

## **Saluda Hydroelectric Project (FERC No. 516)**

### **Study Plan: Lake Murray Wintering Waterfowl Surveys**

Terrestrial Resources Technical Working Committee  
August 24, 2006

#### **I. Study Objective**

The objective of this research will be to develop an aerial survey database describing the abundance and distribution of wintering waterfowl (ducks, geese, swans, and coots) using Lake Murray, South Carolina.

#### **II. Geographic and Temporal Scope**

This study will focus on all areas of Lake Murray reservoir and will include six (6) aerial surveys over a period of four (4) months to be executed as follows: 1 in late November, 2 in December, 2 in January, and 1 in early February. If inclement weather or aircraft unavailability precludes the completion of flights during the study period, flights may be added to the end of the survey period, at the discretion of the Terrestrial Resource Technical Working Committee (TWC).

#### **III. Methodology**

Aerial surveys will be conducted from fixed-wing aircraft by trained observers from the University of Georgia's Savannah River Ecology Laboratory (SREL) and/or Kleinschmidt Associates. Observers will reference the species and numbers of all waterfowl (ducks, geese, swans, and coots) observed during aerial surveys, as well as any occurrences of the federally-endangered wood stork (*Mycteria americana*). Sightings will be map-referenced at the time of occurrence. Other data to be included with each aerial survey are: date, beginning and ending times of the survey, local weather conditions (including temperature, wind speed, extent of wetland icing in winter, etc.), and disturbance-related activities taking place during the aerial survey. Actual duration of these aerial surveys will be approximately 2.5 hours. Aerial surveys will be conducted at a safe airspeed given the prevailing weather conditions and from a height consistent with Federal Aviation Administration (FAA) regulations. The entire lake pool will be surveyed for waterfowl use.

Data summaries will be performed using the Statistical Analysis System (SAS Institute, Inc.). Summaries will include location graphics of waterfowl numbers, as well as descriptions of temporal changes in waterfowl distributions (species- and/or subfamily-specific).

#### **IV. Schedule and Required Conditions**

Waterfowl surveys will be conducted during the winter months (generally late November through early February) of 2006-2007, 2007-2008, and 2008-2009 (3 total overwintering seasons). As previously noted, six (6) aerial surveys will likely be conducted over a period of four (4) months to be executed as follows: 1 in late November, 2 in December, 2 in January, and 1 in early February. If inclement weather or aircraft unavailability precludes the completion of

flights during the study period, flights may be added to the end of the survey period, at the discretion of the TWC.

A brief e-mail summarizing survey observations will be distributed to the Terrestrial Resources TWC following each survey. In addition, an annual report summarizing the field season will be issued no later than April 1 following each study season. A more detailed report summarizing all aspects of the study to date will be prepared following the second season (2007-2008) for inclusion in SCE&G's Application for New License, which is slated for submission to the FERC in 2008.

Study methodology, timing, and duration may be adjusted based on consultation with the resource agencies and interested stakeholders. All data collected will be provided in electronic format to agencies and interested stakeholders.

#### V. Use of Study Results

Study results will be used as an information resource during discussion of relicensing issues with the SCDNR, USFWS, Wildlife and Fisheries RCG, Terrestrial Resources TWC, and other relicensing stakeholders.

#### VI. Study Participants

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