wade fishing/swimming hours in May through October be changed to 8:00 am to 5:00 pm. Bill A. noted that they originally offered the time 6:00 am to 3:00 pm because SCE&G did not want to get too far into the evening hours where there is the possibility of a reserve call. The group noted that that would be acceptable and they also would be fine with boating flows from 10:00 am to 4:00 pm.

The group briefly reviewed the spreadsheet that contained the recreational flows for each month. Changes that were made by the group were highlighted in the spreadsheet. The group then went through the exercise of using allotted acre/feet to accommodate future events. The group agreed that there was a lot more flexibility with having water stored for reserve in Lake Murray for future recreation flows. Jim Cumberland asked if there was any room to add to the 45,000 acre/feet. Bill A. explained that if the water is there then we will try to accommodate the flows needed. Bill Marshall asked if there would be flexibility with the times that the flows are provided. Bill A. noted that it is certainly possible and explained that it would be helpful if committee members had an idea of the times that they want to change and to let SCE&G know before the meetings planned in October so SCE&G can talk with the dispatchers. Dave noted that he would send the excel file with the corrected recreational flows back out to committee members and noted he would develop the wording for the recreation plan.

Alan asked Bill A. if SCE&G was still willing to concede to 51 recreational flow days during a drought when there is a higher strain on the system. Bill A. noted that once a low inflow protocol is created, certain recreational flows and days will be eliminated during specific drought stages. Bill A. noted that the group should determine how they would like the flows to be eliminated at different stages of drought. The group adjourned.

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
RECREATION MANAGEMENT TWC**

**SCE&G Training Center
March 3, 2008**

Final acg 8/11/08

ATTENDEES:

Alison Guth, Kleinschmidt Associates
Randy Mahan, SCANA Services, Inc.
Bill Argentieri, SCE&G
Tommy Boozer, SCE&G
Alan Stuart, Kleinschmidt Associates
Joy Downs, LMA
Jim Cumberland, CCL
Suzanne Rhodes, SCWF

Dave Anderson, Kleinschmidt Associates
Mark Davis, SCPRT
Malcolm Leaphart, TU
Steve Bell, Lake Watch
Dick Christie, DNR
Tony Bebbler, SCPRT
Vivianne Vejdani, SCDNR
Bill Marshall, LSSRAC, SCDNR

MEETING NOTES:

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Dave Anderson opened the meeting and noted that the main purpose of the meeting was to review the draft Recreation Plan and Tommy Boozer would lead discussions on specific recreation sites included in the plan. Dave noted that the group would also review the trout fishery and lake level recommendation. Dave further explained the main meeting purpose would be to provide a forum to clear up any questions with the plan. It was noted that any written comments or alternative proposals were due by March 14th.

Tommy began the presentation on existing, future and proposed recreation sites. During the review, it was noted that the terms “existing”, “undeveloped” and “future” recreation could get confusing. It was also suggested that the terms “existing informal” and “existing undeveloped” recreation be used. The group reviewed through Park Site and Bundrick Island. Tommy noted that at Bundrick Island, their current plans are to leave it as it is. Steve Bell noted that he believes Bundrick Island would be a good area for parking and passive recreation.

Tommy continued to review the existing recreation sites and future recreation sites (those sites that have been classified for recreation but are not yet developed at this time). The group reviewed Shull Island and it was noted that it was one of the most heavily used facilities on the lake. As the group continued to review through the sites, the group reviewed Dreher Island State Park. Tommy noted that Dreher Island State Park would be a good site for a larger marina. Tommy also explained that Long Pine recreation area would be a good place for nature trails. The group also discussed the islands, and lower Saluda River. It was noted that 9 miles of the lower Saluda river shoreline was in the state scenic river program. Tommy described Metts Landing and it was noted that this was one

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Final acg 8/11/08

of the few areas on the LSR that one can put in a boat with an outboard motor. Tommy also explained that there were additional areas on the lower Saluda that were proposed for future recreation sites. It was noted that there was a proposed area along Candy Lane that would be a good take-out for canoes and kayaks above the Millrace rapids.

Steve Bell asked if the sites that are designated for future development in the relicensing will be developed right away. Dave noted that they would not be developed within the first 10 years; however they will be reevaluated during the 10 year review.

In review, Tommy presented a table of existing park sites, existing future development park sites and proposed future development park sites. After the presentation, Dave went through the recreation plan with the group. The group reviewed through each of the existing sites noting improvements or changes, as well as the existing sites for future recreational development. After reviewing the sites, Steve noted that he would like to see signage placed on future recreation sites. Tommy noted that they would be identified on a map.

After lunch the group discussed the trout fishery recommendation. The group reviewed through the document and discussed changes. Malcolm Leaphart of Trout Unlimited had made a few changes to the document and the group discussed those. Dave explained that when discussing protecting the trout fishery, this memo looks at the human side of the resource rather than the ecological side. The group continued to edit the document and Dave noted he would clean it up and send it around for final comments. It was explained that it would be included in a memo issued to the Fish and Wildlife RCG as well as SCE&G on the Recreation TWC's recommendation on how to protect the trout fishery.

The group also discussed the lake level recommendation. Dave asked the group how the recommendation will account for minor fluctuations in water levels. It was noted that the recommendation would simply be an input for the model and not account for fluctuations. LMA and Lake Watch expressed that the model input should include a minimum of 354' Plant Datum (PD), with a preferred level of 356' PD.

During discussions, Steve also recommended that a white paper be written by SCE&G on how the lake level is managed, and what levels would be of concern.

As the group closed, Dave reminded everyone that written comments or emails on the Recreation Plan were due by March 14th. Steve noted that they would like to provide comments on the recreation plan regarding lake level fluctuations. Steve also noted that he believed safety issues should be referenced in the Recreation Plan.

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**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
Downstream Flows Technical Working Committee
SCE&G's Lake Murray Training Center
February 25, 2008**

Final JMS 3-21-08

ATTENDEES:

Bill Argentieri, SCE&G	Dave Anderson, Kleinschmidt Associates
Alan Stuart, Kleinschmidt Associates	Tony Bebber, SCPRT
Dick Christie, SCDNR	Harry Tinsley, Cola Fire
Jeni Hand, Kleinschmidt Associates	Travis Carricato, Cola Fire
Mike Weddell, TU	Malcolm Leaphart, TU
Matt Rice, American Rivers	Gerrit Jobsis, American Rivers
Charlene Coleman, American Whitewater	Steve Bell, Lake Watch
Karen Kustafik, City of Cola, Parks	Jim Cumberland, CCL
Vivianne Vejdani, SCDNR	Bill Marshall, LSSRAC

ACTION ITEMS

- Provide Bill Argentieri with a time frame and flows needed for the Columbia Fire Department rescue squad training on the LSR.
Harry Tinsley and Travis Carricato

NEXT MEETING

**Downstream Flows TWC
TBA**

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
Downstream Flows Technical Working Committee
SCE&G's Lake Murray Training Center
February 25, 2008**

Final JMS 3-21-08

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 Anderson of Kleinschmidt Associates opened the meeting at approximately 10:00 AM and welcomed all committee members. Dave noted that American Whitewater and American Rivers will be presenting their proposals for recreational flow recommendations for the lower Saluda River (LSR). Dave noted that once the group has made the recreational flow recommendations, then the group will discuss the next steps to be taken.

Presentation of American Whitewater Proposal, Charlene Coleman (Attachment A).

Charlene Coleman noted that American Whitewater submitted flow recommendations for the Saluda Hydro Project before the draft application was submitted to FERC. Charlene explained each of the requested flow events month by month. Specifically she noted that in January they have been hosting the Iceman Race for the past seven years during the first non-holiday weekend. In March, for the past five years they have been hosting the Whitewater Festival, which is a good showcase event. She explained that the flows they are requesting are just a general idea, not in black and white. In the month of May, they requested a flow of 10,000 cfs on Mother's Day weekend for the Canoeing for Kids event. She requested that a Rescue Rodeo be scheduled during the third weekend in June. Charlene noted that currently, there is no rescue rodeo in the southeast for rescue teams. She explained that people would find it interesting to watch and it would also give the Columbia Fire Department an opportunity to demonstrate what kind of funding is needed for the department and ideally it would bring all different squads together.

There was extensive discussion about the flows needed by the Columbia Fire Department for swift water rescue training. Harry Tinsley noted that for technical skill development, they would need a flow of 12,000 cfs, which would allow for a better rescue and explained that different flows provide different risks. Harry explained that they would request to have these flows during early spring before it gets hot and people start recreating on the rocks. He explained that since they have approximately 60 techs to train every year, they would like to have flows between 12,000 and 15,000 cfs for approximately 6 hours per day for five days. They would prefer to have the training start in the early morning around 6:00 am until 2:00 pm. They have to conduct the training for a whole week because they will have six shifts. He further explained that they would need to conduct the training twice a year. Gerrit Jobsis noted that may be it would be possible to conduct one of their rescue trainings during the month of December, when SCE&G draws down the reservoir for the winter.

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Charlene continued describing American Whitewater flow requests and noted that for the last weekend in July they would like to have a Whitewater Rodeo. She explained that they use to have this event every year, but took it out. One of the big events that is a big showcase for the City of Columbia is the US Team Jr. Wildwater Racing Practice, which occurs in the month of August. For the month of September, Charlene noted that she put the Columbia Fire Department rescue training in for this month as a starting point for the rescue squad. Finally for the month of October, Charlene noted that they would like to schedule a second canoeing for kids on the third Saturday of the month.

Presentation of American Rivers Proposal, Matt Rice (Attachment B).

Matt Rice noted that members of the Downstream Flows Technical Working Committee recommend the listed schedule of planned releases aimed to improving safe wade fishing and whitewater boating to be incorporated into SCE&G's new operating license for the Lake Murray Dam. Matt explained that American Whitewater flows are included in the schedule and are not competing. Matt noted that TWC members recommend 37 days and the corresponding flow releases be dedicated to whitewater recreation on the LRS. He noted that this recommendation is for one weekend a month in the months of December through May and two weekends a month June through November. Matt explained that the two boating flow ranges identified on the schedule attempt to address the recreational needs of all skill levels of whitewater users as well as other activities on the LSR. The low boating flow range (1,800 cfs-2,400 cfs) aims to enhance whitewater recreation for novice to intermediate boaters. The high boating flow range (3,800 cfs - 4,500 cfs) aims to enhance whitewater recreation for intermediate to expert boaters. Matt noted that these flows would be protected against a reserve call. It was also noted that establishing a 2-3 day weekend of flows, rather than just a day, would assist in attracting out-of-town visitors to paddle of fish and stimulate weekend tourism activity.

Matt noted that the wade fishing recreational flow recommendation aims to provide safe scheduled, wadeable flows on 42 weekend days in a one year period. He explained that they would like the wading flows to be protected from reserve calls. He noted that these flow proposals are from the Saluda instream flow recommendations. Wade fishing flows are optimum at 700 cfs and needed at "no more than" 1000 cfs. The recommendation is for two weekends a month dedicated to wade fishing from December through August and one weekend a month September through November. These flows would also be useful for swimming/rock use at Mill Race and other current and future access points during the season for other activities.

Dave asked the group if there was any discussion needed on flooding on the Congaree National Park (CNP). Gerrit noted that he is currently developing flows needed for the LSR to inundate the CNP. He explained that inundation occurs with a flow of 18,000 to 30,000 cfs from the Congaree River and noted that he is examining how much the LSR is contributing to the flooding. Gerrit noted that if SCE&G could provide the Columbia fire department rescue squad with their flows during the time the CNP needs to be flooded in the spring, would be beneficial.

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SOUTH CAROLINA ELECTRIC & GAS COMPANY SALUDA HYDRO PROJECT RELICENSING Downstream Flows Technical Working Committee SCE&G's Lake Murray Training Center February 25, 2008

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In regards to the flow recommendations from the group, Dave Anderson noted that since the Saluda Hydro Project is used for reserve capacity, SCE&G is willing to provide one weekend a month for recreational flows. Dave explained to the group that when SCE&G provides these recreational flows, Saluda will not be available for a reserve call. Dave also noted that these recreational flows can not be guaranteed as safe because no flows are guaranteed as safe. Gerrit noted that the boating/fishing organizations should have a caucus to discuss their requests, since SCE&G is providing recreational flows for one weekend a month.

After a brief caucus, the organizations returned with a revised draft recommendations for the recreational flow releases on the LSR. The revised recommendations are as follows:

Boating

- 39 days dedicated to whitewater boating.
- 32 days will not be protected from reserve operations (operations OK). These days are highlighted in blue on the chart.
- 7 days including the Wildwater training weekend (2 days), the rescue rodeo weekend (2 days), Memorial Day (1 day), Labor Day (1 day), and July 4 (1 day) will be protected from reserve operations (No operations). These days are highlighted in red.
- Flows for Labor Day, Memorial Day, and July 4: 700cfs-1500cfs

Wade Fishing/Swimming

- 38 days dedicated to wade fishing including MLK Day and Presidents Day
- 38 days protected from reserve operations (No operations)
- Target release window 7:00am-9:00pm (May-October); 7:00am-Noon or Noon-5:00pm, possibly alternating (November-April)
- Make up days: If weather events such as tropical storms make operations necessary on wade fishing days, missed days will be made up in a three month period.

Adaptive management

- Meet annually to schedule recreation days.
- Meet every 3 years to comprehensively review recreation schedule looking at recreation trends, trout reproduction and holdover etc.

Rescheduling

- If a scheduled flow release is cancelled or interrupted due to operational requirements such as dam safety or lake level management cause from climatic conditions, then request to have the flow event rescheduled with in a quarter or three months time frame.

Reserve calls

- During planned operation events, SCE&G should incorporate a rate of change (flow) in the event of a reserve call.

MEETING NOTES

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SALUDA HYDRO PROJECT RELICENSING
Downstream Flows Technical Working Committee
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Final JMS 3-21-08

Warning System

- Request that an advanced warning (strobe lights and sirens) system be placed at the Saluda Spillway, Metts Landing and Corley Island.
- Request that a 10-15 minute warning be given in advance to allow people enough time to get off the river.

Fire Department Rescue Training

Not a part of the recreation recommendation

There was a brief discussion about providing the rescue squad the flows needed to train their team. Bill Argentieri noted that SCE&G could come up with an agreement outside of the license to provide flows for training. Bill noted that once the Columbia Fire Department submitted time frames and flows needed then he would discuss this with upper management.

The meeting adjourned at approximately 3:30 pm and Dave noted that he would contact everyone regarding the next meeting date.

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
Downstream Flows Technical Working Committee
SCE&G's Lake Murray Training Center
February 25, 2008**

Final JMS 3-21-08

ATTACHMENT A

American Whitewater Proposal for Recreational Flow Releases on the Lower Saluda River

Recreation Resource Conservation Group

Issue Recommendation Recreational Flow Releases on the Lower Saluda River

DRAFT

February 5, 2008

Issue:

SCE&G currently operates the Saluda Hydro 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 Saluda Hydro to the lower Saluda River (LSR) 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 maintain downstream water quality of the LSR. SCE&G typically releases a minimum flow of approximately 500 cfs to enhance water quality during the low dissolved oxygen (DO) season (July – November). The average annual flow from the Saluda Dam to the LSR is 2,595 cfs with a minimum average daily flow of 285 cfs.

The Lower Saluda Scenic River Advisory Council, South Carolina Department of Parks, Recreation and Tourism, South Carolina Department of Natural Resources, American Whitewater, Saluda River Chapter of Trout Unlimited, and Coastal Conservation League/American Rivers have requested instream flows for the LSR to support recreational uses such as small boat navigation, swimming, wade and boat fishing, and other downstream uses.

American Whitewater, the Coastal Conservation League/American Rivers, and the City of Columbia Parks and Recreation Department have also requested scheduled recreational releases for whitewater boating, wade fishing, and special events.

To some degree, any number or all of the most popular on-water activities are available at flows of 4,000 cfs and less. Boating activities are generally available at flows of between 1,000 cfs and 4,000 cfs, whereas, non-boating on-water activities, such as swimming and wade angling, are best suited for flows of 1,000 cfs or less.

Daily average flows of less than 1,000 cfs are generally available 38 percent of the time year-round. Hourly average flows of less than 1,000 cfs are generally available 60 percent of the time year-round.

Daily average flows of less than 4,000 cfs are generally available 83 percent of the time year-round. Hourly average flows of less than 4,000 cfs are generally available 27 percent of the time year-round.

Higher flows, for whitewater activities such as canoeing/kayaking and rafting, of 12,000 cfs or greater are generally only available approximately 2 percent of the time year-round on a daily average and hourly average basis.

Recreation Resource Conservation Group
Issue Recommendation
Recreational Flow Releases on the Lower Saluda River

DRAFT

February 5, 2008

Recommendation:

Based on the results of the Downstream Recreation Flow Assessment, the Recreation RCG recommends:

1. SCE&G meets the attached schedule for recreational flow releases in the LSR; and
2. SCE&G hosts an annual meeting the third week of October of each year to review the previous year's flows, set the specific dates for the following year's flows (with the understanding that the volume of water and number of days will remain consistent from year to year, even if the schedule varies), and discuss any outstanding issues with appropriate stakeholders.

Recreation Resource Conservation Group

**Issue Recommendation
Recreational Flow Releases on the Lower Saluda River**

DRAFT

February 5, 2008

Schedule of Recreational Flow Releases in the Lower Saluda River

Flows will be measured at the USGS gage below the Saluda Dam (02168504). Actual flows may vary $\pm 10\%$.

January

First non-holiday weekend (Saturday and Sunday) (**Iceman Race**)

- 1,000 cfs or 4,000 cfs from 10:00AM to 4:00PM

February

No scheduled flows

March

St. Patrick's Day Weekend (Saturday and Sunday) (**Whitewater Festival**)

- 500 cfs from 8:00AM to 11:00AM
- 2,000 cfs from 11:30AM to 1:00PM
- 3,300 cfs from 1:30PM to 3:30PM
- 14,000 cfs from 4:00PM to 6:00PM

April

No scheduled flows

May

Saturday before Mother's Day (**Canoeing for Kids**)

- 10,000 cfs from 7:30AM to 4:30PM

June

Third weekend (Saturday and Sunday) (**Rescue Rodeo**)

- 1,000 cfs from 7:00AM to 11:00AM
- 3,000 cfs from 12:00PM to 4:00PM

July

Last weekend (Saturday and Sunday) (**Whitewater Rodeo**)

- 3,300 cfs from 8:00AM to 4:00PM

August

Recreation Resource Conservation Group

**Issue Recommendation
Recreational Flow Releases on the Lower Saluda River**

DRAFT

February 5, 2008

First weekend (Saturday and Sunday) (**US Team Jr. Wildwater Racing Practice**)

- 7,000 cfs from 8:00AM to 4:00PM

September

First consecutive Friday/Saturday/Sunday (**Rescue Training**)

- Friday – 800 cfs from 1:00PM to 5:00PM
- Saturday – 1,500 cfs from 7:00AM to 11:00AM; 3,500 cfs from 1:00PM to 5:00PM
- Sunday – 7,000 cfs from 7:00AM to 12:00PM

October

Third Saturday (**Canoeing for Kids**)

- 1,400 cfs from 7:30AM to 4:30PM

November

No scheduled flows

December

No scheduled flows

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SALUDA HYDRO PROJECT RELICENSING
Downstream Flows Technical Working Committee
SCE&G's Lake Murray Training Center
February 25, 2008**

Draft JMS 2-27-08

ATTACHMENT B

**American Rivers Proposal of Draft Recommendations for Recreational Flow Releases on the Lower
Saluda River**

DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES ON THE LOWER SALUDA RIVER

Proposed by members of the Downstream Flows Technical Working Committee

The Lower Saluda Scenic River Advisory Council, City of Columbia Parks and Recreation Department, South Carolina Department of Natural Resources, American Whitewater, the Saluda River Chapter of Trout Unlimited, the Coastal Conservation League, and American Rivers support in-stream flows that enhance safe recreational uses on the Lower Saluda River. Members of the Technical Working Committee recommend the following schedule of planned releases aimed at improving safe wade fishing and whitewater boating be incorporated into SCE&G's new operating license for the Lake Murray Dam. The schedule of planned recreational releases is followed by a justification of the recommended releases.

Target release ranges unless otherwise noted:

Boating low: 1,800cfs-2400cfs

Boating high: 3,800cfs-4500cfs

Wade fishing: 700cfs (not to exceed 1000cfs during fishing hours)

Target release window unless otherwise noted:

Boating: 12:00PM-6:00PM at Millrace (May-October)

10:00AM-4:00PM at Millrace (November-April)

Wade fishing: 7:00AM-7:00PM (May-October)

7:00AM-12:00PM (November-April)

January

Boating: First non-holiday weekend for the Iceman Race (2 days)

Flows: 1,000cfs or 4,000cfs

Wade fishing: Two weekends (4 days)

Flows: 700cfs (not to exceed 1000cfs during fishing hours)

February

Boating: One weekend (2 days). Schedule and flow release posted on SCE&G website

Flows: Either low boating recreation flow range (1,800-2400cfs) or high flow range (3,800-4,500cfs)

Wade fishing: Two weekends (4 days). Schedule posted on SCE&G website

Flows: 700cfs (not to exceed 1000cfs during fishing hours)

March

Boating: St. Patrick's Day Weekend for the Whitewater Festival (2 days)

Flows: 8:00AM-11:00AM – 700cfs

11:00AM-1:00PM – 1,800-2,500cfs

1:30PM-3:30PM – 3,800-4,500cfs

3:30PM-6:00PM – 14,000cfs

Wade fishing: Two weekends (4 days)

Flows: 700cfs (not to exceed 1000cfs during fishing hours)

**DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES ON THE
LOWER SALUDA RIVER**

Proposed by members of the Downstream Flows Technical Working Committee

April

Boating: One weekend (2 days)
Flows: Low flow (1,800-2,400cfs) or high flow boating release (3,800-4,500cfs)

Wade fishing: Two weekends (4 days)
Flows: April 1-15: 1000cfs (higher flows for striped bass passage)
April 15-30: 1300cfs

May

Boating: Weekend before Mothers Day for Canoeing for Kids (2 days)
Flows: 7:30AM-4:30PM: 10,000cfs

Wade fishing: Two weekends (4 days)
Flows: May 1-15: 1300cfs (higher flows for striped bass passage)
May 15-31: 1000cfs

June

Boating: Two weekends including the third weekend for the Rescue Rodeo event (4 days)
Flows: First weekend – low or high boating release
Third weekend – 7:00AM-11:00AM: 1000cfs
12:00PM-4:00PM: 3,000cfs

Wade fishing: Two weekends (4 days)
Flows: 700cfs (not to exceed 1000cfs during fishing hours)

July

Boating: Two weekends including the last weekend for the Whitewater rodeo (4 days)
Flows: High boating flow 3,800cfs-4,500cfs

Wade fishing: Two weekends (4 days)
Flows: 700cfs (not to exceed 1000cfs during fishing hours)

August

Boating: Two weekends including the first weekend for U.S. Team Wildwater Racing practice (4 days)
Flows: 8:00AM-4:00PM: 7,000-10,000cfs

Wade fishing: Two weekends (4 days)
Flows: 700cfs (not to exceed 1000cfs during fishing hours)

DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES ON THE LOWER SALUDA RIVER

Proposed by members of the Downstream Flows Technical Working Committee

September

Boating: Two weekends including the first consecutive Friday/Saturday/Sunday for rescue training (5 days)

Flows: Friday-700cfs
Saturday-7:00AM-11:00AM: low boating flows (1,800-2,400cfs)
1:00PM-5:00PM: high boating flows (3,800-4,500cfs)
Sunday- 7:00AM-12:00PM: 7,000cfs

Wade fishing: One weekend (2 days)

Flows: 700cfs (not to exceed 1000cfs during fishing hours)

October

Boating: Two weekends including the third weekend for Canoeing for Kids (4 days)

Flows: Third weekend-low boating flows (1,800-2,400cfs) additional weekend-low or high boating flows (4 days)

Wade fishing: One weekend (2 days)

Flows: 700cfs (not to exceed 1000cfs during fishing hours)

November

Boating: Two weekends (4 days)

Flows: Either high (3,800-4,500cfs) or low boating flows (1,800-2,400cfs)

Wade fishing: One weekend (2 days)

Flows: 700cfs (not to exceed 1000cfs during fishing hours)

December

Boating: One weekend (2 days)

Flows: Either high (3,800-4,500cfs) or low boating flows (1,800-2,400cfs)

Wade fishing: Two weekends (4 days)

Flows: 700cfs (not to exceed 1000cfs during fishing hours)

Holiday Recreational Flows

January 1 – Wade fishing 7:00AM-5:00PM flows: 700cfs (not to exceed 1000cfs during fishing hours)

January 21 – Wade fishing 7:00AM-5:00PM

Presidents Day – Wade fishing 7:00AM-5:00PM

Memorial Day – Wade fishing 10:00AM-7:00PM

July 4 – Boating 10:00AM-6:00PM (not to exceed high or low boating flow ranges unless scheduled in advance)

Columbus Day – Boating 10:00AM-6:00PM

Friday after Thanksgiving – Wade fishing 7:00AM-5:00PM

Christmas day – Wade fishing 12:00PM-5:00PM

DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES ON THE LOWER SALUDA RIVER

Proposed by members of the Downstream Flows Technical Working Committee

The Lower Saluda River is a unique and valuable resource for the people of Richland and Lexington Counties. With adequate river flows, the river is regionally known as a productive trout fishery as well as an exciting whitewater destination. These recreational uses of the river compete. According to the Recreational Flow Assessment conducted by Kleinschmidt and experienced local wade fishermen and whitewater boaters, flows between 500cfs and 1000cfs were ideal for wade fishing and swimming where flows between 1000cfs-4000cfs were adequate for boaters. The proposal above is an effort to enhance safe wade fishing/swimming and whitewater boating on the LSR by providing scheduled safe releases for each activity (no reserve peaking operations during scheduled recreational release) while accounting for the overall biological health of the river and other competing uses including Lake Murray management.

Whitewater Boating

Members of TWC recommend 37 days and the corresponding flow releases be dedicated to whitewater recreation on the Lower Saluda River. The recommendation calls for one weekend a month in the months of December through May and two weekends a month June through November. The logic behind this schedule is as follows:

December through May (one weekend a month) – This time period is popular for wade fishing because of DNR’s stocking schedule and cooler water temperatures. Recreational releases should favor wade fishing during these months.

June through August (two weekends a month) – This time period is popular for boating.

September through November (two weekends a month) – This time period coincides with the reservoir draw down, theoretically providing an opportunity to schedule draw down releases to enhance white water recreation.

The group believes the boating flow days should occur on consecutive weekend days to encourage out of town boaters to spend at least one night in the Columbia area to bring valuable tourist dollars to the region.

The two boating flow ranges identified on the schedule attempt to address the recreational needs of all skill levels of whitewater users as well as other activities on the LSR. The low boating flow range recommendation aims to enhance whitewater recreation for novice to intermediate boaters. The high boating flow range aims to enhance whitewater recreation for intermediate to expert boaters. The group recommends equal release days of both the low boating flow and the high boating flow throughout the year depending on water availability.

DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES ON THE LOWER SALUDA RIVER

Proposed by members of the Downstream Flows Technical Working Committee

Target Recreational Releases

Low Boating flow range 1,800cfs-2,400cfs

The final flow assessment identified a flow of 2,272cfs as good to excellent for whitewater boaters, flatwater boaters, swimmers and tubers. This flow, which falls within the low boating flow range, was better suited for novice to intermediate whitewater boaters. This flow range was also identified as a desirable flow by boaters outside of the recreational flow assessment.

High Boating Flow Range 3,800cfs-4,500cfs

The final flow assessment identified a flow of 3,938cfs as good to excellent for intermediate to expert whitewater boaters as well as flatwater boaters. This flow falls within the high boating flow recommendation and is aimed at enhancing intermediate to expert whitewater recreation.

High Event Flows 7,000cfs +

The group recommends high releases of 7,000cfs and above five days a year. These flows will benefit specific events; U.S. team Jr. Wildwater Racing Practice, Rescue Training, Whitewater Festival, and Canoeing for Kids. These high flows would also allow local outfitters to run whitewater raft trips. High flows are only recommended if they do not severely degrade trout habitat, inhibit potential trout spawning, or substantially lower Lake Murray in low water years.

It is critical SCE&G post scheduled boating flows in advance and cease reserve peaking operations at Lake Murray Dam during the target recreational release window on all days dedicated to whitewater recreation in order to ensure the safety of all LSR users.

Wade Fishing

The Lower Saluda River is a unique fishery in South Carolina. It is a popular destination for trout fishermen throughout the state. It supports a healthy put, grow, and take rainbow and brown trout fishery. There is anecdotal evidence that increasing numbers of trout are holding over every year. With adequate minimum flows, improved dissolved oxygen, and proper management, there is potential trout will spawn in the future. A “wild” trout fishery will bring greater numbers of anglers to the Columbia area further increasing tourist revenues associated with the LSR.

The wade fishing recreational flow recommendation aims to guarantee safe, scheduled, wadeable flows on 42 weekend days in a one-year period. The recommendation calls for two weekends a month dedicated to wade fishing from December through August and one weekend a month September through November. The logic behind the schedule is as follows:

December through May (two weekends a month) - This time period is the most popular and productive for wade fishing. It coincides with DNR’s stocking schedule and water temperatures are cooler.

June through August (two weekends a month) - This time period is popular for fishing, swimming, and rock hopping.

DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES ON THE LOWER SALUDA RIVER

Proposed by members of the Downstream Flows Technical Working Committee

September through November (one weekend a month) - This time period is less productive for wade fishing because it is pre-stocking. The reservoir is also drawn down during this time theoretically presenting an opportunity to release recreational boating flows.

Wading flows should be released on consecutive weekend days to encourage visits from out of town anglers. Flows during wade fishing days should not exceed 1,000cfs at any time during the target release window (7:00am-7:00pm in the summer months and 7:00am-Noon in winter months) to guarantee angler safety. Currently, anglers wade at their own risk due to Lake Murray Dam operations. **It is critical SCE&G halt reserve peaking operations during the target release window on days dedicated wade fishing to ensure wade fishing safety.**

**DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES ON THE
LOWER SALUDA RIVER**

Proposed by members of the Downstream Flows Technical Working Committee

DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES: LOWER SALUDA RIVER					
MONTH	ACTIVITY AND FLOW	BOATING DAYS	BOATING HOURS	WADE FISH DAYS	WADE FISH HOURS
January	<u>Boating</u> : first non-holiday weekend for Iceman Race (2 days) Flows: 1,000cfs or 4,000cfs	2	12	4	20
	<u>Wade fishing</u> : two weekends (4 days) Flows: 700cfs				
February	<u>Boating</u> : one weekend (2 days) Flows: Either low boating recreation flow range (1,800-2,400cfs) or high flow range (3,800-4,500cfs)	2	12	4	20
	<u>Wade fishing</u> : two weekends (4 days) Schedule posted on SCE&G website. Flows: 700cfs				
March	<u>Boating</u> : St. Patrick's Day Weekend for the Whitewater Festival (2 days) Flows: 8:00am-11:00am – 700cfs 11:00am-1:00pm – 1,800-2,500cfs 1:30pm-3:30pm – 3,800-4,500cfs 3:30pm-6:00pm – 14,000cfs	2	20	4	20
	<u>Wade fishing</u> : two weekends (4 days) Flows: 700cfs				
April	<u>Boating</u> : one weekend (2 days) Flows: low flow (1,800-2,400cfs) or high flow release (3,800-4,500cfs)	2	12	4	20
	<u>Wade fishing</u> : two weekends (4 days) Flows: April 1-15: 1,000cfs April 15-30: 1,300cfs (higher flows for striped bass passage)				
May	<u>Boating</u> : weekend before Mothers Day for Canoeing for Kids (2 days) Flows: 7:30am-4:30pm – 10,000cfs	2	12	4	48
	<u>Wade fishing</u> : two weekends (4 days) Flows: May 1-15: 1300cfs May 15-31: 1,000cfs (higher flows for striped bass passage)				
June	<u>Boating</u> : two weekends including third weekend for Rescue Rodeo (4 days) Flows: Rescue Rodeo weekend - 7:00am-11:00am – 1,000cfs 12:00pm-4:00pm – 3,000cfs Other weekend – either low flow (1,800-2,400cfs) or high flow (3,800-4,500cfs);	4	30	4	48
	<u>Wade fishing</u> : two weekends (4 days) Flows: 700cfs				

DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES ON THE LOWER SALUDA RIVER

Proposed by members of the Downstream Flows Technical Working Committee

DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES: LOWER SALUDA RIVER					
MONTH	ACTIVITY AND FLOW	BOATING DAYS	BOATING HOURS	WADE FISH DAYS	WADE FISH HOURS
July	<u>Boating</u> : two weekends including the last weekend for the Whitewater Rodeo (4 days) Flows: high boating flow 3,800cfs-4,500cfs (high on both weekends?)	4	24	4	48
	<u>Wade fishing</u> : two weekends (4 days) Flows: 700cfs				
August	<u>Boating</u> : two weekends including the first weekend for U.S. Team Wildwater Racing practice (4 days) Flows: 8:00am-4:00pm - 7,000-10,000cfs; Other weekend – either low flow (1,800-2,400cfs) or high flow (3,800-4,500cfs)	4	28	4	48
	<u>Wade fishing</u> : two weekends (4 days) Flows: 700cfs				
September	<u>Boating</u> : two weekends including the first consecutive Friday-Saturday-Sunday for rescue training (5 days). Flows: Rescue training – Friday - 700cfs (7am-5pm??), Saturday - 7:00am-11:00am: low boating flows (1,800-2,400cfs); 1:00pm-5:00pm: high boating flows (3,800-4,500cfs), Sunday - 7:00am-12:00pm: 7,000cfs; Other weekend – either low flow (1,800-2,400cfs) or high flow (3,800-4,500cfs)	5	37	2	24
	<u>Wade fishing</u> : one weekend (2 days) Flows: 700cfs				
October	<u>Boating</u> : two weekends including third weekend for Canoeing for Kids (4 days) Flows: CFK on third weekend - low boating flows (1,800-2,400cfs); Other weekend – either low flow (1,800-2,400cfs) or high flow (3,800-4,500cfs)	4	24	2	24
	<u>Wade fishing</u> : one weekend (2 days) Flows: 700cfs				
November	<u>Boating</u> : two weekends (4 days) Flows: either high (3,800-4,500cfs) or low boating flows (1,800-2,400cfs)	4	24	2	10
	<u>Wade fishing</u> : one weekend (2 days) Flows: 700cfs				
December	<u>Boating</u> : one weekend (2 days) Flows: either high (3,800-4,500cfs) or low boating flows (1,800-2,400cfs)	2	12	4	20
	<u>Wade fishing</u> : two weekends (4 days) Flows: 700cfs				
Totals		37	247	42	350

REVISED DRAFT RECOMMENDATIONS FOR RECREATIONAL FLOW RELEASES ON THE LSR

Boating

- 39 days dedicated to whitewater boating.
- 32 days will not be protected from reserve operations (operations OK). These days are highlighted in blue on the chart.
- 7 days including the Wildwater training weekend (2 days), the rescue rodeo weekend (2 days), Memorial Day (1 day), Labor Day (1 day), and July 4 (1 day) will be protected from reserve operations (No operations). These days are highlighted in red.
- Flows for Labor Day, Memorial Day, and July 4: 700cfs-1500cfs.

Wade Fishing/Swimming

- 38 days dedicated to wade fishing including MLK Day and Presidents Day.
- 38 days protected from reserve operations (No operations).
- Target release window 7:00am-9:00pm (May-October); 7:00am-Noon or Noon-5:00pm, possibly alternating (November-April).
- Make up days: If weather events such as tropical storms make operations necessary on wade fishing days, missed days will be made up in a three month period.

Adaptive management

- Meet annually to schedule recreation days.
- Meet every 3 years to comprehensively review recreation schedule looking at recreation trends, trout reproduction and holdover etc.

Rescheduling

- If a scheduled flow release is cancelled or interrupted due to operational requirements such as dam safety or lake level management cause from climatic conditions, then request to have the flow event rescheduled with in a quarter or three months time frame.

Reserve calls

- During planned operation events, SCE&G should incorporate a rate of change (flow) in the event of a reserve call.

Warning System

- Request that an advanced warning (strobe lights and sirens) system be placed at the Saluda Spillway, Metts Landing and Corley Island.
- Request that a 10-15 minute warning be given in advance to allow people enough time to get off the river.

Fire Department Rescue Training

- Not a part of the recreation recommendation.

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
RECREATION MANAGEMENT TWC**

***SCE&G Training Center
February 20, 2008***

Final acg 4/15/08

ATTENDEES:

Alison Guth, Kleinschmidt Associates
Randy Mahan, SCANA Services, Inc.
Tommy Boozer, SCE&G
Alan Stuart, Kleinschmidt Associates
Joy Downs, LMA
Jim Cumberland, CCL

Dave Anderson, Kleinschmidt Associates
Dave Landis, LMA
Steve Bell, Lake Watch
Dick Christie, DNR
Tony Bebbler, SCPRT

MEETING NOTES:

Dave opened the meeting and noted the first item on the agenda would be to review the memo from the Recreation Focus Group. Jim Cumberland led the discussions from the Recreation Focus Group. Jim presented the group with a PowerPoint of the proposal from the Recreation Focus Group. He explained that they were putting this out for the Recreation Management TWC's consideration and requested that the Recreation Management TWC forward the recommendations in the memo to the Lake and Land TWC for consideration in rebalancing.

Jim began the presentation and discussed background information with the group. Jim noted the importance of passive recreational values, such as hiking, walking, and nature watching. He explained that as the Recreation Management TWC reviewed through issues, they began with the natural resource subcommittee's review of future development lands. He pointed out that there was a need to educate property owners on the public's right to access fringelands. Jim also noted that they wanted to see priority given to one multi-slip docking facility for a community over multiple individual docks. Jim explained that they were also looking at enhancing the scenic values of the shoreline by implementing vegetation restoration.

On future development lands, Jim explained, that they would like a plan developed to establish nature trails, informal picnic areas, etc. Jim noted that the tracts that scored 3 or higher in the shoreline survey should be reclassified as recreation lands and included in the recreation plan. He explained that lands that scored a 1 should be protected for their scenic values by reclassifying them to natural areas. Jim continued to note that under their proposal, the lands that did not receive a score would be okay to sell.

For forest and game management lands, Jim noted that they would like to encourage recreational use, and on parcels adjacent to public roads, provide informal parking areas with paths leading to the shoreline. Jim also explained that one thing that was important for the CCL and American Rivers was the lands along the lower Saluda River. He continued to note that they would like all

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
RECREATION MANAGEMENT TWC**

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SCE&G owned lands along the river that are not required for power production to be classified as natural/recreation lands.

Jim concluded the presentation and the TWC began to discuss the topic. Steve noted that he would like to see the Recreation TWC make a recommendation to the Lake and Land TWC on shoreline protection. Dave asked what the recreation focus group hoped to gain by sending this from the Recreation TWC to the Lake and Land Management TWC, instead of simply issuing it from the focus group. Jim responded that they hoped that if it was sent from the Recreation TWC it would have a greater weight with the Lake and Land Management TWC.

Tommy Boozer pointed out that there were many things in the presentation that were similar to what has already been recommended, however, it eliminates SCE&G's ability to make revenue off of land sales. Dave noted that he was concerned that sending the proposal from the TWC would imply that it has SCE&G support. Randy Mahan pointed out that he did not see a problem with the Recreation Management TWC sending this on to the Lake and Land group, however recommending it for adoption would not be something the whole group could agree to. Jim replied that they were not looking for the group to endorse this proposal in its entirety; it would be more of a procedural motion than a substantive motion.

Dick Christie asked if the Recreation Management TWC could add caveats to the proposal for clarification. Dick also noted that during the scoring process in the natural resources subcommittee, the tracts were often scored 1-5 based on their proximity to a road and not necessarily if they were adequate for hiking, birding, and fishing. Dick further suggested that it be clarified that these tracts may have recreation potential, possibly unevaluated potential.

Jim clarified that he believed as long as the potential was there it was important to conserve the lands. He noted that the lake was a great public resource and he was concerned that it was becoming a closed, private lake. Steve Bell noted that at some point there are going to be no more places to build on the lake, so why not stop at this point.

Tommy presented information on SCE&G's proposal to the group (presentation is attached to the December 14, 2007 and January 22, 2008 meeting notes). There was discussion on docks and Randy noted that SCE&G would prefer to allow individuals to choose whether they would prefer a common dock, multi-slip or individual dock. The group also discussed the proposed dock policy on forest management lands.

After lunch the group went through the Recreation Focus group's proposal. Dave noted that it was up to the focus group as to whether they wanted to send this to the Lake and Land Management TWC as is, or try to find some common ground with the Recreation Management TWC. The group discussed making multi-slips mandatory over individual docks. Tommy pointed out that there are incentives in SCE&G's proposal that would encourage a developer to put in multi-slips.

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
RECREATION MANAGEMENT TWC**

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The group continued discussions on the Recreation Focus Group proposal and discussed the identification of recreation areas. Dave noted that they had discussed a map that identifies recreation areas. Tommy explained that they currently have signage from the property owner's side identifying fringelands, but not from the lake side. The group discussed the best ways to identify recreation lands. Joy Downs noted her concern with publishing and encouraging the use of fringelands in front of back property owners. Dave Landis suggested accentuating the lands that should be encouraged for public use. Dave Anderson noted that the compromise would be to not publicize the fringelands, or place them on a map, but to let the public know they are available for use. Steve Bell suggested marking the trees. Tommy noted that putting signage up was a maintenance issue.

Collectively the group edited the memo proposal from the Recreation Focus Group. With some minor modifications the group could send it to the Lake and Land Management TWC with neither endorsement nor objection, noting that the Recreation Management TWC has addressed it, and edited it as a group. Randy added that an official recommendation from the TWC implies consensus. SCE&G, being a member of the TWC, does not believe that this recommendation is best, and that stopping all land sales goes too far. Dave noted he would draft up a memo that included the Recreation Focus Group's proposal.

The group also discussed lake level recommendations. Dave addressed Steve Bell and asked if a compromise had been reached on lake levels. Steve noted that the recommendation as provided by Lake Watch would be to have an optimum of 356 to 354.

The group discussed and modified the TWC recommendation. Joy Downs noted that there was specific wording in the LMA recommendation that could be used. The group worked to incorporate the wording from LMA into the recommendation. It was also suggested that the LMA lake user survey be referenced in the recommendation. Dave noted that he would make the recommended changes and send it back out to the group.

The group briefly touched on the coldwater trout fishery. Dave noted that the recommendation was not very extensive. After discussion, the group decided to leave the document fairly unchanged, with a few edits to the title and to the specific wading flows.

The group wrapped up discussions and Dave pointed out that the next meeting would be on March 3.

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
RECREATION MANAGEMENT TWC**

***Panera Bread
September 13, 2007***

Final JMS 10-29-07

ATTENDEES:

Bill Argentieri, SCE&G
Alan Stuart, Kleinschmidt Associates
Bill Marshall, SCDNR
Tony Bebber, SCDRT
Suzanne Rhodes, SCWF
Tommy Boozer, SCE&G
George Duke, LMHC

Randy Mahan, SCANA
Regis Parsons, Private Land Owner
Steve Bell, Lake Watch
Joy Downs, LMA
Dave Anderson, Kleinschmidt Associates
Jeni Hand, Kleinschmidt Associates

DATE: September 13, 2007

DATE OF NEXT MEETING: TBA

HOMEWORK ITEMS:

- Make CD's that contain example recreation plans and send them to committee members that request them.

Dave Anderson

- Distribute a strawman to committee members that will describe subjects that will be covered in the Saluda Recreation Plan.

Dave Anderson

- Send Dave A. the Saluda recreation maps that contain marinas and informal sites that SCE&G has identified.

Tommy Boozer

- Find out who owns the islands in the vicinity of Ocean Boulevard area on the LSR.

Tommy Boozer

- Incorporate changes into the Standard Process Form and send out to committee members for final comments.

Dave Anderson

- Draft the Saluda Recreation Plan and send out to committee members for review and comment.

Dave Anderson

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
RECREATION MANAGEMENT TWC**

***Panera Bread
September 13, 2007***

Final JMS 10-29-07

- Draft a recommendation for protection of lands in the future development for protection. The recommendation will be sent to the LLM TWC

Dave Anderson

DISCUSSION

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 noted that the purpose of this meeting was to review and discuss: (1) the Saluda recreation studies (recreation assessment, boat density, draft spring addendum); (2) the example recreation plans; (3) standard process questions 6 through 11; and (4) the draft recreation plan.

Saluda Recreation Studies

Dave A. welcomed the group and directed attention to the Saluda Recreation Assessment study and noted that responses to comments received from committee members will be included in a revised version as an appendix to the report. Steve Bell reminded the members that the committee had a responsibility to evaluate all project lands and make recommendations back to the Lake and Land Management TWC on which lands should be set aside for “informal” recreation areas. Tommy Boozer noted that the LLM Natural Resource sub-committee had evaluated undeveloped tracts in the “future development” classification” and had scored the tracts on their informal recreational values. Dave A. noted that he would draft a recommendation to protect natural undeveloped lands at the project.

Dave A. noted that the Saluda Boat Density Study report was finalized in July and posted to the Saluda Hydro relicensing website. He noted that after it was posted to the website, there were some concerns about how the report was written. To address these concerns, he explained that a few changes were made in the methods and conclusions sections of the report, but the results did not change. There was a brief discussion on future recreation facilities and Tommy B. noted that Bundrick Island may possibly support boat launching facilities in the future. Tony B. explained that boat access for Lake Murray is sufficient, however, there should be more recreational areas for non-boaters. Tommy B. noted that an island on Lake Murray has been set aside for pier fishing and explained that it would not have boat launching. Dave A. explained to the group that during the first three to five years of the new license, the recreation plan will concentrate on enhancing existing

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
RECREATION MANAGEMENT TWC**

***Panera Bread
September 13, 2007***

Final JMS 10-29-07

recreational facilities. Tommy B. noted that the most important thing will be to set aside land for recreational use for the next 40 to 50 years.

Dave A. noted the Spring Addendum Study is the only report in draft form and is currently out for review and comment. He explained that recreation for the Saluda Project follows the Bell Curve during peak season. Dave mention that remaining issues that still need to be addresses are striped bass fishing on Lake Murray and trout fishing on the lower Saluda River.

Review of Example Recreation Plans

After a short break, Dave A. noted that the group should have enough information to draft a recreation plan for the Saluda Project. Tony B. noted that the Lake Murray Association's Study may also be used for informational purposes during the development of the Saluda recreation plan. Dave A. noted that to give the group an idea of what a recreation plan should look like, he put together 10 example recreation plans that had been approved by the FERC. Dave A. explained that these example recreation plans contain descriptions of recreation site improvements, scheduling, and a record of consultation. Dave A. noted that he would distribute a strawman to committee members that will describe subjects that will be covered in the recreation plan for the Saluda Hydro Project. Steve Bell noted that the FERC guideline "Recreation Development at Licensed Hydro Projects" has recommendations on developing a plan and suggest that all project lands and other recreation sites be listed in the inventory and project safety issues should be included as part of the plan. Dave A. noted by the end of 2007, a description of improvements needed for each recreation site will be distributed to committee members. Tony B. noted that canoe access sites in the upper creeks of Lake Murray should be included in the recreation plan.

Review of Standard Process Questions 6 through 11

The group began reviewing the Standard Process Form and Dave A. noted that it was updated on September 10, 2007 and it included comments from February of this year. Dave informed the group that questions from Step 1 are considered to be final. The group reviewed and discussed pages 3 through 12 of the Standard Process Form (the Standard Process Form used during the meeting may be viewed in Attachment A). The group requested that courtesy rules should be established for boaters on Lake Murray. Dave noted that he would make changes to the Standard Process Form and send out to committee members for review.

Draft Recreation Plan

Dave A. noted that Kleinschmidt will write up a draft recreation plan and will distribute to committee members by the end of December 2007. Dave noted that the plan will include

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
RECREATION MANAGEMENT TWC**

***Panera Bread
September 13, 2007***

Final JMS 10-29-07

recreational flows for the lower Saluda River . Dave mentioned that committee members will have 30 days to review and comment and a meeting will be scheduled to discuss changes and/or additions to be made to the recreation plan.

Additional Comments by Lake Murray Watch

So far the group has focused primarily on assessing the project's formal recreational facilities. I think we should now take time to look at the other issues relating to recreation:

An assessment of informal recreational resources and opportunities which would include an evaluation of the inventory of undeveloped projects lands. (note a survey of these lands is available from the LLM TWC) Recommendations should be provided to the LLM TWC

An assessment of impacts lake level management has on recreational resources. A recommendation should be made to Operations.

An assessment of buffer zones to determine whether these areas are available for public access and protect the recreational and aesthetic values of the project. Recommendations should be made to the LLM TWC

An assessment of developed and undeveloped easement lands to evaluate public access and recreational opportunities. Recommendations regarding better protection in these areas be provided to LLM TWC.

Recreation Resource Conservation Group

Working Documents

[October 29, 2007](#)~~[September 10, 2007](#)~~



Recreation Resource Conservation Group Work Plan

FINAL

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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

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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

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 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.

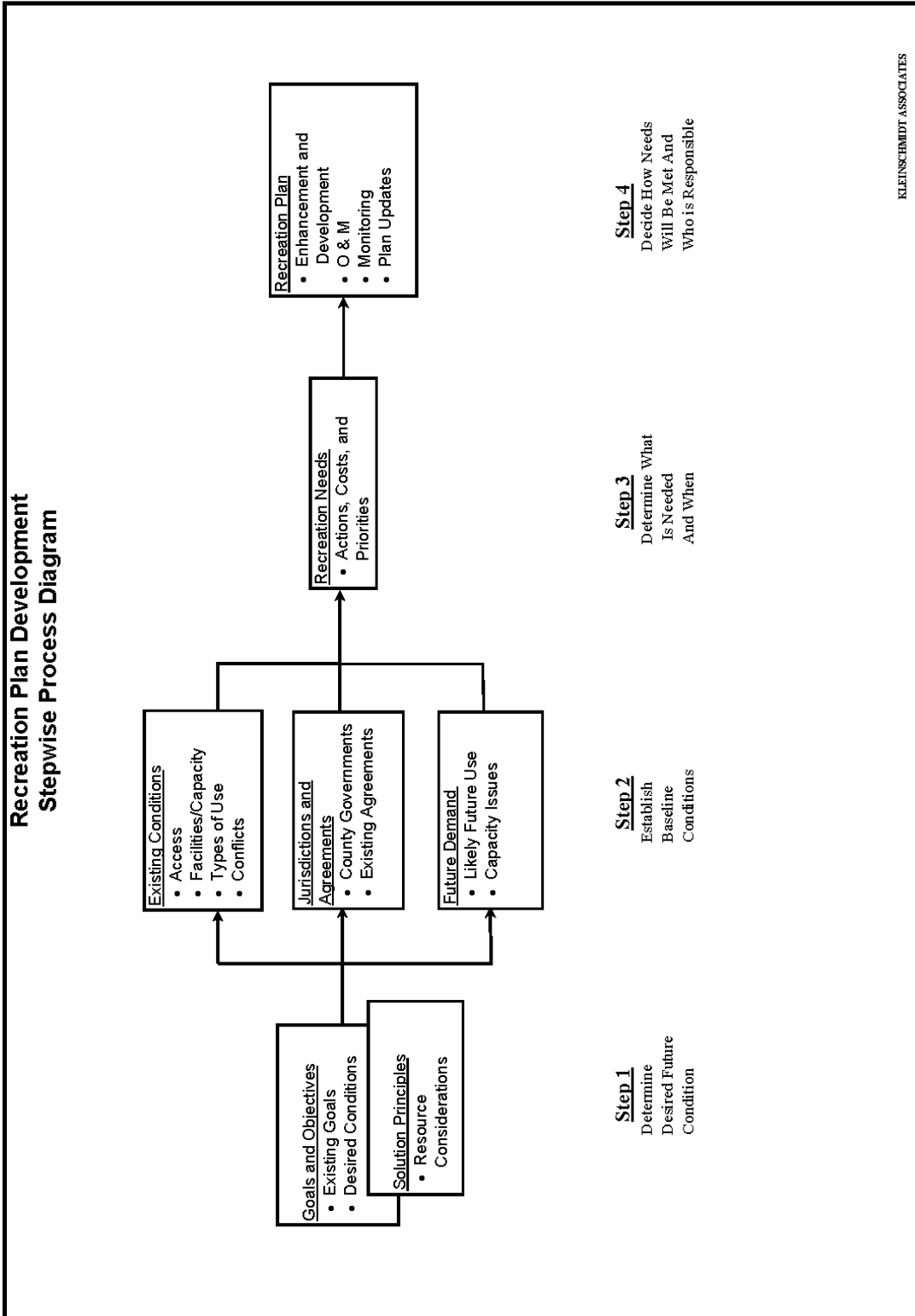
Recreation Vision Statement for the Saluda Project

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 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

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.

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 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.

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

DRAFT

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

DRAFT

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.

Standard Process Form

DRAFT

- 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.

Standard Process Form

DRAFT

b. What is the existing capacity at each site?

<u>Public Access Sites</u>	<u>Vehicle Spaces</u>	<u>Vehicle/Trailer Spaces</u>	<u>ADA Spaces</u>	<u>Total Number of Parking Spaces</u>
<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".

<u>Public Access Sites</u>	<u>Poor</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Excellent</u>
<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>

Standard Process Form

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<u>Public Access Sites</u>	<u>Poor</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Excellent</u>
<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:

<u>Activity</u>	<u>% of Use</u>
<u>Water-Based Activities</u>	
<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>
<u>Water-Based Activities Total</u>	<u>80%</u>
<u>Land-Based Activities</u>	
<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>

Standard Process Form

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<u>Activity</u>	<u>% of Use</u>
<u>Land-Based Activities Total</u>	<u>20%</u>

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>
<u>Water-Based Activities</u>	
<u>Bank Fishing</u>	<u>9%</u>
<u>Boat Fishing</u>	<u>11%</u>
<u>Pier/Dock Fishing</u>	<u>1%</u>
<u>Wading Fishing</u>	<u>0%</u>
<u>Flatwater Canoe/Kayak</u>	<u>13%</u>
<u>Rafting</u>	<u>0%</u>
<u>Tubing/Floating</u>	<u>5%</u>
<u>Whitewater Canoe/Kayak</u>	<u>7%</u>
<u>Swimming</u>	<u>4%</u>
<u>Water-Based Activities Total</u>	<u>51%</u>
<u>Land-Based Activities</u>	
<u>Bicycling</u>	<u>3%</u>
<u>Camping</u>	<u>0%</u>
<u>Dog Walking</u>	<u>7%</u>
<u>Event</u>	<u>3%</u>
<u>Nature Study/Wildlife</u>	<u>1%</u>
<u>Picnicking</u>	<u>1%</u>
<u>Playground/Spraypark</u>	<u>6%</u>
<u>Sightseeing</u>	<u>12%</u>
<u>Sunbathing</u>	<u>0%</u>
<u>Walking/Hiking/Backpacking</u>	<u>5%</u>
<u>Other</u>	<u>9%</u>
<u>Land-Based Activities Total</u>	<u>49%</u>

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

Standard Process Form

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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.

- 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.

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 water-based 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 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.?

Standard Process Form

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Enforcement of established rules are excellent but 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?
- Will existing facility capacity likely be exceeded, and if so where and when?
 - Would accommodating this demand be consistent with the long-term vision for the reservoir?
 - 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.

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- 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 354² ft PD 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.
- 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 is increased to provide lake level management normally from September through December.
- Power generation may be 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. 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 356² 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 352² 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?

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).
- Higher lake levels will increase, improve and enhance recreational opportunities.

Standard Process Form

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18. ~~What are the impacts of 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 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.

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

There appears to be a potential impact to recreational resources when the lake level is lower (below _____ ft.).

- 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 354² ft PD or higher.
- Some navigational hazards (unmarked) occur when levels drop below _____ ft.

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
 - _____ 1996 – Hydrilla control as requested by SCDNR
 - _____ 2002 – 2004 – FERC Order for safety during dam remediation project
 - _____ 2006 – Upstream riprap repair
- It will 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, and installing new recreational access, or other extraordinary circumstances.
- Seasonal variations occur depending on rainfall and upstream water flow.

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 Station)

Standard Process Form

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- [Navigation support](#)
- [Boating opportunities](#)
- [Trout fishery](#)
- [Downstream water quality and aquatic habitat](#)
- [Municipal and industrial water supply](#)
- [Downstream recreation.](#)

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 ft PD during normal flow years and Elev. 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.](#)

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?

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? \(I notice that it is not listed in the state/federal operating requirements in Question 22\).](#)

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
RECREATION RCG
Lake Levels TWC**

**SCE&G Lake Murray Training Center
February 1 , 2007**

Final acg 3-29-07

ATTENDEES:

Alison Guth, Kleinschmidt Associates Bill Argentieri, SCE&G
Joy Downs, LMA Steve Bell, Lake Murray Watch
Bertina Floyd, Lake Murray Homeowners Coalition

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 3 0' to 3 2' 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 3 4' 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.

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

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

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 19th 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.saludahydrorellicense.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 19th 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.

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

ATTENDEES:

Name	Organization	Name	Organization
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

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

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

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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

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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

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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

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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

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
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
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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

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**Saluda Hydro Relicensing
Recreation Resource Conservation Group**

Meeting Agenda

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

- **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



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

ATTENDEES:

Name	Organization	Name	Organization
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		

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
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**SCDNR HEADQUARTERS
September 20, 2006**

final dka 10-20-06

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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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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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

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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

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September 20, 2006**

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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:

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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 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)

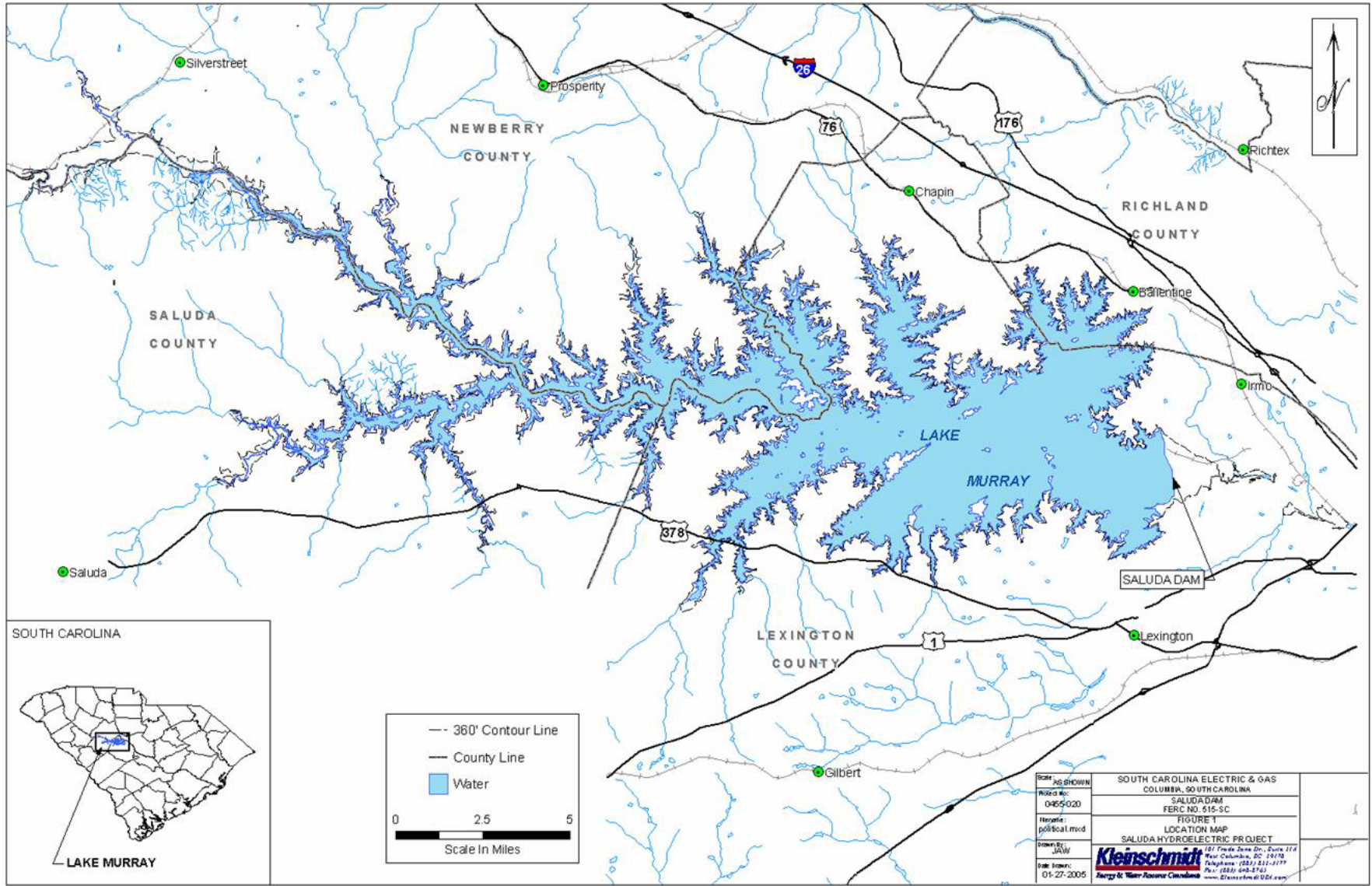
DOWNSTREAM RECREATION FLOW ASSESSMENT STUDY PLAN

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 quality¹. 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.

¹ 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.

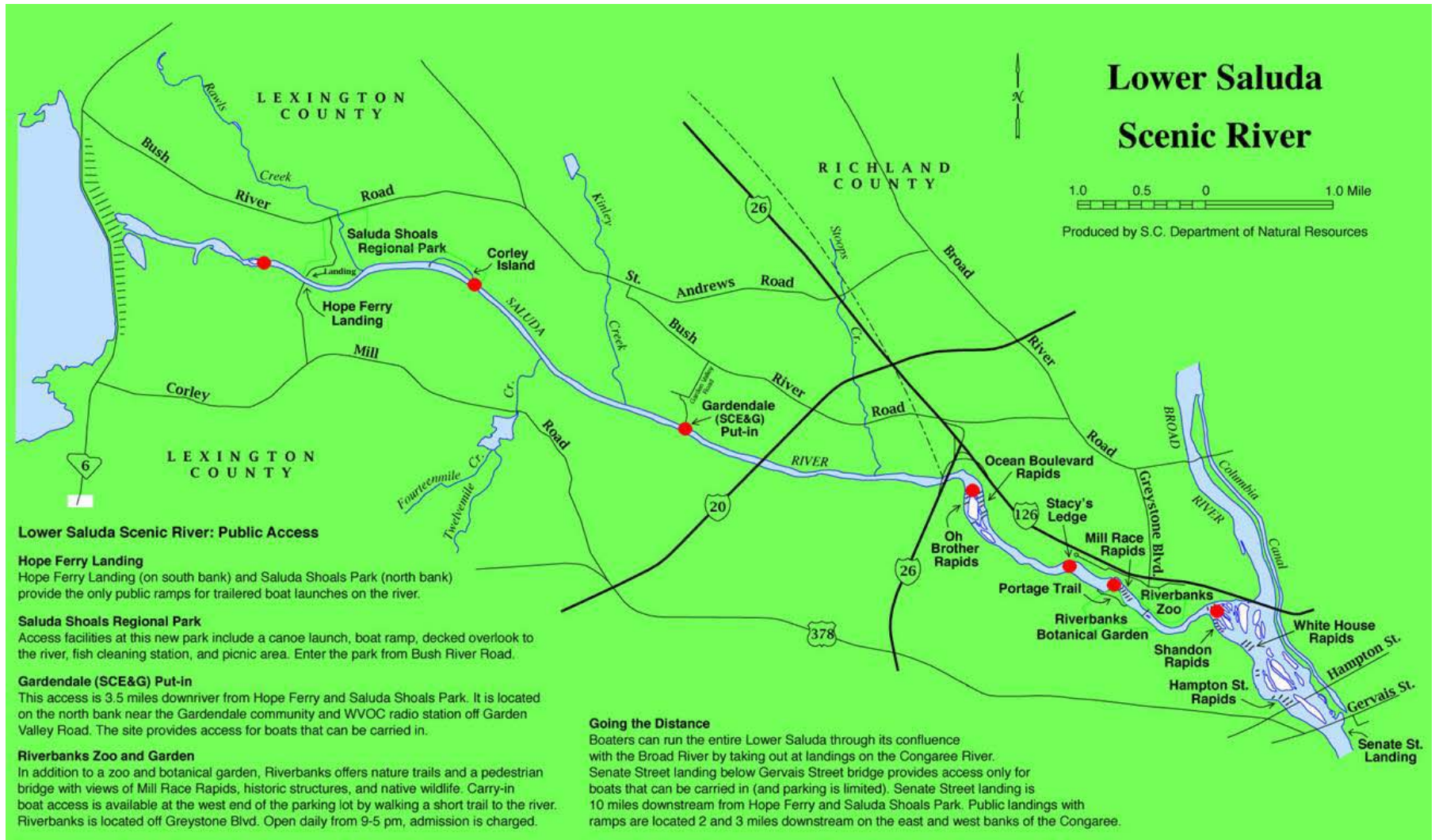
Goal 2: *Understand the “rate of change” of the lower Saluda River at various flows at various river reaches. This will be accomplished by meeting the following objectives:*

- 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:

TASK	DATE
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

- American Whitewater. 2006. Whitewater Flow Studies. [Online} URL:
http://www.americanwhitewater.org/content/Wiki/stewardship:whitewater_flow_studies.
Accessed June 16, 2006.
- Lienemann, Anne, Peter Jonas, and Jim Vogel. 2004. Whitewater and River Boating Report for the Oroville Hydroelectric Project (FERC No. 2100). Prepared for the California Department of Water Resources. January 2004.
- Rood, Stewart B., and Wilco Tymensen. 2001. Recreational Flows for paddling along rivers in southern Alberta. Prepared for Alberta Environment, Lethbridge, AB. October 2001.
- South Carolina Department of Parks, Recreation and Tourism, Recreation, Planning and Engineering Office. 2002. South Carolina Statewide Comprehensive Outdoor Recreation Plan.
- South Carolina Design Arts Partnership. 2000. Lower Saluda Scenic River Corridor Plan Update. Clemson, South Carolina. Prepared for the Lower Saluda Scenic River Advisory Council and the South Carolina Department of Natural Resources.
- South Carolina Water Resources Commission, South Carolina Department of Parks, Recreation and Tourism, and Lower Saluda River Task Force. 1990. The Lower Saluda River Corridor Plan. Report #170. Columbia, South Carolina.
- Whitaker, Doug, Bo Shelby, and John Gangemi. 2005. Flows and Recreation: A Guide to Studies for River Professionals. October 2005.
- Whitaker, Doug, and Bo Shelby. 2000. Boating Feasibility Study for the Lake Chelan Hydroelectric Project (FERC No. 637). Prepared for Public Utility District No. 1 of Chelan County, Wenatchee, Washington. October 2000.

APPENDIX A

DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE

Name	Contact Information	Affiliation
Bill Marshall	marshallb@dnr.sc.gov	Lower Saluda Scenic River Advisory Council, DNR
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Tom Eppink	teppink@scana.com	SCANA Services, Inc.

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

Author	Comment	Response
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

Author	Comment	Response
Tony Bebber	i. Identify and characterize potential/anticipated recreation areas on the lower Saluda River. <ol style="list-style-type: none"> 1. Identify activities that may be supported by these areas. 2. Identify anticipated patterns of use of these areas by type and volume. 3. Estimate preferred flows associated with reasonable and safe recreational use. 4. Understand the “rate of change” at various flows at these areas. 	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

Author	Comment	Response
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

Author	Comment	Response
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

Author	Comment	Response
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

Author	Comment	Response
Tony Bebbber	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 Bebbber	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

Author	Comment	Response
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

Author	Comment	Response
Patrick Moore	River flows and rates of change 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 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.	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.

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

ATTENDEES:

Name	Organization	Name	Organization
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		

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

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

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 25th, 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

**Saluda Hydro Relicensing
Recreation Resource Conservation Group**

Meeting Agenda

July 21, 2006

9:30 AM

Lake Murray Training Center

- **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

Facilitator:		
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com
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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.~~

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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

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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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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:

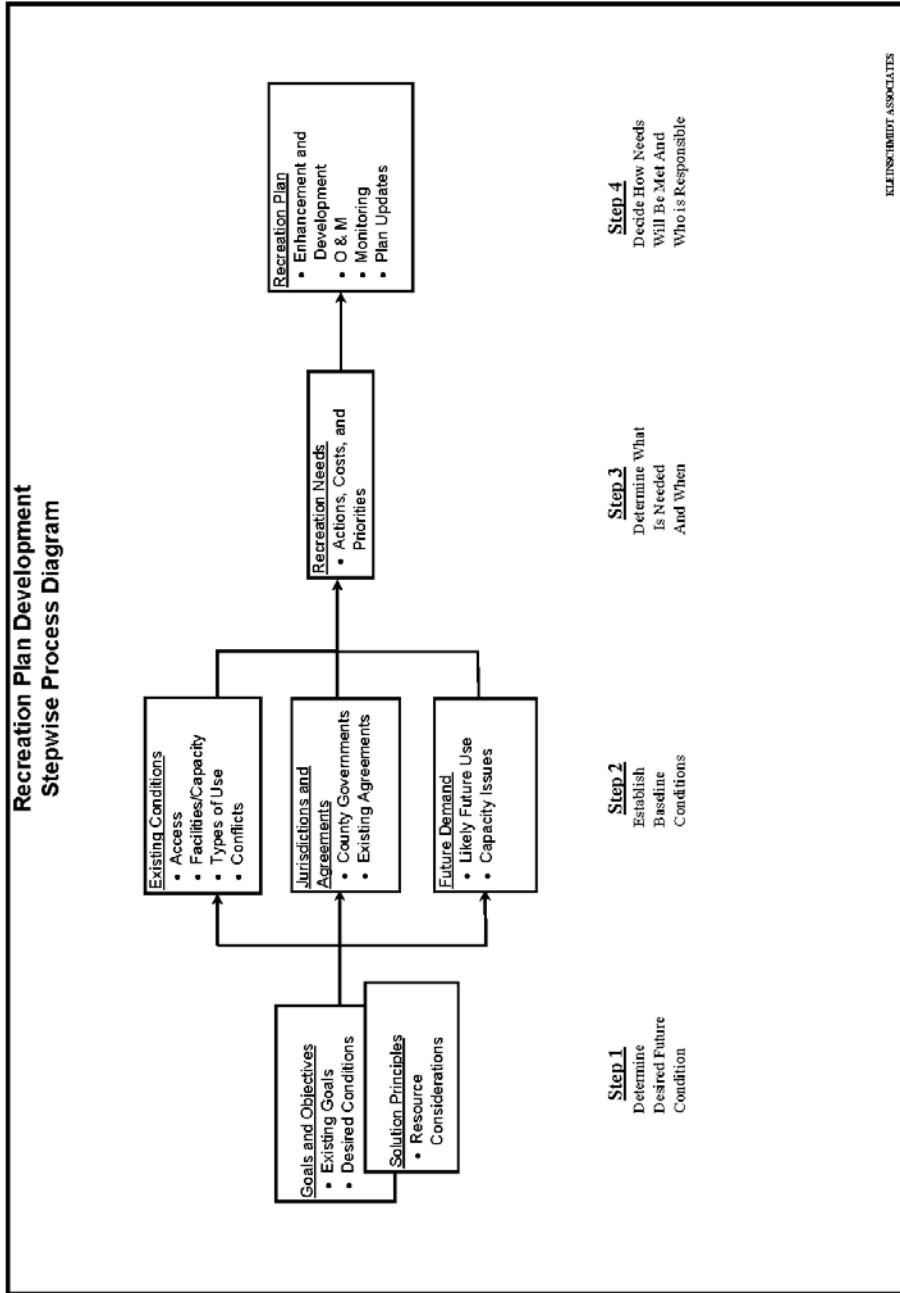
- Evaluation of SCE&G-owned Project lands for possible reclassification for recreation activities.
- Providing appropriate operations and maintenance of public recreation facilities.
- Optimizing the capacity of existing public recreation facilities to accommodate existing and future demand.

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;

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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

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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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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)?

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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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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¶

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Recreation Resource Conservation Group Work Plan

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- creation of a state park on the south side of the reservoir
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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 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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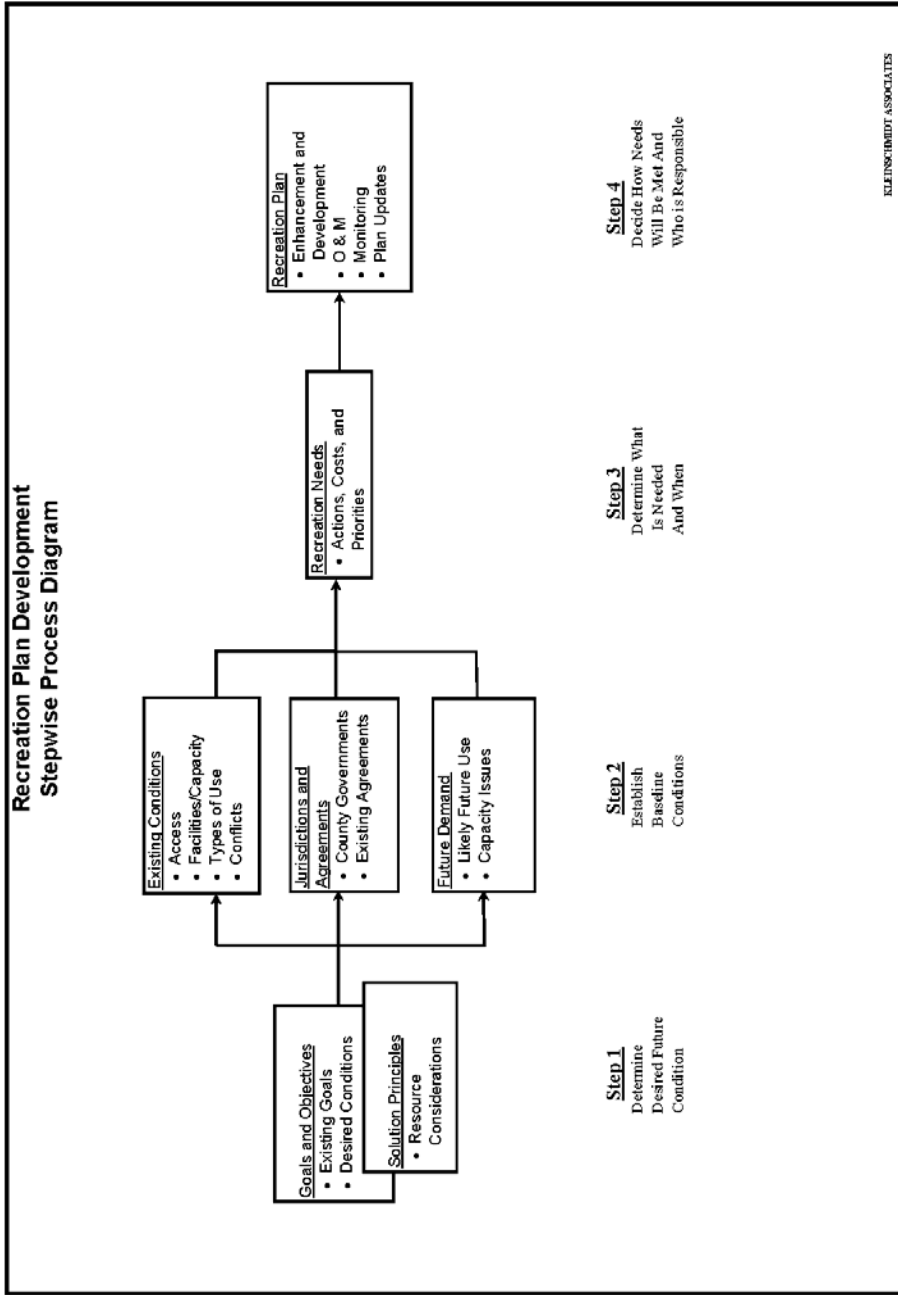
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Recreation Vision Statement for the Saluda Project

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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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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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(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.

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

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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)

**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

SALUDA HYDROELECTRIC PROJECT
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COLUMBIA, SOUTH CAROLINA**

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

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

MEETING NOTES

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

**LAKE MURRAY TRAINING CENTER
July 19, 2006**

final dka 08-14-06

ATTENDEES:

Name	Organization	Name	Organization
Alison Guth	Kleinschmidt Associates	David Hancock	SCE&G
Dave Anderson	Kleinschmidt Associates	Steve Bell	Lake Watch
Bill Argentieri	SCE&G	Regis Parsons	landowner
Alan Stuart	Kleinschmidt Associates	Marty Phillips	Kleinschmidt Associates (by phone)
Tom Eppink	SCANA Services, Inc.	Tony Bebbber	SCPRT
Tommy Boozer	SCE&G	Joy Downs	LMA

HOMEWORK ITEMS:

- Tommy Boozer – contact Berger for study information
- Joy Downs – distribute LMA survey results to group

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

July 19, 2006

final dka 08-14-06

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 welcomed the group and noted that the sole purpose of the meeting would be to discuss the Boat Density Study Plan. He explained that the goal for the meeting would be to leave with a very near final version of the plan. The group began an interactive session reviewing the document as it was projected on the screen and changes were made in real time.

As the group reviewed the document, Tommy Boozer asked how future boat densities would be determined. Dave noted that although they were only examining current boat densities they would be able to make some estimates regarding future densities. Dave continued to explain that future boat densities are very difficult to predict due to the many factors that could affect them. In reference to the study in general, Steve Bell asked how the information was going to be used. Dave replied that it will be useful in discussions on the future development of lands. Tony agreed and added that it will be helpful in determining where new access points should be located. Marty Phillips further pointed out that the information that comes out of this analysis is really just one factor of many that SCE&G will be using to make management decisions in the future. Tommy Boozer asked if this study would provide information on whether Lake Murray was at optimum levels of recreation, or below. Dave noted that it would, using standards commonly used in FERC relicensing.

Dave took this opportunity to explain a little about the study to the group. He noted that they would be using aerial photography from 2001 and classify different types of activities on the Lake. Dave pointed out that jet skiing would be considered under the water skiing classification. It was noted that in the Berger study, which used the same 2001 photographs in the analysis, boat counts were broken down into smaller segments. Tommy agreed to call Berger to see if more detailed information is still available. Marty agreed to send Tommy an email describing the information needed from Berger.

Tony asked if there was any way to extrapolate 2006 data from the 2001 photographs by looking at boater registrations. Marty noted that Kleinschmidt had considered that possibility but concluded that we have no way to determine whether those individuals with boats registered in the vicinity of Lake Murray actually boat on Lake Murray. She stated that it has been documented that changes in recreation participation is influenced by population growth. Marty suggested that the 2001 information could be combined with the SCORP data and population growth estimates to provide a range of boating estimates that would likely approximate current levels of boating. The group

MEETING NOTES

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

**LAKE MURRAY TRAINING CENTER
July 19, 2006**

final dka 08-14-06

agreed that this was acceptable. Tony also noted that he would try to break the SCORP information down by county.

The group continued through the document making changes interactively. Steve Bell noted that he would be especially interested in knowing the counts in the cove and creek areas. Dave continued to explain the calculations to the group. Joy Downs noted that the LMA received results of the survey they implemented last year and shared that fishing was listed as the recreation activity with the highest rates of participation around the lake. She noted that she would distribute this information to the group.

The group reviewed the schedule and concluded the meeting. The group agreed to continue with the course of the study.

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

ATTENDEES:

Name	Organization	Name	Organization
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

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

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

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

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

Meeting Agenda

April 18, 2006

2:30 pm

Lake Murray Training Center

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.



MEETING NOTES

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

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

final dka 05-15-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	Alan Stuart	Kleinschmidt Associates
Dave Anderson	Kleinschmidt Associates	Jennifer Summerlin	Kleinschmidt Associates
Randy Mahan	SCANA Services	Tom Eppink	SCANA Services
David Hancock	SCE&G	Tony Bebber	SCPRT
George Duke	LMHOC	Joy Downs	LMA
Karen Kustafik	Columbia Parks and Recreation	Malcolm Leaphart	Trout Unlimited
Tommy Boozer	SCE&G	Tim Vinson	SCDNR
Bill Marshall	SCDNR & LSSRAC	Patrick Moore	CCL/AR
Steve Bell	Lake Watch		

HOMEWORK ITEMS:

- Dave Anderson – Check Recreation Interests and Issues for issues needed on Recreation RCG Work Plan
- Dave Anderson – E-mail vision statement to Recreation RCG
- Dave Anderson – Combine Recreation RCG Work Plan and Recreation Issue Standard Process into one document and email to all RCG members
- Dave Anderson – Draft issue sheets for issue tracking
- Everyone – Finalize Standard process form
- Everyone – Review stakeholder list on the web
- Dave Anderson – Schedule next Recreation RCG meeting

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING:

**July 21, 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
April 17, 2006**

final dka 05-15-06

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 opened the meeting by briefly reviewing the Recreation Issues Standard Process, which is designed to help characterize existing recreation resources and aid in development of an appropriate recreation plan for the Saluda Project. Dave A. noted that the questions pertaining to recreation management are categorized according to a four-step recreation planning process developed for the project. He added that the list will be distributed to all members in Microsoft Word in order to track changes as the document is completed.

Dave A. noted that in order to keep everyone focused on the overall purpose of the Recreation RCG, he formulated a draft recreation vision statement (attached) and asked the group to provide comments and/or changes. The group modified the vision statement and Dave A. noted that he would send out these track changes by email to all group members.

Dave A. reviewed the Recreation RCG Work Plan (attached) and noted that he came up with a list of Identified Issues from comments to the ICD and previous meeting minutes. He briefly talked about each issue and group members suggested and agreed to the necessary changes. George Duke noted that he was unclear as to why there were two documents and suggested combining them into one document to avoid confusion. The group agreed and Dave noted that he would combine the documents and send them out to everyone.

After a short break, the group began to examine RCG Tasks and Responsibilities listed on the Work Plan. Dave asked the group to provide comments. Joy Downs had a couple of specific suggestions on the need to address minimum winter levels and lake level fluctuations. Steve Bell suggested that the Recreation RCG should make recommendations to the Lake and Land Management RCG to ensure adequate lands are retained to meet recreational needs. Through brief discussion, the group agreed to all changes.

Dave then focused attention on the Work Scope and Product section of the Work Plan. He went through each task and noted the tasks that have been completed and tasks that are in the process of being completed. Through brief discussion, changes were made by group members. Steve B. wanted to know about the timeframe for discussing the amount of land that SCE&G sets aside for the future. Dave replied that once we have completed Step One and Step Two, the results and the expertise represented in the RCG will determine the amount of land that will be set aside for the future. The group then discussed the schedule for future issues that will be addressed.

MEETING NOTES

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

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

final dka 05-15-06

After lunch, Dave discussed up-dates from the Technical Working Committees (TWC). He noted that the Downstream Flow TWC had a meeting at the SCDNR office and agreed to start identifying users of the lower Saluda River (attached). He added that the TWC plans to use this list to eventually determine an optimum flow and schedule for various river users. They are currently examining the River Alliance study along with other studies through a working bibliography.

Dave then updated the group on issues that are being addressed in the Recreation Management TWC. The group has discussed Lake Murray and lower Saluda River questionnaires to be implemented in concurrence of site counts at SCE&G owned sites at the Project. Dave mentioned that the Recreation Management TWC will also examine aerial photographs of Lake Murray to look for possible information on boat densities. George Duke noted that the 2001 photos may not be valid due to the significant changes over the years, and suggested we need to take new photos on a couple of dates to compare current use with use reported in 2001. There was further discussion about assessing ADA compliance on SCE&G sites as part of the recreation site inventory. Alan Stuart presented information on ADA compliance to educate the group. The presentation included the amount of complexity that is involved with this process, such as types of ramps, gangways, railings, edge protection, restrooms, and parking lot types. David Hancock noted that if any new facilities are built, they must be ADA compliant.

Dave reminded the group that one of their tasks is to finalize the Standard Process Form and to review the stakeholder list on the Saluda relicensing website. There was some discussion about the TWC sending items to the RCG for approval. Dave noted all issues will be finalized by the RCGs, which may then task a TWC to deal with the issue. The TWC will decide what information is needed to deal with the issue and whether or not existing information is sufficient. After the TWC determines if the existing information is sufficient, or conducts a study to collect needed information, they will then send their recommendation to the RCG for approval. Dave noted that agenda items for the next meeting will be updates from the TWC. The group agreed to schedule the next meeting around the July Quarterly Public Meeting.

MEETING NOTES

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

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

final dka 05-15-06

**Saluda Hydro Relicensing
Recreation Resource Conservation Group**

Meeting Agenda

**April 17, 2006
9:30 AM**

Lake Murray Training Center

- **9:30 to 10:30** Review of Standard Process and Development of Vision Statement
 - **10:30 to 11:30** Review Recreation RCG Work Plan
 - **11:30 to 12:30** Lunch
 - **12:30 to 1:00** Update from Downstream Flows TWC
 - **1:00 to 1:45** Update from Recreation Management TWC (to include presentation on ADA design standards)
 - **1:45 to 2:00** Discussion of Questions for FERC Representative
 - **2:00 to 2:15** Develop an Agenda for Next Meeting and Set Next Meeting Date
- Adjourn



Recreation Vision Statement for the Saluda Project

The long-term vision for the Saluda Project is to recognize, protect, and enhance the fishery, water quality, and recreational opportunities on the reservoir and the Lower Saluda River, while recognizing the need to protect habitat supporting threatened, endangered, and sensitive species of the reservoir and tailwater, and ensure adequate facilities and public access are provided. Given the size of the reservoir it is felt that it can continue to support a diversity of recreation opportunities.

Improvements to be considered at the Saluda Project include:

Providing appropriate operations and maintenance of public recreation facilities.

Optimizing the capacity of existing public recreation facilities to accommodate existing and future demand.

Improving access and safety in the publicly accessible 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 minimize the occurrence of surface elevations lower than 354' in the late summer and early fall.

Ensuring public access areas for the non-boating public remain available along the shoreline.

Development of new facilities if a proven need arises.

Recreation Resource Conservation Group Work Plan Saluda River Project

Facilitator:			
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Members:			
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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	adventure@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 Saluda River Project

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

- the need for better public access
 - access site above the Mill Race rapids
 - creation of a state park on the south side of the reservoir
 - creation of a multi-lane boating facility that can accommodate large tournaments
 - non-boating access
 - paddling access
 - expansion of existing facilities to accommodate future growth
 - security at recreation facilities
- protect the scenic integrity of the Project
- using the concept of adaptive management in future recreation planning
- creation of a communication system that would encompass information on lake levels and river flows
- protection of the cold water fishery on the Lower Saluda River
- creation of scheduled recreation flows for the Lower Saluda River
- identification of a reliable lake level that will provide year round access for a majority of lake users

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 level fluctuations may be adversely affecting recreation at the lake, 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 and alternatives for modifying project operations, including operations that would benefit recreation.
- Identifying any studies, if applicable, that need to be performed for identifying and/or evaluating changes to Project operations.
- 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 recreation access, facilities, and use.

Recreation Resource Conservation Group Work Plan Saluda River Project

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 level fluctuations – from a recreation setting perspective.
- **Task 5** – Review stakeholder requests (e.g., agency letters) 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 and recreational issues.
- **Task 11** – Develop a consensus based Recreation Plan for the Saluda Project that addresses all of the issues and tasks identified above.

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

IDENTIFIED USERS OF THE LOWER SALUDA RIVER

- swimmers
 - children & teenagers on the river banks
 - people at access areas
 - rock people
 - educational groups and clubs
- tubers
- fishermen
 - bank
 - trout
 - food—people that actually fish to feed their families
 - bass and other
 - father and son type outings to learn to fish
 - scouts and other clubs, groups
 - boat
 - trout
 - trophy bass
 - recreational
 - food
 - business (oriental group that fishes near bridges)
 - wade
 - trout
 - children w/ parents
- charity groups
 - canoe, raft, sit on tops, etc
- social groups
- clubs
- educational groups
 - schools and university
 - scouts
 - club field trips
 - outdoor clubs
- hikers
- mountain bikers
- kayakers and canoeists—(skilled)
- recreational boaters (rental and less skilled)
- 4x4 clubs
- zoo visitors
- rescue training
- kayak and canoe classes
- us team boaters practicing (olympic and world team level)
- bird watchers
- nature lovers

WORKING BIBLIOGRAPHY OF STUDIES ON THE LOWER SALUDA RIVER

de Kozlowski, Steven J. 1988. Instream Flow Study, Phase II: Determination of Minimum Flow Standards to Protect Instream Uses in Priority Stream Segments; A Report to the SC General Assembly. SC Water Resources Commission.

DRAFT

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER

April 17, 2006

final dka 05-15-2006

ATTENDEES:

Name	Organization	Name	Organization
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 Bebbber	SCPRT
George Duke	LMHOC		

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

final dka 05-15-2006

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

final dka 05-15-2006

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

final dka 05-15-2006

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

Meeting Agenda

April 17, 2006

2:30 pm

Lake Murray Training Center

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



MEETING NOTES

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

**CONFERENCE CALL
April 7, 2006**

final dka 04-25-06

ATTENDEES:

Name	Organization	Name	Organization
Tommy Boozer	SCE&G	Steve Bell	Lake Murray Watch
Van Hoffman	SCE&G	Tony Bebber	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

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 MANAGEMENT TECHNICAL WORKING COMMITTEE**

CONFERENCE CALL

April 7, 2006

final dka 04-25-06

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 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 30th. 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 selected 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 assumptions about what is and what is not a disability, and that we will not be able to tell whether some people have them or not. 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. Kelly 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

MEETING NOTES

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

CONFERENCE CALL

April 7, 2006

final dka 04-25-06

came from. Tony B. thought the individual maps would be most useful. Marty stated that we could obtain the information but would not be able to correlate individual responses to dots on a map. The group agreed to try having respondents indicate their location on the lake by placing a dot on a map 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. Kelly 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. Marty 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 side 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

MEETING NOTES

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

CONFERENCE CALL

April 7, 2006

final dka 04-25-06

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 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 17th 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

final dka 04-25-06

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

Meeting Agenda

April 7, 2006

9:30 AM

Conference Call

- **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

final dka 04-25-06

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.

Malcolm Leaphart: 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 committees and I want to make sure that we do fail to address it... Thanks.

**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 one main activity	Check all other activities	Types of Activities
		FISHING:
<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
		BOATING:
<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
		OTHER:
<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.)

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.)

THANK YOU FOR YOUR HELP! WE APPRECIATE YOUR TIME TODAY!

**Lower Saluda River Recreation Study
Public Access Site Questionnaire**

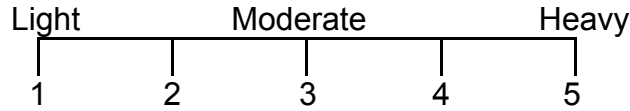
Clerk: _____	Site: _____	Date: _____	Time: _____ am/pm
Weather: <input type="checkbox"/> Sunny	<input type="checkbox"/> Partly Cloudy	Record Respondent Gender: <input type="checkbox"/> Male	<input type="checkbox"/> Female
(Check all <input type="checkbox"/> Cloudy	<input type="checkbox"/> Light Rain	RESPONDENT REFUSED INTERVIEW: <input type="checkbox"/>	
that apply) <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

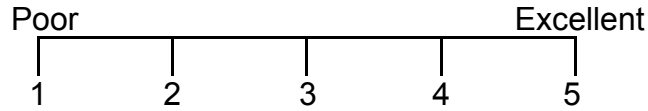
- Including yourself, how many people are in your party today? *(Fill in blank.)*
_____ people in party
- What time did you arrive **at the Lower Saluda River** today? *(Fill in blank.)*
_____ am / pm
- What is the primary recreation activity that you participated in today **at the Lower Saluda River**? *(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
		FISHING:
<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
		BOATING:
<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
		OTHER:
<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.)

- 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.)

- 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.)*

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.)*

THANK YOU FOR YOUR HELP! WE APPRECIATE YOUR TIME TODAY!

MEETING NOTES

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

**CONFERENCE CALL
March 24, 2006**

final dka 03-28-06

ATTENDEES:

Name	Organization	Name	Organization
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		

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**

final dka 03-28-06

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 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

final dka 03-28-06

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**

final dka 03-28-06

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

final dka 03-28-06

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

Meeting Agenda

March 24, 2006

9:30 AM

Conference Call

- **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**

final dka 03-28-06

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: _____

Facility Type:

____ Primitive Camp

____ Picnic Area

____ Day Use

____ Overlook Site

____ Informal Site

____ Launch Ramp

Road Access:

____ Paved access..... # of lanes

____ Unpaved access..... # of lanes

Operations:

____ Manned

____ Seasonal (From ____ To ____)

____ Unmanned

____ Year Round

____ Fee (\$)..... (Site ____; Parking; ____)

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		

Parking Lots:

Type	Estimated # Paved	Estimated # Gravel	
ADA Spaces	_____	_____	_____ Spaces delineated?
Regular Spaces	_____	_____	_____ Curbs?
Vehicle & trailer spaces	_____	_____	

Sanitation Facilities:

	Flush	(ADA?)	Portable	(ADA?)	Showers	(ADA?)
Unisex	_____	(____)	_____	(____)	_____	(____)
Women	_____	(____)	_____	(____)	_____	(____)
Men	_____	(____)	_____	(____)	_____	(____)

Campground/Campsite:

	RV sites	Cabins	Tent sites	Primitive sites
# of sites	_____	_____	_____	_____
On site parking	_____	_____	_____	_____
Water front	_____	_____	_____	_____
ADA compliant	_____	_____	_____	_____

Boat Launch Facilities:

_____ Hard surface	_____ Unimproved	_____ # of Lanes
_____ Gravel	_____ Carry In	_____ Boat Prep Area?

Courtesy/Fishing Docks:

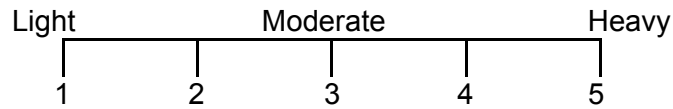
Courtesy/Fishing	Dimensions	ADA Compliant
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Notes: _____

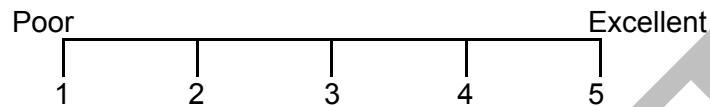
Picture Number From _____ To _____

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.)*

- better access road
- better lake access at low water
- paving/grading of parking area
- navigation aids
- paving/grading of access road
- better maintenance *(emptying trash cans, cleaning restrooms, etc.)*
- increased security/patrolling
- ADA compliant facilities
- other – *(please describe _____)*

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.

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

MEETING NOTES

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

**CONFERENCE CALL
March 17, 2006**

final dka 04-05-06

ATTENDEES:

Name	Organization	Name	Organization
Malcolm Leaphart	Trout Unlimited	Tim Vinson	SCDNR
Tommy Boozer	SCE&G	Steve Bell	Lake Murray Watch
Van Hoffman	SCE&G	Tony Bebber	SCPRT
David Hancock	SCE&G	Dave Anderson	Kleinschmidt Associates

HOMEWORK ITEMS:

- Tommy B. – locate photographs from boating use study
- Dave A. – finish and distribute site inventory form
- All – review draft site user questionnaire and provide feedback to Dave A.
- Tommy B. – review lease agreements for Dreher Island and Saluda Shoals
- Tim V. – provide group with number and location of regatta permits

PARKING LOT ITEMS:

- Discussion of project lands open to the public

DATE OF NEXT MEETING:

**March 24, 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 17, 2006**

final dka 04-05-06

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.

After working out a few bugs with the conference call system, the meeting began with a discussion of the draft inventory form to be used to collect information from SCE&G public sites (attached). There was some discussion on whether Dreher Island and/or Saluda Shoals would be included in the inventory, mainly centering on if SCE&G would be able to fund any improvement projects at these sites. Tommy B. said they would have to review the lease agreements for these two facilities and see what kind of arrangement is currently in place.

There was some discussion on the ADA assessment for the park sites. David H. has not had a chance to contact the Department of Vocational Rehab, but will do so. Someone questioned if all the sites would have to be brought into compliance as a result of the assessment. Dave A. replied that no, they would not have to be, but upgrading existing facilities may be part of a mitigation package for the license application.

The group then proceeded to go through each section of the inventory form. Tommy and David H. agreed that there are no "Campsite" facility types on Lake Murray and the group agreed to drop this type. We will add "Launch Ramp" and "Primitive Camp" to this section. There were some questions on the "Access" section; the group agreed that changing this to "Road Access" would make the intention of this section more clear. The group agreed to change the heading from "Site Facilities" to "Site Amenities" to avoid confusion. There were some suggested changes to this section, including dropping "Sanitation", "Boat Ramp", and "Showers". These amenities are covered in other sections of the form. The group agreed to add "Trash Cans", "Pump Out", and "Trail Mileage" to this section. The group agreed to add "estimated" to the "Parking Lots" section to account for unimproved parking lots. "Showers" will be added to the "Sanitation Facilities" section, along with "ADA Compliance". Under "Campground/Campsites", the word "wilderness" will be changed to "primitive". Finally, "# of lanes" will be added to "Boat Launch Facilities". There was some discussion about inventorying the signs going into and at the sites; Dave A. said that this was a section he had deleted from the form, but would add it back. After this review of the inventory form, Dave A. agreed to modify the form and redistribute to the TWC for approval.

The discussion turned to the report "Investigation of Boating Use on Lake Murray" and some of the comments received from its email distribution. There was some discussion of whether the revised lake section map (attached) that Dave distributed correctly identified the sections used in the report. Tommy B. said the sections appeared correct. Someone asked about the time of day the photographs were taken. Tommy B. didn't remember exactly, but will investigate this. Tommy

MEETING NOTES

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

**CONFERENCE CALL
March 17, 2006**

final dka 04-05-06

does have the photo set from some of the dates and will distribute these for the TWC to examine. Tommy will also locate the rest of the photos for use by the committee. Steve B. indicated he was fine with using these photos in lieu of conducting another boating density studies. Pending an examination of the actual photos, the group agreed that additional boat counts were not necessary.

The discussion then turned to the draft "Public Access Site Questionnaire" distributed by Dave A. prior to the meeting (attached). Dave explained that the questionnaire as written was meant to be filled out on-site by site users. There was some discussion about the pros and cons of using this method versus doing an interview type questionnaire. The group agreed that they would like to use the interview type questionnaire. Dave A. explained that this type of survey would mean that the group would have to delete about five questions from the questionnaire and that the wording of the questions would have to be modified to be more conducive to a spoken interview. Tony mentioned that perhaps we could offer some type of "give-away" for completing the interview. The group also decided the sampling period should be from sun-up to sun-down in order to include all users of the sites. There was some discussion of the individual questions; these remarks will be captured in actual changes to the questionnaire.

Since the meeting was running long, the group agreed to table the discussion on project lands open to the public. Homework assignments were reviewed and the meeting adjourned.

MEETING NOTES

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

**CONFERENCE CALL
March 17, 2006**

final dka 04-05-06

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

Meeting Agenda

**March 17, 2006
10:00 AM
Conference Call**

- **10:00 to 10:10** Review Inventory Form and Approve Final Version
- **10:10 to 10:20** Discussion of “Investigation of Boating Use on Lake Murray”
- **10:20 to 10:35** Discussion of Public Site User Questionnaire
- **10:35 to 10:45** Discussion of Project Lands Open to the Public
- **10:45 to 11:00** Moving Forward



MEETING NOTES

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

**CONFERENCE CALL
March 17, 2006**

final dka 04-05-06

Additional Comments Received

Tim Vinson: Tommy asked me at our last meeting together if the ski and boating courses have to be permitted by DNR. I think it was understood that DNR does not have any regulation on these, but I found out today the DHEC does require persons to get Navigable Waters Permits for the installation of such devices.

Also, I have found out the number of regatta permits for Lake Murray in the year 2004. Not sure if anything is published on the year 2005, still checking into that and the locations of these events.

Malcolm Leaphart: Maybe we did not cover the following questions last week since we 'tabled' the discussion of "Project Lands Open to the Public"; but, would like to discuss these during the TWC conference call tomorrow. My suggested agenda topic is: 'Public access plans for the lower Saluda River Corridor'.

Also, I am assuming that more studies are not needed to show that more access needs to be provided on the river, right?? Additional studies should not be needed either for a river trail along the entire corridor as that was documented in the SC DNR Charrette which included landowners and broad public interest groups, including individual citizens (reference with Bill Marshall who led that effort and can supply plan copies). Thanks.

Q. What additional public access is planned for the new license plan along the lower Saluda River?

Q. Will consideration be given to expanding the Gardendale throw-in landing to a ramp suitable for small trailered boats? Or, if that is not a suitable site for a trailer launch because of hydraulics, where can a ramp suitable for small trailered boat launchings be located so that most of the river above I20 is accessible upstream? An upstream trip from there, especially by motor boat, is much safer for the public in that it allows for a downstream return to the landing in case of problems with motors, handling very high or very low flows, etc. Making the safer upstream trip from the Hopes Ferry landings only gives access to the short stretch to the dam - and that stretch is often not navigable at low flows at the sandy island a short distance upstream.

Q. What plans are being considered to make a riverfront trail from Saluda Shoals to the Riverbanks Zoo a reality? That is, will SCE&G help by developing trails or 'cluster parks', including parking, on their river corridor property, including along the stretch just below I-20 above the asphalt plant.

Q. Was a right of way for a public trail provided for in the property sale to a private party for the land sold between the Zoo and I-26 (the old Columbia Police Club property)? If not, what is the

MEETING NOTES

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

**CONFERENCE CALL
March 17, 2006**

final dka 04-05-06

mitigation for not keeping that land and providing public access to that critical stretch just above the Mill Race Rapids and Zoo where public access and recreation demands are the highest?

Q. Will SCE&G support the River Center' and help to develop it as envisioned by the River Alliance?

Q. Will any access be provided, through a small ramp and/or cluster park in the stretch between the old trestles where the scenic river corridor begins and the sandy island upstream from Saluda Shoals Park? That is prime fishing water due to the location near the dam. While security concerns may not allow public facilities at the dam, facilities near the beginning of the scenic river corridor should be feasible and an acceptable substitute site.

Site Visit/Inventory Forms

Inspected by: _____

Date: _____

Site Name/Code: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Facility Type:

____ Campground/Campsites ____ Picnic Area ____ Day Use
____ Overlook Site ____ Informal Site

Access:

____ Paved access ____ # of lanes
____ Unpaved access ____ # of lanes

Operations:

____ Manned ____ Seasonal
____ Unmanned ____ Year Round
____ Fee (\$)

Site Facilities:

#	Type	#	Type
____	Picnic Tables	____	Potable Water
____	Grills	____	Dumping Station
____	Firepit/ring	____	Boat Ramp (____ # of lanes)
____	Sanitation	____	Docks
____	Trails (specify use _____)	____	Playground
____	Shelter	____	Showers
____	Designated Swim Area	____	Food
____	Store	____	Marina
____	Fuel		

Parking Lots:

_____ # _____ Type _____

_____ ADA spaces

_____ Spaces delineated?

_____ Regular spaces

_____ Curbs?

_____ Vehicle & trailer spaces

Sanitation Facilities:

Type:	# Unisex	# Women	# Men
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Flush	_____	_____	_____
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Portable	_____	_____	_____
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Campground/Campsite:

	RV sites	Cabin sites	Tent sites	Wilderness sites
# of sites	_____	_____	_____	_____
On site parking	_____	_____	_____	_____
Water front	_____	_____	_____	_____
ADA compliant	_____	_____	_____	_____

Boat Launch Facilities:

_____ Hard surface

_____ Unimproved

_____ Gravel

_____ Carry In

Courtesy/Fishing Docks:

Courtesy/Fishing	Dimensions	ADA Compliant
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_____	_____	_____
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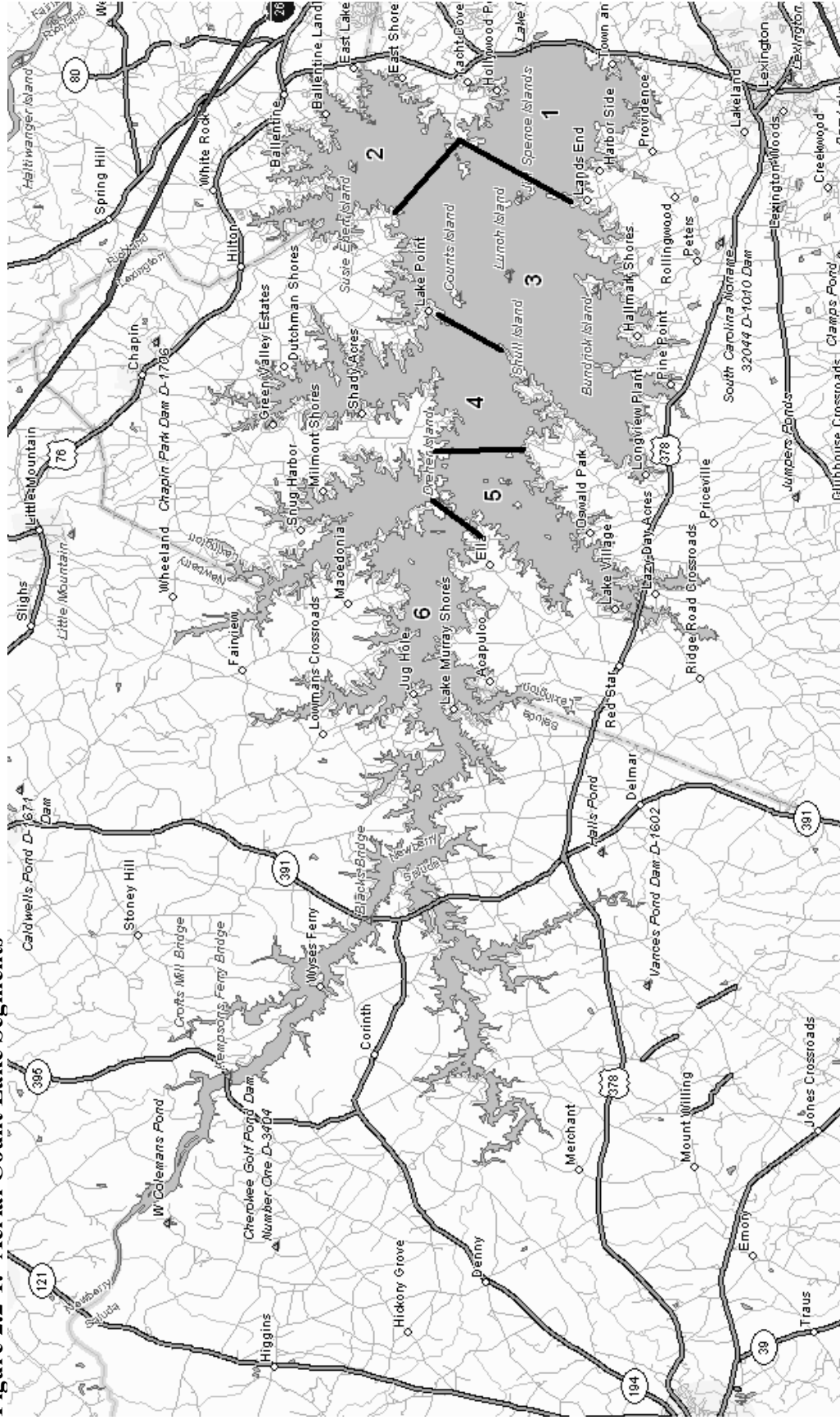
_____	_____	_____
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_____	_____	_____
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_____	_____	_____
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_____	_____	_____
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Figure 2.2-1. Aerial Count Lake Segments



Lake Murray and Lower Saluda River Recreation Study Public Access Site Questionnaire

IN QUESTIONS 1 THROUGH 8, WE'D LIKE TO LEARN ABOUT YOUR TRIP TODAY:

1. What recreational activities did you participate in today at **Lake Murray/Lower Saluda River**? (Please check only one main activity in the first column and all other secondary activities in the second column.)

Check only one main activity	Check all other activities	Types of Activities
		FISHING:
<input type="checkbox"/>	<input type="checkbox"/>	boat fishing
<input type="checkbox"/>	<input type="checkbox"/>	bank/pier/dock fishing
<input type="checkbox"/>	<input type="checkbox"/>	stream fishing
<input type="checkbox"/>	<input type="checkbox"/>	tailrace/river fishing
		BOATING:
<input type="checkbox"/>	<input type="checkbox"/>	motor boating
<input type="checkbox"/>	<input type="checkbox"/>	pontoon
<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"/>	lake canoeing/kayaking
<input type="checkbox"/>	<input type="checkbox"/>	river canoeing/kayaking
		OTHER:
<input type="checkbox"/>	<input type="checkbox"/>	bicycling
<input type="checkbox"/>	<input type="checkbox"/>	tent or vehicle camping
<input type="checkbox"/>	<input type="checkbox"/>	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"/>	lake swimming
<input type="checkbox"/>	<input type="checkbox"/>	picnicking
<input type="checkbox"/>	<input type="checkbox"/>	other: _____

2. Including yourself, how many people are in your party today? (Please fill in blank.)

_____ people in party

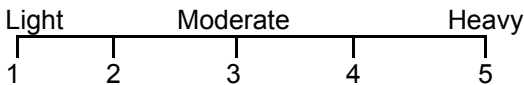
3. Today, how many hours did you visit **Lake Murray/Lower Saluda River** for recreational purposes? (Please fill in blank.)

_____ hours

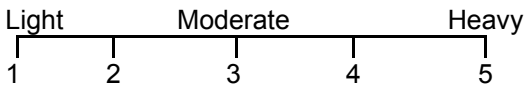
4. In total, how many days will you be visiting **Lake Murray/Lower Saluda River** on this trip? (Please fill in blank.)

_____ days

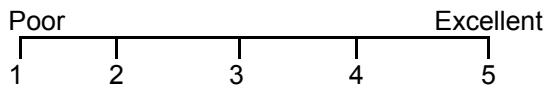
- 5a. How would you rate the crowdedness **on the water on Lake Murray/Lower Saluda River** today? (Please circle one number.)



- 5b. How would you rate the crowdedness **at the particular recreation site you are at** today? (Please circle one number.)



6a. How would you rate the overall condition **at the particular recreation site you are at** today? (Please circle one number.)



6b. Please rate the condition of the facilities **at the particular recreation site you are at** 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						Yes	No
swimming area	1	2	3	4	5						Yes	No
fishing pier/dock	1	2	3	4	5						Yes	No
picnic tables/shelter	1	2	3	4	5						Yes	No
trash cans	1	2	3	4	5						Yes	No
boat launch	1	2	3	4	5						Yes	No
boat dock	1	2	3	4	5						Yes	No
camping area	1	2	3	4	5						Yes	No
signs	1	2	3	4	5						Yes	No
lighting	1	2	3	4	5						Yes	No
fish cleaning station	1	2	3	4	5						Yes	No
access road	1	2	3	4	5						Yes	No
parking lot	1	2	3	4	5						Yes	No

6c. Please indicate which additional facilities are needed **at the particular recreation site you are at** today. (Please check all that apply.)

- better access road
- paving/grading of parking area or access road
- increased security/patrolling
- other - (please describe _____)
- better lake/river access
- better maintenance (emptying trash cans, cleaning restrooms, etc.)
- ADA compliant facilities

7a. Have you had any negative experiences while participating in recreational activities at **Lake Murray/Lower Saluda River** on this trip? (Please check one box.)

- Yes
- No → (If no, skip to Question 8.)

7b. If yes, please indicate the types of issues experienced at **Lake Murray/Lower Saluda River** on this trip. (Please check all that apply.)

- too much litter/trash
- too crowded
- water levels too high
- poor weather
- other - (please describe _____)
- reckless boaters
- boating hazards
- water levels too low
- water temperature
- boats too noisy
- people too noisy
- poor site conditions
- difficult access

8. In preparing for and making this trip to **Lake Murray/Lower Saluda River**, about how much money did you spend on each of the following items before you got home? (If you live in this area and/or didn't spend anything for certain items, write \$0. If you paid for other members of your party, please include these costs in your costs. Please fill in the blank, providing your best estimate rounded to the nearest dollar.)

- \$ _____ Food & Drink
- \$ _____ Hotel/Motel/Lodging
- \$ _____ Boating Rentals, Bait and Tackle and Other Recreational Supplies
- \$ _____ Gasoline (auto and boat)
- \$ _____ Guide Fees or User Fees (parking/entrance/admission)
- \$ _____ Other (_____)
- \$ _____ TOTAL

**IN QUESTIONS 9 THROUGH 14B, WE'D LIKE TO LEARN ABOUT YOUR TRIPS
TO LAKE MURRAY/LOWER SALUDA RIVER IN GENERAL:**

9. During what **one** season do you spend the most time participating in recreational activities at **Lake Murray/Lower Saluda River**? (Please check only one.)

- Winter (Dec.-Feb.)
- Spring (March-May)
- Summer (June-Aug.)
- Fall (Sept.-Nov.)
- Except for this trip, I haven't participated in recreation activities at Lake Murray/Lower Saluda River. → (Skip to Question 15)

10. In an average year, approximately how many days do you spend at **Lake Murray/Lower Saluda River** for recreational purposes? (Please fill in the blank for each month; if you do not visit Lake Murray/Lower Saluda River in a specific month, write 0.)

Number of Trips	Number of Trips	Number of Trips
_____ January	_____ May	_____ September
_____ February	_____ June	_____ October
_____ March	_____ July	_____ November
_____ April	_____ August	_____ December

11a. During the past 5 years, has the number of visits you have made to **Lake Murray/Lower Saluda River** increased, decreased, or stayed about the same? (Please check one box.)

- increased
- decreased
- stayed about the same → (Skip to Question 12a.)
- I live here year round → (Skip to Question 12a.)

11b. If the number of trips has increased or decreased, what is the major reason for this change? (Please fill in blank.)

12a. Do you ever go boating (including boat fishing) on **Lake Murray/Lower Saluda River**? (Please check one box.)

- Yes
- No → (If no, skip to Question 13.)

12b. When you are boating and/or boat fishing on **Lake Murray/Lower Saluda River**, what is the average amount of time you spend on the water during an average day, not including time spent launching or trailering your boat? (Please fill in blanks, as appropriate.)

Boating: _____ average hours/day Boat Fishing: _____ average hours/day

12c. When you are boating and/or boat fishing on **Lake Murray/Lower Saluda River**, what is the average number of people in your party, including yourself? (Please fill in blanks, as appropriate.)

Boating: _____ average group size Boat Fishing: _____ average group size

12d. What is the name of the launch site or access area that you typically use for boating and/or boat fishing on **Lake Murray/Lower Saluda River**? (If you use your own pier/dock as the typical access site, please write 'own dock' under name of launch site.)

Boating launch site/access area: _____

Boat Fishing launch site/access area: _____

13a. Overall, are the number and types of existing recreational facilities and activities at **Lake Murray/Lower Saluda River** adequate to meet your needs? (Please check one box.)

- Yes → (If yes, skip to Question 14a.)
- No

13b. If no, please write in the name of the **Lake Murray/Lower Saluda River recreation sites** where additional facilities are needed and check the types of facilities needed at each site. *(Please check all that apply.)*

(1) Name of Site:	(2) Name of Site:	(3) Name of Site:
<input type="checkbox"/> restrooms	<input type="checkbox"/> restrooms	<input type="checkbox"/> restrooms
<input type="checkbox"/> swimming area	<input type="checkbox"/> swimming area	<input type="checkbox"/> swimming area
<input type="checkbox"/> fishing pier/dock	<input type="checkbox"/> fishing pier/dock	<input type="checkbox"/> fishing pier/dock
<input type="checkbox"/> picnic shelter	<input type="checkbox"/> picnic shelter	<input type="checkbox"/> picnic shelter
<input type="checkbox"/> boat launch	<input type="checkbox"/> boat launch	<input type="checkbox"/> boat launch
<input type="checkbox"/> boat dock	<input type="checkbox"/> boat dock	<input type="checkbox"/> boat dock
<input type="checkbox"/> better lake/river access	<input type="checkbox"/> better lake/river access	<input type="checkbox"/> better lake/river access
<input type="checkbox"/> paving/grading	<input type="checkbox"/> paving/grading	<input type="checkbox"/> paving/grading
<input type="checkbox"/> trash cans	<input type="checkbox"/> trash cans	<input type="checkbox"/> trash cans
<input type="checkbox"/> lighting	<input type="checkbox"/> lighting	<input type="checkbox"/> lighting
<input type="checkbox"/> camping area	<input type="checkbox"/> camping area	<input type="checkbox"/> camping area
<input type="checkbox"/> signs	<input type="checkbox"/> signs	<input type="checkbox"/> signs
<input type="checkbox"/> other – <i>(please describe</i> _____)	<input type="checkbox"/> other – <i>(please describe</i> _____)	<input type="checkbox"/> other – <i>(please describe</i> _____)

14a. Have you had any negative experiences while participating in recreational activities at **Lake Murray/Lower Saluda River**? *(Please check one box.)*

- Yes
 No → *(If no, skip to Question 15.)*

14b. If yes, please indicate the types of issues experienced while participating in recreational activities at **Lake Murray/Lower Saluda River**. *(Please check all that apply.)*

- too much litter/trash reckless boaters boats too noisy
 too crowded boating hazards people too noisy
 water levels too high water levels too low poor site conditions
 poor weather water temperature difficult access
 other - *(please describe* _____)

IN QUESTIONS 15 THROUGH 19, WE'D LIKE TO LEARN A LITTLE BIT ABOUT YOU:

15. Do you have a seasonal or permanent home in either Richland, Lexington, Saluda, and Newberry Counties, South Carolina? *(Please check one box.)*

- Yes
 No

16. 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

17. Are you . . . ? *(Please check one.)*

- male
 female

18. In what year were you born? *(Please fill in blank.)* _____

19. Do you have any additional comments? *(Please be as specific as possible.)* _____

Thank you for your help with this important study! We appreciate your time today.

MEETING NOTES

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

**LAKE MURRAY TRAINING CENTER
March 3, 2006**

final dka 03-22-06

ATTENDEES:

Name	Organization	Name	Organization
David Hancock	SCE&G	George Duke	LMHC
Dave Anderson	Kleinschmidt Associates	Tim Vinson	SCDNR
Tommy Boozer	SCE&G	Tony Bebber	SCPRT
Steve Bell	Lake Murray Watch	Jennifer Summerlin	Kleinschmidt Associates

HOMEWORK ITEMS:

- Tommy B. – send out acreage of current management prescriptions
- All – research dock restrictions and any boating capacity studies the USACE used on Lake Lanier
- Dave – scan and email existing boating use study
- Tim – send Dave questions used by DNR during previous surveys
- Dave – draft inventory form and inventory database

PARKING LOT ITEMS:

- Discussion of shoreline classifications

DATE OF NEXT MEETING:

**March 17, 2006 at 10:00 a.m.
Conference Call**

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER

March 3, 2006

final dka 03-22-06

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 A. opened the meeting by briefly going over the objectives of the TWC and what the committee needs to accomplish by the start of the recreation season. The first thing that the committee went over is the facility inventory that has been discussed in the Recreation RCG meetings. Dave reminded the group that they need to have the complete list of amenities by the end of the day in order to complete the facility inventory.

There was some discussion as to how the information would be maintained after it was collected. Dave explained the benefits of storing the information in a database, which would allow SCE&G to easily update the information, and will allow the data to be used in a variety of ways (GIS, brochure, website, etc.). Tommy reminded the group that SCE&G goes through the updating process when it is time to submit their Form 80s and also during the 5-year review of the lake management plan. Tommy noted that the 5-year review was originally a recreational review and has evolved to encompass the entire lake and land management program. The group also discussed how this information would be available on a website.

Dave reminded the group that a website is peripheral to collecting the information; we need to focus since the recreation season is approaching. There was a group discussion of additional variables that need to be collected for purposes of a complete facility inventory. One of the main points from this discussion focuses on ADA compliance. The group agreed that we must contact the Department of Vocational Rehabilitation and have them evaluate all of SCE&G's park sites as part of the facility inventory. The group agreed to a final set of variables (to be shown on the inventory form—attached) that must be collected as part of the inventory. Dave will send out a draft form with the information to be collected prior to next meeting and will also begin to design the database that will store the information.

Steve B. indicated that shorelines in the forest management and future development classification and buffer zones are open to the public for passive recreational uses and should be included in the inventory of areas available for public use. Tommy Boozer indicated that he did not want to include these in the inventory of areas "designated" as recreational sites. Steve B. noted that the islands, which have no amenities, are included, so why not the forest management lands, future development, and buffers. David H. and Tommy expressed their concern about advertising buffer zones as designated recreational sites due to the potential for conflict it may create. Steve B indicated that members of the Recreational Resource Group should be aware that these shorelines, while not designated as recreational sites, are available for public use, noting that the FERC recently

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER

March 3, 2006

final dka 03-22-06

ruled that public access paths to the buffers should be provided as needed. Steve B. suggested that, for the purpose of inventory, forest management, future development, and buffers should be listed as a separate category (i.e., non designated areas, impromptu, passive) and included as part of the recreational resource inventory. The group agreed to further discuss this issue at a later time.

The group briefly returned to the discussion of facility inventory. Dave wanted to make sure that the list of amenities the group has agreed to will satisfy the comments from the SCPRT on the Initial Consultation Document. Tony B. indicated they would, but he would like to see numbers with those variables where a count makes sense (parking spaces, tables, etc.). Dave also wanted to make sure the group agreed that this information would only be collected for SCE&G public areas and not for private or commercial areas. The group agreed, but wanted to make sure the information we already have on private/commercial facilities is not lost.

There was some discussion as to whether the islands need to be taken off the SCE&G facilities list. Tommy wants them to stay on the list because they are an important part of recreational use on the lake. The group agreed to leave the islands on the list and indicate they can be used for primitive camping. Dave questioned the numbers assigned to some private facilities and not others. David H. replied they have not updated the numbers and need to do so as part of this exercise.

After lunch, the group concentrated on existing use data and the need to collect additional data for purposes of relicensing. Dave summarized the study request for recreation and went over the studies that need to be in place by the start of recreation season. Dave asked the group if a carrying capacity study was necessary given SCE&G cannot regulate the numbers of boats on the lake. Dave preferred the term boat density study and reminded the group that SCE&G has conducted this type of study in 2001. There was some discussion as to how the boat counts provide useful information and possible uses of this information in analyses of crowding on the lake. The group agreed to look at the existing boating count study and make a determination if this type of study needs to be conducted again. Dave will scan the report and send to the group so they can make a determination by Friday, March 10.

The group then discussed some of the studies done in support of the Catawba-Wateree relicensing for Duke Power. Tony pointed out the user surveys they conducted at existing sites as well as the surveys done of the surrounding region to determine the need for more access sites. Tommy B. questioned if this information was useful for locating new recreation sites. Tony replied that not only did the surveys do that, but also provided information as to satisfaction with existing facilities. Tommy reminded the group that the main determination they will use in deciding locations of new sites is whether SCE&G owns the property—it is highly unlikely that SCE&G will purchase additional properties for future sites.

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER

March 3, 2006

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Dave questioned the group if it would be possible to use counts conducted during the remediation project to estimate use at recreation facilities. The group agreed this information might prove useful, but is probably not an accurate reflection of use. The group discussed doing a use estimate of SCE&G facilities as well as conducting a survey of users at these sites. Tim mentioned the DNR has some questions they use for these types of surveys and he will send the questions to Dave. Dave will also look at the Catawba-Wateree study and see if there are any applicable questions the group can use. Dave will draft a questionnaire for the group's consideration at the next meeting.

Dave reminded the group that we must reach a decision on the boat density study as soon as possible so the group can finalize plans for the recreation season. Tony pointed out the season starts on April 1 and he would like to see the survey conducted over an entire year. The group examined the calendar for the coming weeks and agreed to have conference call on March 17 to talk about a user questionnaire. Dave reminded the group that the LSR needs to be included in any studies. After reviewing the homework items, the meeting adjourned.

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER

March 3, 2006

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Additional Comments Received

Charlene Coleman: Well as a comment. I'd have to say Steve Bell raises a valid point, that I also questioned. I too believe there should be an acknowledgement of public ownership of such areas. The ostrich never saw anything with his head stuck in the sand. I see this inventory as a great asset in pursuing restoration of damaged buffers by "undetermined", sudden plant death by shore fronting landowners. Some of the islands I know are private and should be documented as such. I feel certain they do not pay taxes on this land. A public trail around the lake would be an awesome project too. Also, I'm pretty tired of people clearing all the way to the river too.

Patrick Moore: The Coastal Conservation League and American Rivers support including project lands open to public recreation in the recreation inventory. These lands have existing recreational uses that will probably only increase in the future. To get the full picture of current and future recreational use on Lake Murray it would be useful to know who uses these lands now, who is likely to use them in the future, which ones have public access from roads/other public lands etc. We can figure out a way to include these project lands open to public recreation and avoid advertising them as public recreation areas. I am under the impression that part of our job is to make a recommendation to the L&LM RCG about the current and future shoreline classifications based on our recreation studies.

Site Visit/Inventory Forms

Inspected by: _____

Date: _____

Site Name/Code: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Facility Type:

____ Campground/Campsites ____ Picnic Area ____ Day Use
____ Overlook Site ____ Informal Site

Access:

____ Paved access ____ # of lanes
____ Unpaved access ____ # of lanes

Operations:

____ Manned ____ Seasonal
____ Unmanned ____ Year Round
____ Fee (\$)

Site Facilities:

#	Type	#	Type
____	Picnic Tables	____	Potable Water
____	Grills	____	Dumping Station
____	Firepit/ring	____	Boat Ramp (____ # of lanes)
____	Sanitation	____	Docks
____	Trails (specify use _____)	____	Playground
____	Shelter	____	Showers
____	Designated Swim Area	____	Food
____	Store	____	Marina
____	Fuel		

Parking Lots:

_____ # _____ Type _____

_____ ADA spaces

_____ Spaces delineated?

_____ Regular spaces

_____ Curbs?

_____ Vehicle & trailer spaces

Sanitation Facilities:

Type:	# Unisex	# Women	# Men
-------	-------------	------------	----------

Flush	_____	_____	_____
-------	-------	-------	-------

Portable	_____	_____	_____
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Campground/Campsite:

	RV sites	Cabin sites	Tent sites	Wilderness sites
# of sites	_____	_____	_____	_____
On site parking	_____	_____	_____	_____
Water front	_____	_____	_____	_____
ADA compliant	_____	_____	_____	_____

Boat Launch Facilities:

_____ Hard surface

_____ Unimproved

_____ Gravel

_____ Carry In

Courtesy/Fishing Docks:

Courtesy/Fishing	Dimensions	ADA Compliant
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_____	_____	_____
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_____	_____	_____
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_____	_____	_____
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_____	_____	_____
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_____	_____	_____
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MEETING NOTES

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

**SCDNR HEADQUARTERS
March 01, 2006**

final dka 03-22-06

ATTENDEES:

Name	Organization	Name	Organization
Tom Eppink	SCANA	Charlene Coleman	AW
Bill Marshall	SCDNR and LSSRAC	Malcolm Leaphart	TU
Patrick Moore	AR/SCCCL	Dave Anderson	Kleinschmidt Associates
Guy Jones	River Runner	Jennifer Summerlin	Kleinschmidt Associates
Karen Kustafik	Columbia Parks and Recreation		

HOMEWORK ITEMS:

- Charlene Coleman – send list of river users to group
- All – Review list of river users and begin to fill in “who, what, when, where, why”
- All – compile a working bibliography of existing studies related to the LSR
- Dave – scan and email creel surveys done on the LSR

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
March 01, 2006**

final dka 03-22-06

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 A. began the meeting by going over the tasks associated with the committee. Dave outlined the function of the group to include proposing recreational flows for the lower Saluda River and the effects of project operations on recreational use of the LSR. Tom E. questioned the group about what recreational issues exist on the LSR. Someone identified the coldwater trout fishery and the striper fishery. Dave asked if there were any conflicts between users on the LSR, noting that, in general, there are conflicts between boat and wading anglers. Malcolm replied that there are some problems with boats going to fast through “runs” the wading anglers are fishing, but it is not a major issue on the LSR.

Malcolm L. questioned the group as to what “recreational flows” means. Dave replied that he thinks it means flows conducive to certain activities, or optimal flows. Malcolm replied that their main concerns with the LSR are that project releases are not announced in advance and that recreating is often unsafe because of the extreme flow level changes; and, that TU advocates for the best flows to be set based on scientific studies for the fish, not for the fishermen or other recreationists. Tom E. believed the flow issues will be dealt with in the Safety RCG and in the Fish & Wildlife RCG.

Dave reviewed the plan for the TWC for the coming months. Dave thought the group should begin by reviewing existing information on the number of users on the river. Dave reminded the group that the number of users needs to be established so we can project use for the new license term. Dave wondered if we would be able to use information from the SCORP to estimate use.

Dave questioned the group as to whether it is necessary to separate users in any sort of recreational analysis. The group agreed that if another group were to conduct a use estimate for the Project, then it would be necessary to differentiate different types of uses on the LSR.

Tom questioned the group as to what would be each groups “preferred” flow for the LSR, not taking other Project uses into account (i.e., what would each group like to see if their respective uses were the only consideration). Malcolm replied that he would like to see more of a ‘run of the river’ flow regime with flows out of the lake based on flows into the lake with scheduled releases that averaged those flows over a 24 hour period for less fluctuation. Tom replied there will ultimately be a flow regime. Dave also noted the FERC will be using the current license as a baseline and they will not go back to pre-Project conditions in an environmental analysis.

MEETING NOTES

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

**SCDNR HEADQUARTERS
March 01, 2006**

final dka 03-22-06

Tom continued the exercise of identifying who uses the LSR, pointing out that he envisioned identifying who, what, where, and whens of recreational use on the LSR. Tom noted that once all of this information is identified, we can begin to diagram use and provide some flow recommendations to the operations group.

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MEETING NOTES

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

**SCDNR HEADQUARTERS
March 01, 2006**

final dka 03-22-06

SCE&G will regulate flows to suit the public. Tom E. replied the new license will allow SCE&G to operate under a certain regime. The group will look at all alternatives and decide on the best outcomes. Tom thinks the final plan will fall somewhere in the middle.

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The meeting adjourned with everyone agreeing to attempt to fill out the river user outline via e-mail before meeting again. The next meeting time will be determined after this process occurs.

IDENTIFIED USERS OF THE LOWER SALUDA RIVER

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 - people at access areas
 - rock people
 - educational groups and clubs
- tubers
- fishermen
 - bank
 - trout
 - food—people that actually fish to feed their families
 - bass and other
 - father and son type outings to learn to fish
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- nature lovers

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MEETING NOTES

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DOWNSTREAM FLOWS TECHNICAL WORKING COMMITTEE**

**SCDNR HEADQUARTERS
March 01, 2006**

final dka 03-22-06

ATTENDEES:

Name	Organization	Name	Organization
Tom Eppink	SCANA	Charlene Coleman	AW
Bill Marshall	SCDNR and LSSRAC	Malcolm Leaphart	TU
Patrick Moore	AR/SCCCL	Dave Anderson	Kleinschmidt Associates
Guy Jones	River Runner	Jennifer Summerlin	Kleinschmidt Associates
Karen Kustafik	Columbia Parks and Recreation		

HOMEWORK ITEMS:

- Charlene Coleman – send list of river users to group
- All – Review list of river users and begin to fill in “who, what, when, where, why”
- All – compile a working bibliography of existing studies related to the LSR
- Dave – scan and email creel surveys done on the LSR

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
March 01, 2006**

final dka 03-22-06

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 A. began the meeting by going over the tasks associated with the committee. Dave outlined the function of the group to include proposing recreational flows for the lower Saluda River and the effects of project operations on recreational use of the LSR. Tom E. questioned the group about what recreational issues exist on the LSR. Someone identified the coldwater trout fishery and the striper fishery. Dave asked if there were any conflicts between users on the LSR, noting that, in general, there are conflicts between boat and wading anglers. Malcolm replied that there are some problems with boats going to fast through “runs” the wading anglers are fishing, but it is not a major issue on the LSR.

Malcolm L. questioned the group as to what “recreational flows” means. Dave replied that he thinks it means flows conducive to certain activities, or optimal flows. Malcolm replied that their main concerns with the LSR are that project releases are not announced in advance and that recreating is often unsafe because of the extreme flow level changes; and, that TU advocates for the best flows to be set based on scientific studies for the fish, not for the fishermen or other recreationists. Tom E. believed the flow issues will be dealt with in the Safety RCG and in the Fish & Wildlife RCG.

Dave reviewed the plan for the TWC for the coming months. Dave thought the group should begin by reviewing existing information on the number of users on the river. Dave reminded the group that the number of users needs to be established so we can project use for the new license term. Dave wondered if we would be able to use information from the SCORP to estimate use.

Dave questioned the group as to whether it is necessary to separate users in any sort of recreational analysis. The group agreed that if another group were to conduct a use estimate for the Project, then it would be necessary to differentiate different types of uses on the LSR.

Tom questioned the group as to what would be each groups “preferred” flow for the LSR, not taking other Project uses into account (i.e., what would each group like to see if their respective uses were the only consideration). Malcolm replied that he would like to see more of a ‘run of the river’ flow regime with flows out of the lake based on flows into the lake with scheduled releases that averaged those flows over a 24 hour period for less fluctuation. Tom replied there will ultimately be a flow regime. Dave also noted the FERC will be using the current license as a baseline and they will not go back to pre-Project conditions in an environmental analysis.

MEETING NOTES

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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

ATTENDEES:

Name	Organization	Name	Organization
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		

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
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER
February 15, 2006**

final dka 03-17-06

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.

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.

Guy J. wondered if we could record the quality of the facility, specifically citing Gardendale as a facility that needs improvement. David H. noted this area was strictly supposed to be for launching canoes; Guy replied a different put-in (i.e., steps) would be better for canoe access. Dave A. remarked we need to focus on the big picture at the moment and individual sites will be discussed later.

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

MEETING NOTES

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

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amenities are available at these private facilities. Tony B. noted it would be nice to know the number of slips and boat launches, but not much beyond that. George D. asked for clarification for the meaning of “private,” noting there are public private facilities and then private facilities that you have to belong to an organization before using the facility. The group discussed this distinction and concluded it will be nice to know if the facility is open to the public, and make the distinction between those facilities and those that are not available unless you are a member of an organization. One classification scheme put facilities into either public, commercial, or private.

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.
3. Priority should be given to recreational proposals where multiple stakeholders offer significant participation.
4. Recreational facilities should appeal to a broad public.
5. Reasonable access for the disabled should be provided.

MEETING NOTES

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6. Recreational needs should be prioritized for the project.
7. The improvement or expansion of existing recreational facilities should be considered first.
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.

The group then discussed a few specifics of the solution principles. George D. wondered if we could shift some of the cost of the access sites to those people that use them. Randy M. pointed out that it would nice to identify potential partners through the process. There was also a brief discussion concerning demographic projections and how they relate to future recreational use. Lee B. noted we might be able to find projected boat sales data from the boating industry. Alan S. questioned Bill M. and Guy J. to see if they are comfortable with the process since they have focused interests on the Lower Saluda River. Both men agreed they are comfortable with the process.

MEETING NOTES

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Dave A. then introduced the standard process form that will guide the group throughout relicensing (the blank form is attached). Dave directed the group to approach the questions from a general sense to gauge whether the questions are sufficient for this project. Someone mentioned it would be nice to change “tailrace” to “Lower Saluda River” and “impoundment” and “reservoir” to “Lake Murray.”

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
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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

**Saluda Hydro Relicensing
Recreation Resource Conservation Group**

Meeting Agenda

February 15, 2006

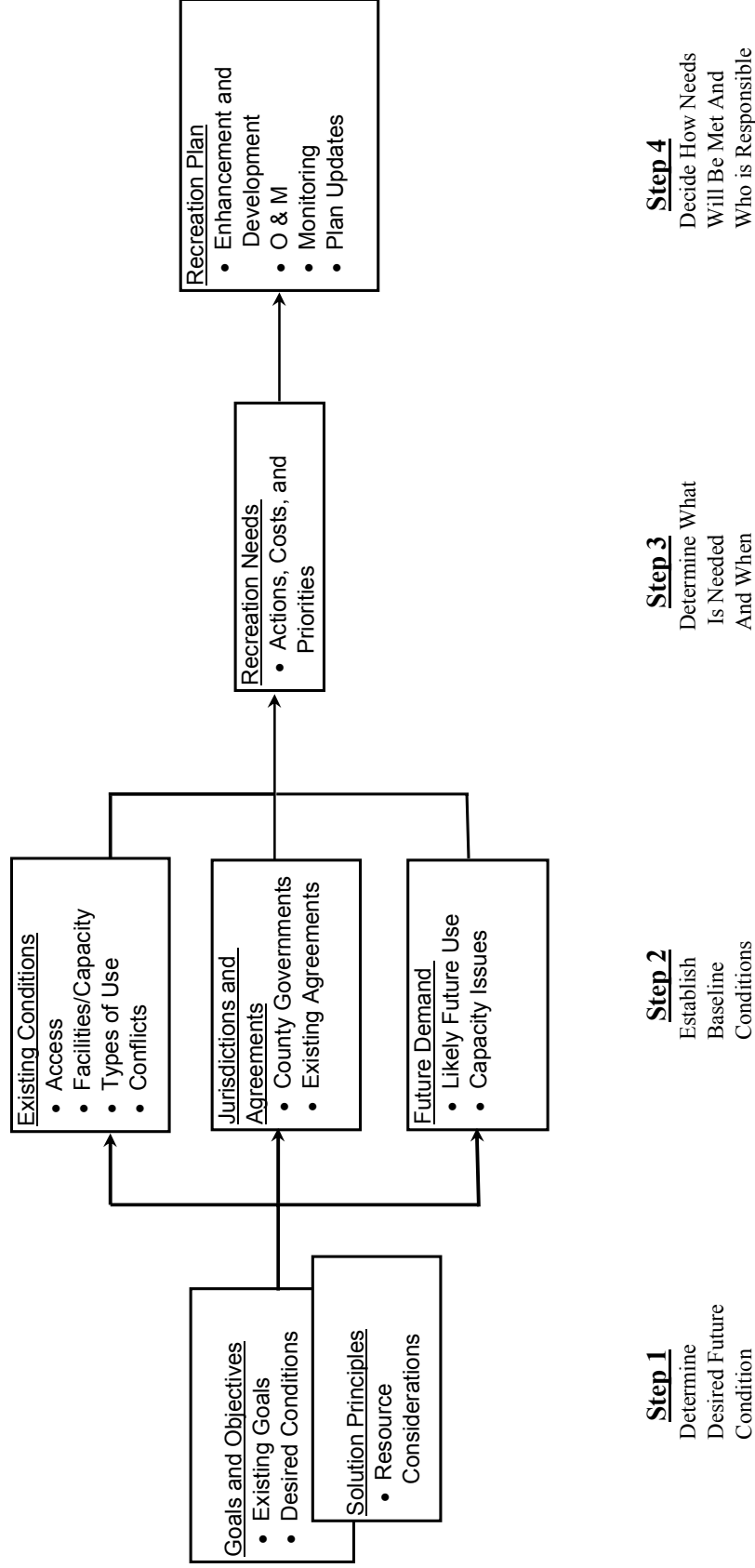
9:30 AM

Lake Murray Training Center

- **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



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?

MEETING NOTES

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SALUDA HYDRO PROJECT RELICENSING
RECREATION RESOURCE GROUP**

**LAKE MURRAY TRAINING CENTER
January 11, 2006**

final dka 02-22-06

ATTENDEES:

Name	Organization	Name	Organization
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

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

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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

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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
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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
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LSR	Both	Lake
public access/portage	scenic integrity	aquatic weeds – covered under lake and land management
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 - covered under water quality group	new state park in Lexington County
communication	fishing	expansion of facilities
recreation Flows/instream flows	non-boating access	conservation of land – management prescriptions identified in land use group and specifics for recreation will be developed in this group, will make recommendations
		paddling access
		large multi-lane facility
		lake level reliability – will be carried over between this group and the other group

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

**Saluda Hydro Relicensing
Recreation Resource Conservation Group**

Meeting Agenda

January 11, 2005

9:00 AM

Lake Murray Training Center

- **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



MEETING NOTES

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

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

final acg 1-25-06

ATTENDEES:

Alison Guth, Kleinschmidt Associates
Randy Mahan, SCANA Services, Inc.
David Hancock, SCE&G
Van Hoffman, SCANA Services, Inc.
Tim Vinson, SCDNR
Steve Bell, Lake Watch
Gerrit Jobsis, American Rivers, CCL
Dick Christie, SCDNR
Tony Bebber, SCPRT

Dave Anderson, Kleinschmidt Associates
Tommy Boozer, SCE&G
George Duke, LMHC
Jim Devereaux, SCE&G
Bill Marshall, SCDNR
Alan Axson, Columbia Fire
Michael Waddell, Trout Unlimited
Irvin Pitts, SCPRT
Joy Downs, LMA

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**

final acg 1-25-06

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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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**

final acg 1-25-06

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.

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 12th 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
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**SCE&G Training Center
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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:

MEETING NOTES

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

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

final acg 1-25-06

**Saluda Hydro Relicensing
Recreation Resource Conservation Group**

Meeting Agenda

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

- **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