

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
LAKE AND LAND MANAGEMENT TWC**

**SCE&G Training Center
April 25, 2006**

Final ACG 5-19-06

ATTENDEES:

Alan Stuart, Kleinschmidt Associates
Alison Guth, Kleinschmidt Associates
Tommy Boozer, SCE&G
David Hancock, SCE&G
Ron Ahle, SCDNR
Steve Bell, LW

Dick Christie, SCDNR
Joy Downs, LMA
Bill Argentieri, SCE&G
Van Hoffman, SCE&G
Tony Bebber, SCPRT

DATE: April 25, 2006

HOMEWORK ITEMS:

Due for next meeting:

- Ron Ahle- to prepare a strawman of guidelines for bank stabilization based on Duke criteria
- Tommy and David – To bring information on USACE bank stabilization criteria for group discussion
- Steve Bell - To bring information on TVA bank stabilization criteria for group discussion

AGENDA TOPICS FOR NEXT MEETING:

- **9:30 to 9:45** Review of Mission Statement and Review of Responsibilities of the TWC – *Alan Stuart*
- **9:45 to 10:05** Review of Pending and Completed Priority Issues and Studies – *Alan Stuart*
- **10:05 to 10:35** Discussion on Potential SCE&G Land Transaction – *Van Hoffman*
- **10:35 to 10:45** **Break**

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- **10:45 to 11:00**
Bank Discussion of Homework Items – Review of USACE and TVA Stabilization Guidelines – *Tommy Boozer and Steve Bell*
 - **11:00 to 11:45** Discussion of Homework Items – Review Strawman on Bank Stabilization Guidelines based on Duke’s Guidelines – *Ron Ahle and Group*
 - **11:45 to 12:15** **Lunch**
 - **12:15 to 1:00** Continued Discussion on Bank Stabilization Guidelines Strawman – *Ron Ahle and Group*
 - **1:00 to 1:45** Discussions on Excavations
 - **1:45 to 2:00** Develop List of Homework Assignments, Agenda and Date for Next Meeting
- Adjourn

DATE OF NEXT MEETING: **May 8, 2006 at 9:30 a.m.**
Located at the Lake Murray Training Center

INTRODUCTIONS AND DISCUSSION

Alan Stuart opened the meeting and noted that the first order of business would be to review the homework assignments from the March 28th TWC meeting. As homework from the last meeting, Ron Ahle presented a strawman of guidelines on limited brushing around Lake Murray to the group for review. Upon evaluation of the document, Tommy Boozer noted that the strawman document was very similar to the document on limited brushing that SCE&G had sent to the FERC with the addition of a few species.

The group continued an interactive review of the document and made several changes. Ron Ahle explained that limited brushing is effective in eliminating the undesirable and invasive species from the shoreline. Tommy Boozer noted that their goal was to achieve a document that would be consistent and that allowed for violations to be dealt with. Ron explained that the document does not allow the individual to clear any vegetation on the list of native species, he continued to note that the native species would begin to take the place of the invasive species once they were

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removed. David Hancock also noted that when a limited brushing permit is received it serves as an opportunity to educate the landowner.

Joy Downs then asked SCE&G if a limited brushing permit would need to be obtained if a landowner owned down to the 360' and wanted to clear weeds out of rip-rap that was placed there. Tommy noted that the weeds could be cleared out of any rip-rap without the need for a limited brushing permit. Dick Christie explained, that from a DNR perspective, a key value of the document was the educational component. He explained that the back property owner did not have the immediate right to go down to the 360' and apply herbicide. He noted that those activities needed to be first authorized by SCE&G.

It was noted that if issues arose in the future that this document could be amended to deal with those issues during a SMP review period. The group agreed that the limited brushing strawman contained the general criteria that was needed and any minor issues would be addressed when it was moved into the overall SMP.

After agreeing to the limited brushing guidelines (document with group incorporated changes can be viewed below), the group began to discuss the Sedimentation and Erosion Control Plan. SCE&G gave a brief explanation of the background of the plan and Tommy noted that the areas of concern were chosen in discussions with the DNR and the USFWS.

Steve asked the group what SCE&G's responsibility in terms of erosion was. Tommy explained that, at this point, the FERC has only required SCE&G to identify the areas of concern. He noted that they have also agreed to evaluate the public recreation sites and to stabilize them as they were developed.

Ron noted that LIDAR could be very useful in the identification of eroded areas. He explained that it may be helpful to develop a map of eroded areas using this tool. Tommy noted that he would look into this.

After lunch, the group decided to review the criteria for the identification of eroded areas. Through discussions the group decided that anything 50 feet in length and greater will be identified for mapping purposes, anything less than that would be dealt with on a case to case basis. Ron noted that for mapping purposes, in addition to looking for areas with a length of 50 feet and greater, that the group should look for areas with an 80 to 90 percent slope that is 5 feet or greater in elevation. Tommy noted that they would begin to work on developing the maps.

The group then began discussions on bank stabilization. Along with discussions on rip-rap, and bioengineering, David explained that SCE&G has very strict criteria about where sea walls can and

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cannot be placed. Tommy also briefly described an option for bank stabilization that included the placement of small blocks along the shoreline.

Tommy noted that they typically like to give individuals options for bank stabilization such as block or rip rap, and noted that he has only seen bioengineering successful in the back of coves. Ron agreed and noted that bioengineering needs a certain degree of protection to be beneficial.

The group began to discuss that some eroding areas may need to be sloped in order to perform proper stabilization. Dick noted that he does not believe that the DNR would be against sloping an area if that was what was needed in order to stabilize the site. He explained that if there is a 4 or 5 foot bluff then it will most likely have to be sloped. David then asked what SCE&G should do if they needed to establish a slope on a buffer zone. He continued to ask if they should establish it by taking out a few trees or from the lake-ward side down. Ron noted that it would need to be determined on a case to case basis. Dick also explained that if there is a 50 foot wide buffer zone and the first 10 feet needs to be used for sloping, that it may not have that big of an impact on the buffer.

Ron explained that from his involvement in the Catawba-Wateree relicensings he had the guidelines for bank stabilization developed for those projects. He explained that it consisted of a booklet of instructions for the back property owner on what type of erosion control was allowed and contained recommendations for stabilization. Alan asked if Ron would develop a strawman for Lake Murray from the criteria in Duke's plan and the group agreed. Tommy also noted that he would like to see the criteria for the Corp and TVA lakes. Tommy was assigned the homework of researching the Corp guidelines, while Steve Bell noted that he would research TVA criteria. David also added that he would be meeting with the other utilities at a conference the next week and he would confer with them as to what types of guidelines for stabilization they imposed.

Alan noted that at the next meeting they would continue to discuss erosion and sedimentation in the morning and discuss excavations in the afternoon. Van Hoffman noted that he would also like a few minutes on the agenda to discuss a land transaction that was being discussed.

The group concluded the meeting and noted that the next meeting would occur on May 8th at 9:30.

Limited Brushing Criteria with group edits attached below:

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**SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES
ENVIRONMENTAL PROGRAMS OFFICE**

MEMORANDUM

To: Lake & Land Management Technical Committee
From: Ron Ahle
Date: 4-25-2006 (Revised 4/25/06)
Subject: Limited Brushing

The unauthorized clearing of vegetation below the 360 elevation is not allowed on the shoreline of Lake Murray. **However, in some cases where the back property owner owns down to the 360 elevation, limited brushing will be allowed when permission is granted by SCE&G Lake Management after a site visit with the applicant.** Once limited brushing is complete the applicant can maintain the site in said condition. SCE&G permits docks to minimize impacts to vegetation below elevation 360 contour line. Limited brushing will allow back property owners to remove exotic and invasive vegetation that occurs adjacent to their property.

In general, certain critical vegetation cannot be removed when limited brushing is permitted. Critical vegetation such as buttonbush, willows, oaks and others provide well documented benefits such as bank stabilization, water quality functions, habitat, shade in near shore environments, and *terrestrial input for aquatic ecosystems (May redefine later to a more common language or in a definition section* . For the purposes of a limited brushing permit, the following vegetation can not be cleared:

Buttonbush	Sycamore
Tag alder	River birch
Water Hickory	Green ash
Black gum	Cottonwood
Black willow	Oaks
Tulip poplar	Hardwood species
Persimmon	

Plants that can be cleared through limited brushing are generally undesirable species that are invasive and in some cases, exotic. Included in this group are vines such as green briars, Japanese honey suckle, poison ivy, poison oak, wisteria, and kudzu, shrubs such as black berry and privet,

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and trees such as mimosa and Bradford Pear. Trees that are dead and create a hazard may also be removed.

Some selective clearing of native, non-invasive species will be allowed through limited brushing. Generally, this will include certain softwood species that are less than 3 inches diameter at breast height (dbh).

Species that could be cleared in this category include:

Sweetgum
Red cedar
Longleaf pine

Red maple
Loblolly pine
Virginia pine

Any vegetation that doesn't meet the above listed criteria, but the back property owner would still like to remove will have to be addressed individually with SCE&G Lake Management Staff. It is likely that any tree removal that is not consistent with limited brushing, as outlined above, will have to be mitigated in accordance with the riparian buffer zone management plan and may include revocation of the property owner's dock permit.

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