

MONTICELLO RESERVOIR AND PARR RESERVOIR WATERFOWL SURVEY STUDY PLAN

**PARR HYDROELECTRIC PROJECT
(FERC No. 1894)**

Prepared for:

**South Carolina Electric & Gas Company
Cayce, South Carolina**

Prepared by:

Kleinschmidt

Lexington, South Carolina
www.KleinschmidtUSA.com

January 2014

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SOUTH CAROLINA ELECTRIC & GAS COMPANY

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	STUDY OBJECTIVE.....	2
3.0	GEOGRAPHIC AND TEMPORAL SCOPE.....	2
4.0	COLLECTION METHODS AND ANALYSIS.....	4
5.0	SCHEDULE.....	5
6.0	USE OF STUDY RESULTS	5

LIST OF TABLES

FIGURE 1	AERIAL VIEW OF SURVEY AREAS	3
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1.0 INTRODUCTION

South Carolina Electric & Gas Company (SCE&G) is the Licensee of the Parr Fairfield Hydroelectric Project (FERC No. 1894) (Project). The Project consists of the Parr Hydro Development and the Fairfield Pumped Storage Development. Both developments are located along the Broad River in Fairfield and Newberry Counties, South Carolina.

The Project is currently involved in a relicensing process which involves cooperation and collaboration between SCE&G as licensee and a variety of stakeholders including state and federal resource agencies, state and local government, non-governmental organizations (NGO), and interested individuals. The collaboration and cooperation is essential to the identification of and treatment of operational, economic, and environmental issues associated with a new operating license for the Project.

In preparation for relicensing, SCE&G formed a Fish and Wildlife and Water Quality Resource Conservation Group (RCG) which is comprised of interested stakeholders who are working with SCE&G to identify potential issues, make biological study recommendations, and provide technical and experience-based input related to wildlife resources in the Project area. During issues scoping, the RCG identified the need for a waterfowl survey of Project waters to better understand waterfowl utilization of project waters. Further, this information will be useful in evaluating potential project effects or water level fluctuations on overwintering waterfowl utilizing Parr and Monticello reservoirs.

2.0 STUDY OBJECTIVE

The objective of this study will be to evaluate the abundance and distribution of wintering waterfowl (ducks, geese, swans, and coots) using Parr and Monticello reservoirs, South Carolina.

3.0 GEOGRAPHIC AND TEMPORAL SCOPE

This study will focus on all areas of Parr and Monticello reservoirs and will include nine (9) aerial surveys over a period of five (5) months to be executed as follows: 1 in late November, 2 in December, 2 in January, and 2 in February, and 2 in March. Should inclement weather or aircraft unavailability preclude completion of flights during the study period, flights may be added to the end of the survey period, at the discretion of the RCG.

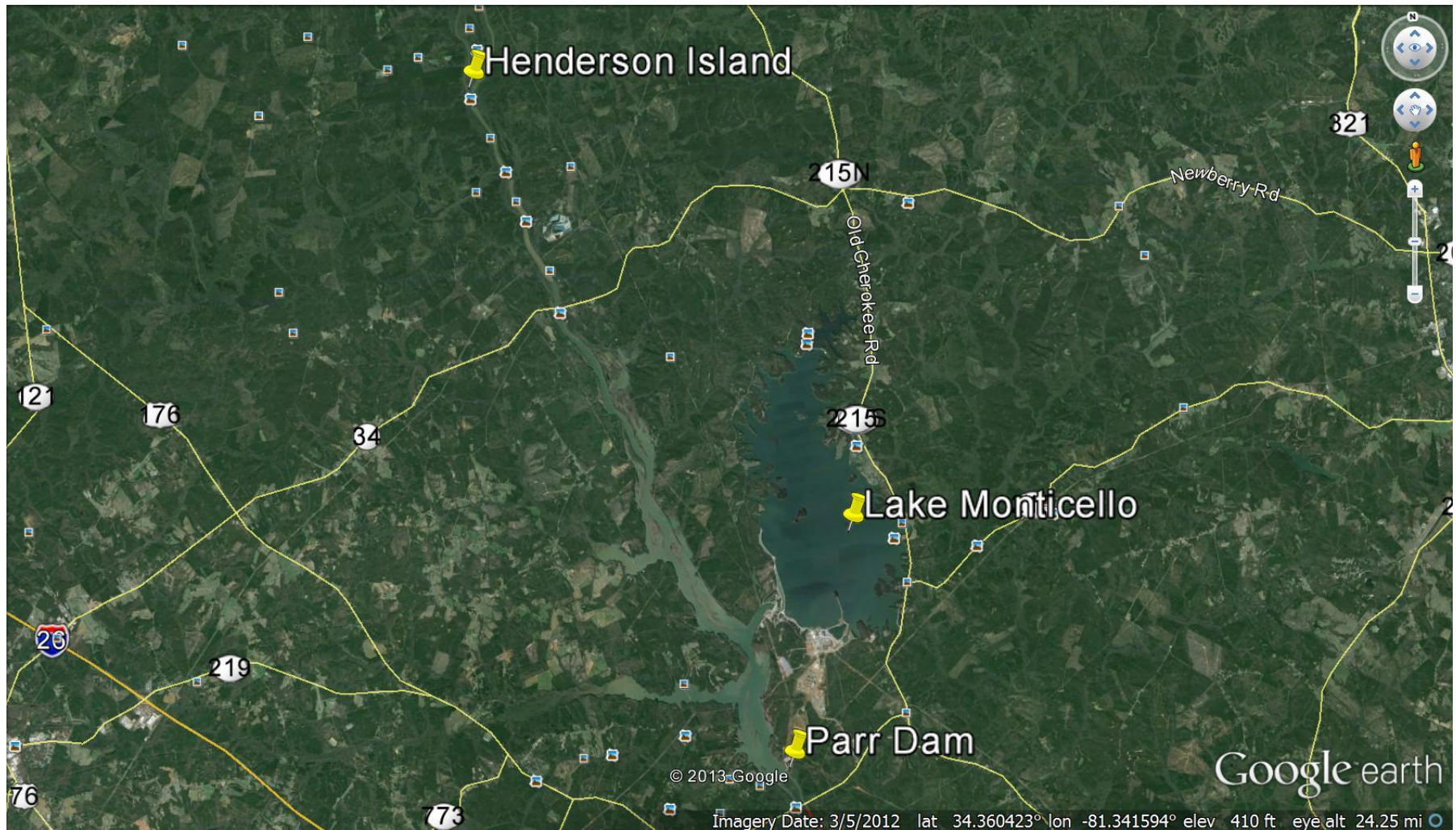


FIGURE 1 AERIAL VIEW OF SURVEY AREAS

4.0 COLLECTION METHODS AND ANALYSIS

Aerial surveys will be conducted from fixed-wing aircraft by qualified waterfowl observers. Observers will identify the species and estimate numbers of all waterfowl (ducks, geese, swans, and coots) observed during aerial surveys. Sightings will be map-referenced at the time of occurrence with additional data collected during each aerial survey including 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 each aerial survey 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. Both reservoirs, in their entirety, will be surveyed for waterfowl use. Specifically with respect to Parr Reservoir, aerial surveys will be conducted from Parr Shoals Dam to the base of Henderson Island and will include a portion of the Enoree River and Broad River Waterfowl areas.

Data will be summarized in both graphical and tabular format. Summaries will include location graphics of waterfowl numbers, as well as tabular summaries and descriptions of temporal changes in waterfowl distributions (species- and/or subfamily-specific). If available and deemed applicable by the RCG, South Carolina Department of Natural Resources hunting use data from the Enoree and Broad River Waterfowl areas, as well as use data from the Recreation Use and Needs Study, may be incorporated into study reporting. Finally, any waterfowl survey data collected by SCDNR for the study area may also be incorporated in the study reporting if deemed applicable in consultation with the RCG.

Notification – the security organization at the Virgil C. Summer Nuclear Station will be notified prior to each aerial survey of Monticello Reservoir (at least a 24 hour notice is preferred).

5.0 SCHEDULE

Waterfowl surveys will be conducted during the winter months (generally late November through mid March) of 2015-2016, 2016-2017, thus spanning two complete overwintering seasons. As previously noted, nine (9) aerial surveys will likely be conducted over a period of five (5) months to be executed as follows: 1 in late November, 2 in December, 2 in January, 2 in February, and 2 in March. Should inclement weather or aircraft unavailability preclude the completion of flights during the study period, flights may be added to the end of the survey period, at the discretion of the RCG.

A brief e-mail, summarizing survey observations, will be distributed to the RCG 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 (2016-2017) for inclusion in SCE&G's Application for New License (Application). The Application is slated for submission to the FERC in 2018.

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

6.0 USE OF STUDY RESULTS

Study results will be used as an information resource during discussion of relicensing issues and developing potential Protection, Mitigation and Enhancement measures with the South Carolina Department of Natural Resources, USFWS, and other relicensing stakeholders within the RCG.