



Fish and Wildlife MIG

Martin Issue Group
Meeting

September 26, 2007



A SOUTHERN COMPANY

MIG 1 Agenda

- Introductions
- Feedback on Issue Sheet
- FERC ILP Study Plan Criteria
- Summary of Draft Study Plans
- Summary of Study Plan Process
- MIG membership
- Next steps

MIG Sheet Feedback



FERC ILP Study Criteria

- Describe the goals and objectives of each study proposal and the information to be obtained;
- If applicable, explain the relevant resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied;
- If the requester is a not resource agency, explain any relevant public interest considerations in regard to the proposed study;
- Describe existing information concerning the subject of the study proposal, and the need for additional information;
- Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements;
- Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate filed season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge; and
- Describe considerations of level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs.

MIG 1 Studies

- Rare, Threatened, and Endangered Species Surveys
- Striped Bass Study
- Migratory Fish - Tallapoosa Basin Literature Review
- Lake Martin - Wildlife Management Plan
- Lake Martin - Assessment of Fish Density and Species Composition Associated with Various Shoreline Types
- Fish Entrainment/Turbine Mortality
- Evaluation of Minimum Flows downstream of Martin Dam





Rare, Threatened, and Endangered Species Surveys

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Study Goals

- Identify the location and abundance of any Rare, Threatened, and Endangered species within the project boundary and if project operations potentially impact species present
- Determine ways to limit impacts, opportunities to enhance or reintroduce species to specific areas within or near the project

Description of Study

- Field surveys to determine the presence of Rare, Threatened, or Endangered species
 - within the Martin project boundary
 - some tributaries of Lake Martin
- Review of existing studies on low head dams located on tributaries to Lake Martin to assist the agencies with identifying potential restoration areas adjacent to the project boundary

Study Implementation Schedule

- April - June 2009: Field surveys
- May 2009: Develop database
- August 2009: Finalize database
- November 2009: Finalize report of surveys
- January- April 2010: Review restoration areas
- June 2010: Draft report
- September 2010: Final report





Striped Bass Study

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Study Goals

- Understand the relationship of project operation and potential impact to striped bass and their habitat in Lake Martin
- Identify ways to limit project impacts

Description of Study

- Create Expert Panel to review existing information on striped bass fishery
- Identify information gaps and field data that need to be collected or reviewed
- Collect data and develop recommendations

Study Implementation Schedule

- March 2009: Expert Panel review of information
- April 2009: Collect Field data
- November 2009: Review data and finalize report on surveys
- June 2010: Draft report
- September 2010: Final report





Migratory Fish- Tallapoosa Basin Literature Review

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Study Goals

- Document the migratory species that currently or historically utilized the Tallapoosa River

Description of Study

- Review historic distribution of migratory fish in the Tallapoosa Basin.
- Review management and recovery plans for key migratory fish species
- Develop a summary report of plans that could be applied to the Tallapoosa Basin

Study Implementation Schedule

- April 2009: Literature review
- September 2009: Draft report
- January 2010: Final Report



Lake Martin-Wildlife Management Plan

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Study Goals

- Develop a Wildlife Management Plan for the lands that are included within the project boundary of the Martin Project, especially lands that would be managed for the red-cockaded woodpecker

Description of Study

- 8800 acres of land in the Martin Project boundary, mixture of developed and undeveloped land
- Develop a Wildlife Management Plan including management strategies to reduce impacts to and/or enhance quality of rare, threatened, and endangered species within the Martin Project

Study Implementation Schedule

- April to December 2009: Develop GIS overlays
- April to December 2009: Periodic meetings
- January 2009: Draft wildlife management plan
- March 2009: Discussion of plan
- April 2009: Final report





Lake Martin- Assessment of Fish Density and Species Composition Associated with Various Shoreline Types

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Study Goals

- Investigate what type of shoreline structure/material is the most effective in providing shoreline refuge and habitat for aquatic species

Description of Study

- Study sites representing various types of shoreline habitat (natural and man-made) will be selected and sampled to determine variations in species abundance within each type of shoreline

Study Implementation Schedule

- Spring and Summer 2009: Field study
- December 2009: Draft report
- April 2010: Final report



Fish Entrainment and Turbine Mortality

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Study Goals

- Understand the relationship of project operations and the potential impacts of turbine entrainment and mortality on fish in Lake Martin (especially striped and largemouth bass)

Description of Study

- Resident fish entrainment and mortality (for a range of turbine types and physical characteristics) at hydroelectric sites in the United States has been well documented
- Develop an entrainment database for use at the Lake Martin Project

Study Implementation Schedule

- May 2009: Develop entrainment and turbine mortality databases
- December 2009: Draft report
- April 2010: Final report



Evaluation of Minimum Flows Downstream of Martin Dam

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Study Goals

- Understand the relationship of project operation and the potential impacts of:
 - > hydro peaking on the aquatic fauna and habitat in the tailrace area downstream of the Martin Project
- Determine the need for a minimum flow to offset any impacts of hydro peaking on the tailrace
- Determine if it is possible to enhance or create a “riverine” type habitat in the tailrace area

Description of Study

- Study area includes the tailrace area for ½ mile downstream of the Martin Dam
- Field sampling to determine the current species inhabiting the tailrace (fish, mussels and snails, and crayfish)
- Review of and/or collection of tailrace water quality data
- Observation of the tailrace under various flows

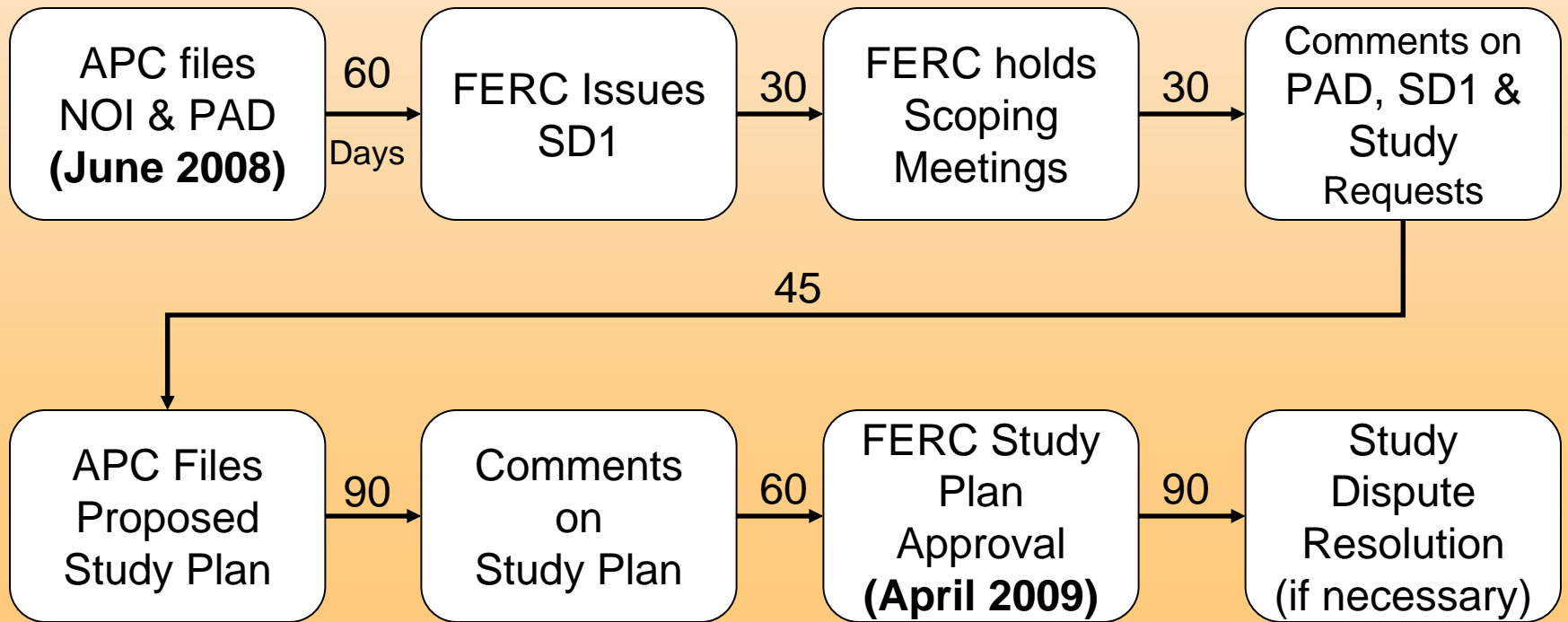


Study Implementation Schedule

- Mid-March to early April 2009: Fisheries samples
- June to October 2009: Mussel and snail samples
- December 2009: Draft report
- February 2010: Discussion of data
- April 2010: Final report



Study Plan Process



Next Steps

- MIG membership
- Review MIG feedback with Agencies
- Continue to work on draft study plans
- Distribute draft study plans to MIG members for review and comment