## SOUTH CAROLINA ELECTRIC & GAS COMPANY SALUDA HYDRO PROJECT RELICENSING FRESHWATER MUSSEL/BENTHIC MACROINVERTEBRATE TECHNICAL WORKING COMMITTEE

## SCE&G Training Center March 8, 2006

Final csb 04-14--06

#### **ATTENDEES:**

Bill Argentieri, SCE&G Shane Boring, Kleinschmidt Associates Jeni Summerlin, Kleinschmidt Associates Randy Mahan, SCANA Services Gerrit Jobsis, SCCCL & Am. Rivers Alan Stuart, Kleinschmidt Associates Tom Eppink, SCANA Services Jim Glover, SCDHEC Amanda Hill, USFWS

#### **ACTION ITEMS:**

- Contact John Alderman regarding mussel habitat reconnaissance survey *Shane Boring*
- Provide info regarding impacts of dissolved oxygen on freshwater mussels *Gerrit Jobsis*
- Provide information on temperature impacts on mussels

Shane Boring

 Send out LSR macroinvertebrate survey reports (prepared by Shealy Environmental) to all team members

Shane Boring

- Provide copy of 1986 SCDHEC macroinvertebrate report for LSR *Jim Glover*
- Provide raw data on tributaries that were sampled along the LSR by DHEC *Jim Glover*
- Distribute mussel survey data provided by SCDNR (J. Price) to group for review *Shane Boring*

**DATE OF NEXT MEETING:** May 3, 2006 at 9:00 am

Location: SCE&G Offices at Carolina Research Park 111 Research Drive Columbia, SC 29203



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## **MEETING NOTES:**

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

Shane Boring opened the meeting at 9:00 AM. Shane reminded the group that, at the February 22<sup>nd</sup> Fish and Wildlife RCG meeting, the Technical Working Committees (TWCs) were formed and study requests were assigned to the TWCs<sup>1</sup>. He added that the purpose of today's meeting would be to further discuss the study requests assigned to the Freshwater Mussels/Benthic Macroinvertebrates TWC and to begin evaluating the need for studies, available data, data needs (gaps), study objectives and scope, and to assign tasks toward addressing each study request.

#### **Request for Mussel Survey**

Amanda Hill noted the USFWS requests a mussel survey in the Lower Saluda River (LSR) and Lake Murray. She explained that, if mussels are found in the area, they would eventually like to have a map that illustrates species locality, richness and abundance.

The group then discussed the status of existing mussel survey data in the Santee Basin and in SC in general. Specifically, Shane noted that he had spoken with Jennifer Price at SCDNR and that she had provided a database of known mussel surveys conducted in SC waters in recent years. He added that, according to Jennifer, this data is fairly comprehensive and consolidates information from a number of sources including John Alderman (Alderman Environmental), Art Bogan (NC Museum of Natural History), Tim Savidge (Catena Group), and Gene Keferl (Coastal Georgia Comm. College). Shane added that, based on discussions with Jennifer and her review of the data, he was not aware of any surveys for Lake Murray or the LSR. Gerrit Jobsis requested that the mussel survey data from SCDNR be shared with the group for review. Shane agreed to distribute the data to group members via e-mail.

Amanda suggested contacting John Alderman to discuss the potential for conducting a reconnaissance mussel survey in Lake Murray and the LSR. The group agreed, and Shane was tasked with contacting John. Shane noted that he would provide John with SCE&G's fly-over data for the LSR to help in determining sampling locations.

The group then briefly discussed habitat types that would likely need to be sampled as part of a mussel survey. Amanda Hill noted the importance of sampling tributaries, around islands, selected

<sup>&</sup>lt;sup>1</sup> See February 22<sup>nd</sup>, 2006, Fish and Wildlife RCG meeting notes for study request summaries and assignments.



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coves, and in any unique habitats in the lake. For the LSR, Gerrit and Amanda noted the importance of surveying the confluence and in pool, shoal, and bank habitats. It was noted that sampling locations could be further refined through discussions with John Alderman.

# Request for Benthic Macroinvertebrate Study

The group discussed the status of existing data on benthic macroinvertebrate fauna in the project area. Specifically, Shane noted that SCE&G contracted Shealy Environmental to conduct macroinvertebrate surveys of the LSR. Bill Argentieri added that Shealy conducted studies in 2001, 2003, 2004 and 2005 and that study reports are available in electronic format. Shane agreed to distribute copies of the reports to group members via e-mail. Jim Glover added that, while the artificial substrate sampling conducted by Shealy undoubtedly provides valuable information, it may be necessary to add a multi-habitat sampling component to provide a complete picture of invertebrate fauna.

Jim Glover noted that SCDHEC conducted a macroinvertebrate study in the LSR in 1986. He agreed to attempt to find a copy of this report and distribute to the group. Jim also mentioned that SCDHEC recently conducted multi-habitat sampling of several fairly large tributaries of the LSR. He explained that they have raw data for this study and would distribute the information. Shane enquired as to whether SCDHEC has conducted any multi-habitat sampling in Lake Murray tributaries. Jim noted that most of their sampling is in tributaries above the influence of the reservoir and thus would be of limited value.

Shane noted that he had spoken with staff from the Columbia USGS office and that they may have macroinvertebrate data for the LSR. Jim Glover noted that he understands this data to be from the headwaters (wadeable) areas of tributaries, and thus it is likely to be of limited value in assessing the LSR mainstem.

The group briefly discussed the need for a benthic macroinvertebrate study in Lake Murray. Jim Glover and others noted that the methods used for their multi-habitat sampling were developed for streams and may not be applicable to the reservoir. Gerrit noted that it would be beneficial to discuss this issue with Ron Ahle, as Ron has some knowledge of methods developed specifically for reservoir environments.

The group agreed that once the existing data has been distributed for review, the TWC should meet again to determine the need for additional studies. Jim noted that, if field studies are needed, they should be conducted in the summer to late winter. He added that collecting within this time frame



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will establish a qualitative comparison of species across seasons. The group agreed that the macroinvertebrate community should be evaluated under normal operating conditions.

## **Date/Location of Next Meeting**

The group agreed to have the next TWC meeting on May 3, 2006 at the Research Park at 9:00 am. Shane noted that an effort would be made to hold several TWC meetings on a single day to cut down on travel for agency staff. He added that he will issue an electronic meeting invitation to confirm the date with individual members and provide directions to the meeting site. The meeting adjourned at approximately 10:20 am.

