

# **PARR HYDROELECTRIC PROJECT**

**(FERC No. 1894)**

## **RARE, THREATENED AND ENDANGERED SPECIES STUDY PLAN**

*Prepared for:*

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

*Prepared by:*

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October 2013

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## **1.0 INTRODUCTION**

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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 (Figure 1).

The Project is currently involved in a relicensing process which involves cooperation and collaboration between SCE&G as the licensee and a variety of stakeholders including state and federal resource agencies, state and local government, non-governmental organizations (NGOs), and interested individuals. Collaboration and cooperation of stakeholders is essential to the identification of and treatment of operational, economic, and environmental issues associated with a new operating license for the Project. SCE&G has established several Technical Working Committees (TWCs), including members from among the interested stakeholders, with the objective of achieving consensus regarding the identification and proper treatment of these resource issues in the context of a new license.

In preparation for relicensing, SCE&G formed a Rare, Threatened and Endangered Species Technical Working Committee (“RT&E TWC” or “TWC”), 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 rare, threatened and endangered (RT&E) species potentially residing in the Project area. SCE&G is planning to conduct a literature-based study to compile existing information on federally and state listed RT&E species in the immediate project area. SCE&G will use this information in developing their license application for Federal Energy Regulatory Commission (FERC).

## **2.0 STUDY OBJECTIVES**

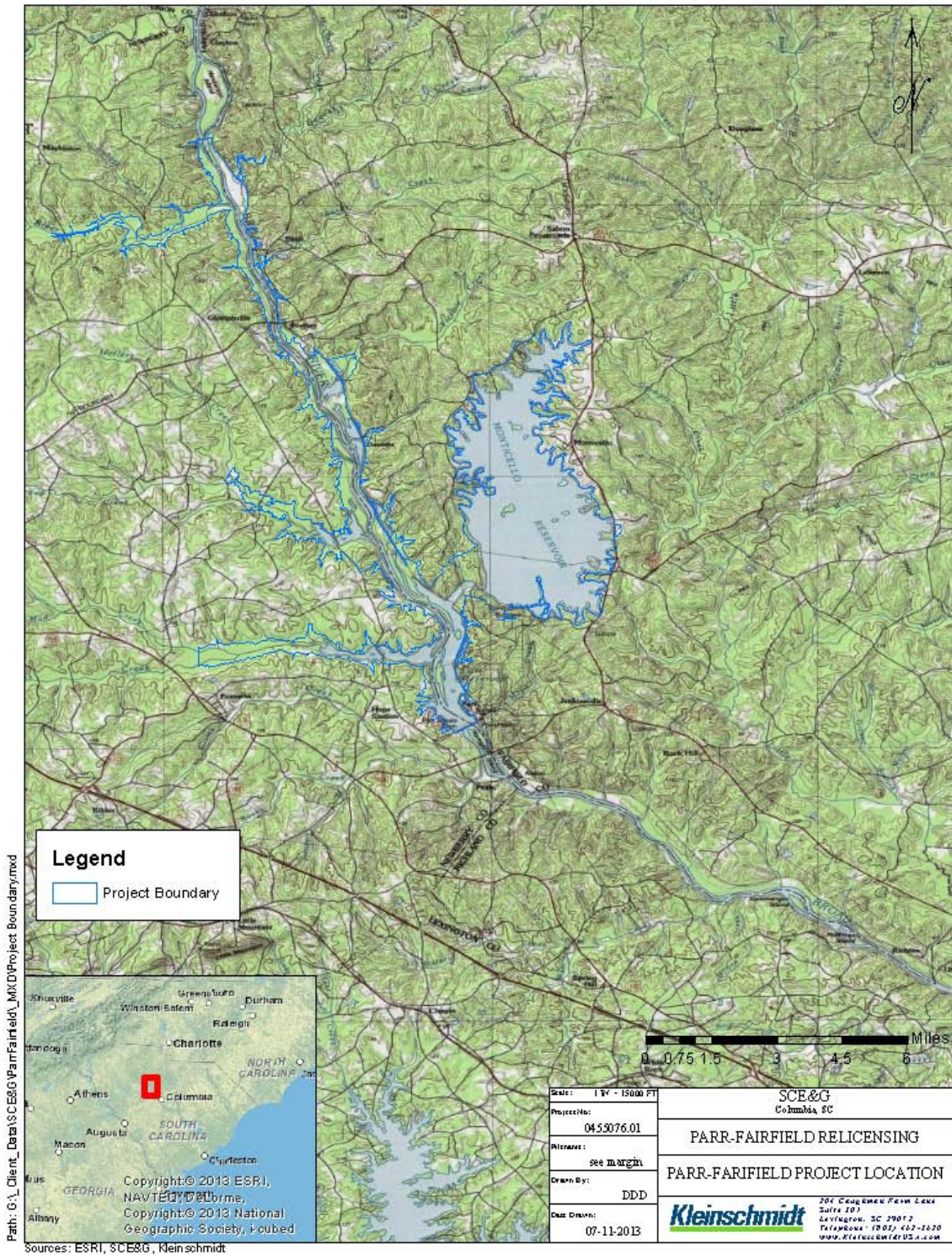
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The objective of this study is to characterize the present status of RT&E species at the Parr Fairfield Hydroelectric Project by providing information regarding the availability of RT&E habitat and characterize the known status of RT&E species within the Project boundary and Project vicinity. The presence or absence of select species will be verified through targeted field studies, including the Rocky Shoals Spider Lily Study, the Spiny Crayfish Study, and the Monticello Mussel Study.

## **3.0 GEOGRAPHIC AND TEMPORAL SCOPE**

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This study will focus on all areas within the FERC Project boundary, including Parr and Monticello reservoirs, the immediate vicinity of the Project in Fairfield and Newberry counties, and the area downstream of Parr Shoals Dam extending to and including Frost Shoals in Richland County. RT&E species that are deemed as potentially occurring within the Project Area and from Parr Shoals Dam extending to and including Frost Shoals, near Boatwright Island, along with the known presences of available RT&E habitat, will be evaluated. As this study is a desktop exercise, no field reconnaissance will be implemented. The study is scheduled to commence in 2015.



**FIGURE 1 PARR-FAIRFIELD PROJECT LOCATION MAP**

## **4.0 COLLECTION METHODS AND ANALYSIS**

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In order to appropriately characterize the present status of RT&E species in the Project vicinity, information will be collected from various sources, including the South Carolina Department of Natural Resources (SCDNR) and the U.S. Fish and Wildlife Service (USFWS) RT&E databases.

As an initial step, a list of RT&E species documented as occurring in the counties surrounding the Project and downstream (Newberry, Fairfield and Richland) will be compiled based on the USFWS and SCDNR county level listings. Additional key species may be added at the request of TWC members, if agreed to be appropriate. The federal, state and global status of each of these species will be summarized, along with counties of occurrence. As a second step, known ranges of these species, along with occurrence data from the SCDNR Natural Heritage Program and other survey data, will then be used to eliminate species occurring in the counties but not in the Broad River Basin. Habitat requirements of each of the remaining species will then be summarized and compared to available habitat within the Project boundary and the area downstream of the Parr Shoals Dam extending to and including Frost Shoals, near Boatwright Island. This analysis will yield a list of species that potentially occur within the Broad River Basin, and that have suitable habitat within the Project Boundary and downstream of the Parr Shoals Dam extending to and including Frost Shoals, near Boatwright Island.

## **5.0 SCHEDULE**

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Research and data collection efforts will begin no later than the spring of 2015. A final report summarizing the study findings including the compiled spreadsheets will be issued within 120 days of the completion of data collection. Study methodology and timing may be adjusted based on consultation with resource agencies and interested stakeholders.

## **6.0 USE OF STUDY RESULTS**

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Study results will be used as an information resource during discussion of relicensing issues and developing potential Protection, Mitigation and Enhancement measures with the SCDNR, USFWS, RT&E TWC and other relicensing stakeholders.