

APPENDIX A-8
LOWER SALUDA RIVER FISH COMMUNITY MONITORING PROGRAM

APPENDX A-8

LOWER SALUDA RIVER FISH COMMUNITY MONITORING PROGRAM

FINAL

BACKGROUND

The Saluda Project is an existing licensed hydroelectric project, owned and operated by SCE&G. The Project is located on the Saluda River, in the counties of Lexington, Richland, Newberry and Saluda, South Carolina. The Project consists of an earth fill embankment Dam (Saluda Dam) impounding a 48,000-acre reservoir, a gated emergency spillway, a back-up dam, a powerhouse, five concrete intake towers and associated penstocks. Construction of the Project was completed in 1930, and construction of the back-up dam was completed in 2005.

The lower Saluda River (LSR) is approximately 10 miles in length and is characterized by bedrock-dominated riffles, with limited gravel and cobble substrates, and a high percentage of pool habitats. The river receives hypolimnetic (i.e., coldwater) flows from Lake Murray via the Saluda Project. This cold water has created the opportunity for the SCDNR to establish a successful Put, Grow and Take trout fishery for brown trout and rainbow trout. The LSR fishery community is unique in that it provides fishing opportunities for both resident warmwater species, as well as stocked coldwater species (trout).

MONITORING PLAN

SCE&G has conducted fish community sampling on the LSR since the mid 1990s to monitor for changes in the fish community. SCE&G will continue to conduct semiannual electrofishing sampling of the LSR to document and monitor for changes in the fish community. This document provides guidelines for the semiannual sampling.

Sampling will be conducted only during daylight hours and with safe, reasonable flows. The majority of sampling will be conducted during the 500-2000 cfs flow range. All efforts will be made to sample at flows that have been constant for a minimum of 8 hours. Sampling will occur in the spring (March – May) and fall (October – November).

Sample locations in the LSR will be located from the tailrace of the Saluda Hydro downstream to the I-26 Bridge. Because changing flow levels in the LSR can limit sampling areas, sample areas will be located within particular sections of the LSR. The first section that will be sampled will be located from the tailrace of Saluda Hydro downstream 2 river miles. The second section will begin 2 miles below Saluda Hydro and extend downstream 3 river miles. The third section will start 5 miles below Saluda Hydro and extend 2.5 river miles downstream. Within each section one to several sample locations will be chosen for sampling, with every effort made to sample the same locations during each sampling event. Sampling locations will be sampled for 15 minutes.

All fish collected will be identified to lowest taxonomic level, measured to nearest millimeter (mm), and weighed to nearest gram (g). All fish collected will be returned to the river except specimens required for identification verification or reference collections. Additional data collected will include the following:

1. Personnel,
2. Sample location,
3. Sampling date, start time, and end time (minutes),
4. Actual shocking time – pedal time (seconds)
5. Notes on fish condition; i.e. sores, lesions, abnormal features, etc.

Basic water quality measurements (pH, temperature, dissolved oxygen) will be collected at each sample location immediately after electrofishing. All recorded data will be retained for a period of 15 years. All fish data will be submitted to the SCDNR annually as required by the Scientific Collecting Permit.

REPORTS

Reports will not be routinely produced, but will be produced upon SCE&G management or agency request.