

**Study Plan 2 - Socioeconomic Impacts of Rule Curve Change**

**1.0 GOALS AND OBJECTIVES OF STUDY**

The purpose of this study is to estimate the social and economic impact of a rule curve change at the Martin Project.

**2.0 RELEVANT RESOURCE MANAGEMENT GOALS**

Fluctuating water levels at hydropower projects may affect resources associated with a hydroelectric project. Not only could fluctuating water levels affect the environmental resources (*i.e.*, fisheries, erosion, aquatic plants, etc.), they also affect social and economic resources (recreation use, property values, etc.). Many Lake Martin stakeholders have requested an examination of how a rule curve change at Lake Martin could potentially affect recreation visitation, property values, and reservoir related businesses.

**3.0 BACKGROUND AND EXISTING INFORMATION**

Fishery Information Management Systems, Inc. (FIMS) conducted a study in the 1990s that estimated recreation visitation, trip expenses, distribution of recreation use, property values, and reservoir related business activity. Much of the information provided in the report (FIMS, 1997) is relevant to possible rule curve changes associated with the relicensing of Lake Martin. The FIMS report will provide the basis for this study and will be used as a template for providing current effects of a possible rule curve change. Furthermore, APC conducted a recreational use study in 2007 that will provide current recreational use patterns as well as an up-to-date inventory of on-the-water businesses at Lake Martin.

**4.0 PROJECT NEXUS**

The nexus to the Project is the FERC project boundary and general project vicinity. The FIMS study also identified the market area for Lake Martin visitors, generally including the counties surrounding the Project, as well as major metropolitan areas in the vicinity (Birmingham and Montgomery).

**5.0 STUDY AREA AND STUDY SITES**

The study area will include Lake Martin, its tributaries, and lands and water within the FERC project boundary for the Martin Project. As noted above, the study area will be expanded to include a qualitative assessment of market areas associated with recreation visitation at the Project.

**6.0 PROPOSED METHODOLOGY**

The draft methodology for [inclusion in a Request for Proposals \(RFP\) to be sent out to a select group of experts will include:](#)

- 1) Use existing data (2007 study) to estimate current year recreation use.
- 2) Adjust trip expense information from FIMS study using the consumer price index (CPI).
- 3) Adjust trip expenses by market segment from FIMS study using current population data for market segments identified in FIMS study.

- 4) Update property value information from interviews with knowledgeable real estate personnel around Lake Martin.
- 5) Update number of businesses associated with Lake Martin using phone books, advertising in magazines, websites, etc.
- 6) Adjust business related income using CPI.
- 7) Conduct phone interviews with those businesses dependent on a winter draw down (e.g., seawall construction).
- 8) Use existing regression equations reported in FIMS study to estimate economic impact, recreational use, and property values of a three to five foot increase in winter pool as well as changes in number of months at full pool.

[Variations to the methodology may be acceptable depending on the reasons given in response to the RFP.](#)

### **7.0 CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE**

Updating existing studies is common practice in relicensing proceedings. The methodology used in the FIMS study is common to economic and recreation studies at other hydropower project in the Southeast.

### **8.0 PRODUCTS**

A draft report will be distributed to the MIG 5 for review and comment. A final report will be provided as part of the license application that will include a PDF copy of the literature/citations used in the report.

### **9.0 SCHEDULE**

APC files Final Study Plan	November 2008
Anticipated FERC Approval	April 2009
Consult with MIG 5	June 2009
Collect Updated Data from Identified Sources	October 2008 – January 2009
Draft Report	Fall 2009
Final Report	Spring 2010

### **10.0 LEVEL OF EFFORT AND COST**

APC estimates the cost of conducting the study, including consultation with the MIG 5, will be approximately \$125,000.

### **11.0 REFERENCES**

Fishery Information Management Systems. 1997. Potential Impacts of Water Diversion on Recreational Use and Economic Values Associated with Six Alabama Reservoir Systems, Volume 6: The Martin Reservoir System. ADECA-OWR-97-07. Alabama Department of Economic and Community Affairs, Montgomery, AL.