SOUTH CAROLINA ELECTRIC & GAS COMPANY SALUDA HYDRO PROJECT RELICENSING TERRESTRIAL RESOURCE TECHNICAL WORKING COMMITTEE

SCE&G Offices at Carolina Research Park July 26, 2006

Final jms 7/26/06

ATTENDEES:

Bill Argentieri, SCE&G Tom Eppink, SCANA Services Ron Ahle, SCDNR Amanda Hill, USFWS Bob Seibels, Riverbanks Zoo Alan Stuart, Kleinschmidt Associates Shane Boring, Kleinschmidt Associates Alison Guth, Kleinschmidt Associates Bob Perry, SCDNR

ACTION ITEMS:

- Sort the bird data by family
- Shane Boring
- Add brown pelican to the bird data
- Shane Boring
- Contact Dick Christie about the use of high resolution photography by using GIS for the shallow water fish habitat assessment

Ron Ahle

• <u>Develop a winter waterfowl study plan</u> Shane Boring

DATE OF NEXT MEETING: TBA



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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 welcomed committee members and noted that the focus of the meeting would be to discuss: (1) the species list developed from existing data, (2) development of framework for winter waterfowl survey study plan, and (3) the next meeting date (including need for an RCG meeting).

Review of Species List Developed From Existing Data

Shane distributed the species list that was developed from the 2005 and 2006 bird data and noted that all sources were cited. He explained that the list from Dreher Island State Park was recently updated. It was suggested that the list should be sorted out by family. Shane reminded the group that committee members agreed in the previous meeting that this comprehensive species list would satisfy the migratory bird data study request. He noted that this list will be part of exhibit E in the final report for the license application. Ron Ahle asked if the wadding bird rookeries would be included as well. Shane explained that the two known rookeries are currently being examined in the wood stork survey and will be described in the license application. It was noted that the brown pelican should be added to the list.

Development of Framework for Winter Waterfowl Survey Study Plan

Shane directed attention to the Waterfowl Survey Study Plan and Alan Stuart noted that this is a standard aerial survey protocol. There was some discussion as to whether the study would be conducted over a three year period. Alan asked how a three year survey would fit in the relicensing timeframe. Bob Perry noted that it would continue to build the waterfowl historical database and it would also give us information on habitat use. Ron Ahle noted that waterfowl hunting and observation are two recreational attributes of the project that would provide a nexus for this survey. He added that by conducting these surveys over a longer period, it may answer the question of whether or not the recreational needs of the project are being met in these areas. Through further discussion, the group agreed that the study would be conducted over a three year period, with an interim report being issued after the two year timeframe. It was also agreed that the survey would be conducted up to the project boundary, which should include wood stork habitat. Shane noted that this study may explain the rapid decrease in waterfowl population in recent years.



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Date/Location of Next Meeting

Before the meeting closed, there was a brief discussion about the request for a comprehensive assessment of Lake Murray, and a proposed framework for a study plan, developed by SCDNR and USFWS, was distributed (Attachment A). To gain a better understanding of the available habitat around the project boundary, Ron mentioned the use of high resolution photography, by using GIS. He added that this method would allow for shallow water habitats to be examined. Amanda noted that this would satisfy her interest in regards to this topic, however Ron should check with Dick Christie. Ron noted that he would check with Dick before sending Shane criteria for GIS mapping.

The group agreed to have the next meeting in early 2007. Shane noted that he would issue an electronic meeting invitation to confirm a date with individual members.



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Attachment A

Proposed Framework for Addressing the Request for GIS-Based Comprehensive Habitat Assessment on Lake Murray (Developed by SCDNR and USFWS)



Study Plan Name: Shallow Water Fish Habitat Assessment

1) Study Objectives

a. Identify and map substrate (sand, gravel, cobble...), cover (woody debris, rip-rap and piers) and aquatic vegetation in the shallow water (<5 feet) areas of the reservoir.</p>

 Identify and map substrate (sand, gravel, cobble...), cover (woody debris, rip-rap and piers) and aquatic vegetation in the major tributaries under project influence.

c. Determine the stage/area relationship of these habitat types between the 354-358 pool elevations in one-foot increments.

2. Basis

The FERC licensing process requires an assessment of any potential impacts to fish and wildlife resources by the project and its operation (18CFR4.51).

3. Geographic and Temporal Scope

The availability and abundance of aquatic habitat is often correlated with stage. The availability emergent shoreline vegetation, woody debris, and man-made structures associated with the shoreline usually peaks at full pool and declines as water levels are lowered. The establishment of a stage-habitat relationship is important in evaluating the effects of operations and guide curves on habitat.

This would essentially be a mapping exercise, coupled with some field verifications, to determine the relationships between habitat and depth.

Elevation and slope associated with the shallow water habitats listed above will be determined in each project reservoir. Sampling transects (minimum of five where available) will be established in each habitat type based on the percentage of shoreline that a particular habitat type contributes to the total shoreline mileage. An Abney level and stadia rod will be used to measure the range in elevation and slope of the habitats during significant drawdown periods. Data from each transect will be summarized and mean ranges in elevation and slope will be calculated for the habitat types in each reservoir.

Data collected will be used in conjunction with aerial photography data (and/or other appropriate supporting information) to expand the areal estimates of habitat at various one-foot changes in reservoir water levels.

Use of Study Results

Shoreline aquatic habitat maps will be used to evaluate current project operations and changes proposed as result of hydro relicensing on the aquatic community of each impoundment. In addition, this information may be useful for identifying ways to enhance reservoir fish habitat.