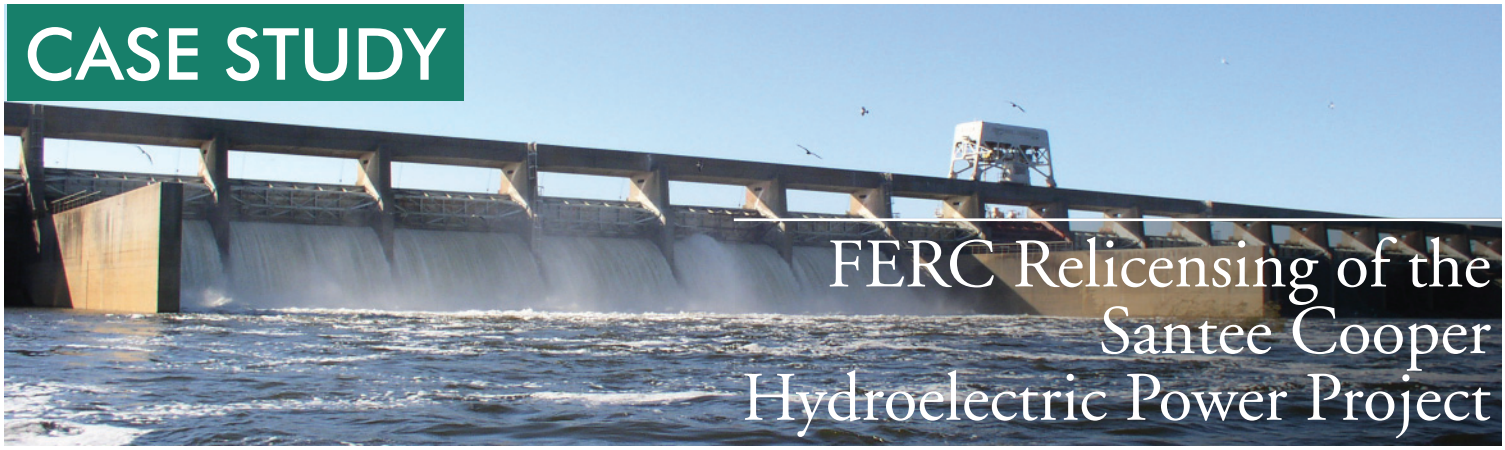
CASE STUDY



FERC Relicensing of the Santee Cooper Hydroelectric Power Project

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Environmental Studies for FERC Relicensing of the Santee Cooper Hydroelectric Power Project

BACKGROUND

The South Carolina Public Service Authority (Santee Cooper) has applied to the Federal Energy Regulatory Commission (FERC) to relicense the Santee Cooper Hydroelectric Power Project (Project).

Relicensing was complex because the Project is blended with a flow diversion project owned by the US Army Corps of Engineers. The Project includes a diversion of water to form a second reservoir on another river, a re-diversion of water to its original source river, and encompasses the largest total impoundment of any licensed project in the United States. Relicensing process issues included affects on endangered fish, freshwater mussels, fish passage, assessment of instream flow on mesohabitat characteristics, water quality, reservoir water level fluctuations, wetland and waterfowl enhancements, and recreational uses.

Largemouth bass caught during boat eletrofishing surveys on the Santee River.

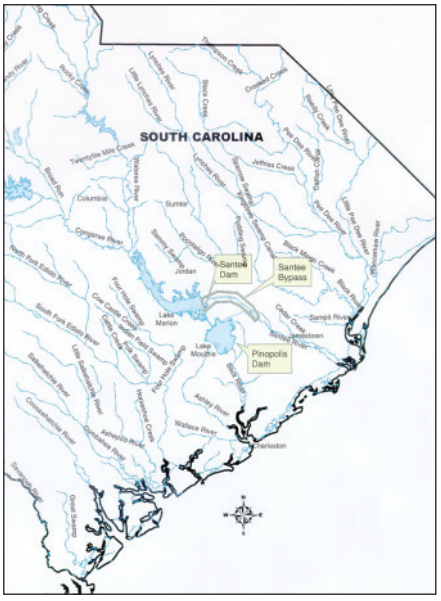
Releasing longnose gar after boat electrofishing survey on the Santee River.

THE CHALLENGE

The challenge was providing credible scientific studies and strategic regulatory process advice to help the client achieve balance between the natural resources and multiple uses of the Santee Cooper lake and river system, while addressing specific objectives of state and Federal agencies, recreational users and the needs of Santee Cooper and its customers. Fisheries and water quality issues were critical to a successful outcome.

NORMANDEAU ASSOCIATES
ENVIRONMENTAL CONSULTANTS

To meet this challenge, Normandeau prepared multiple environmental investigations, including study coordination, data analysis and interpretation, and to inform decisions by stakeholders involved in the relicensing process, such as:



Santee Cooper Project Area Rivers.

- upstream fish passage monitoring of American shad and blueback herring using radio telemetry and hydroacoustics
- an instream flow/Mesohabitat assessment of 37 river miles of bypass reach
- a navigability assessment using River2D channel modeling
- an Index of Hydrologic Alteration (IHA) analysis
- anadromous fish passage evaluation of the Santee River and bypass (shortnose sturgeon, American eel, American shad, and other diadromous species)
- an assessment of fish outmigration entrainment and survival
- seasonal continuous temperature monitoring

THE SOLUTION

Santee Cooper submitted the results of the environmental studies performed by Normandeau and other organizations to FERC. From these study results, FERC developed a Draft EIS for public review and will issue a Final EIS after receiving public comment. Santee Cooper relied on Normandeau Associates' study results during negotiations for a Settlement Agreement between Santee Cooper, the South Carolina Department of Natural Resources and the U.S. Fish and Wildlife Service. This agreement outlined the future operating conditions and mitigation of the Santee Cooper Hydroelectric Power Project, and will be incorporated in the Final EIS by FERC.


Recording fish and habitat data on the Santee River.

Based on successful performance as lead contractor for the critical fisheries and water quality issues of the application process, Normandeau Associates, Inc. was selected to provide additional strategic and procedure support services during later relicensing stages, including:

- providing strategic and procedural advise
- facilitating communication with agency and NGO contacts
- preparing additional FERC documents
- supporting negotiation and conflict management/resolution
- providing environmental technical support
- developing and implementing project study plans