



ALABAMA POWER COMPANY

BIRMINGHAM, ALABAMA

MARTIN HYDROELECTRIC PROJECT

FERC NO. 349

STUDY PLAN 9 – LOCATION OF REGULATED DISCHARGES ON LAKE MARTIN

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Prepared by:



A SOUTHERN COMPANY

**ALABAMA POWER COMPANY
BIRMINGHAM, ALABAMA**

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ON LAKE MARTIN**

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**STUDY PLAN 9 – LOCATION OF REGULATED DISCHARGES
ON LAKE MARTIN**

1.0 GOALS AND OBJECTIVES OF STUDY

The consulting agencies identified the following issues: declining water quality of Lake Martin, Constellation Energy Power Plant impacts to Hillabee Creek, National Point Discharge Elimination System (NPDES) permits from Alexander City and the impact to Wind Creek and overall Lake Martin water quality, and an assessment of all regulated discharges into Lake Martin.

The purpose of this study is to develop a list of all regulated discharges available to the public on Lake Martin (which includes the basin from Harris to Martin) and identify their location. Once the list is compiled, it will be added to a Geographic Information System (GIS) overlay for use during the Martin relicensing.

2.0 RELEVANT RESOURCE MANAGEMENT GOALS

The Alabama Department of Environmental Management (ADEM) is responsible for maintaining water quality levels on Lake Martin. This is an integral aspect of Lake Martin's success as a recreation, drinking water, fish and wildlife, and economic resource.

3.0 BACKGROUND AND EXISTING INFORMATION

In order to maintain water quality, Federal and State laws regulate pollution from both point and non-point sources. Point sources are distinct conveyances. Examples include pipes and man-made ditches as well as discharges from municipal, industrial, and other facilities. Point source pollution sites within the Lake Martin reservoir are regulated through the NPDES, and managed by the ADEM and the United States Environmental Protection Agency (USEPA). NPDES permits include provisions such as limits on types of discharge, monitoring, and reporting requirements. An NPDES permit will usually indicate an acceptable pollutant parameter, and the permittee may choose the best method to achieve these levels. The permits are issued for a five year term and may be renewed or administratively extended. The application process for the NPDES permits require that the public be notified and allowed to comment on NPDES permit application. The ADEM NPDES application requires information such as the purpose of the application, previous permit numbers, business activity, and waste storage and disposal.

Non-point source pollution is caused by precipitation moving across the ground and carrying pollutants such as pesticides and fertilizers with it. Several organizations including the Clean Water Partnership (CWP), the Soil Water Conservation Committee (SWCC), the Natural Resource Conservation Service (NRCS), and the Alabama Department of Public Health (ADPH) are concerned about monitoring discharges into Lake Martin, and they have been working

together (along with the Alabama Power Company (Alabama Power)) to determine the origin of non-point source pollution in the basin.

4.0 PROJECT NEXUS

There are both point and non-point sources of pollution that have direct and indirect impacts to Lake Martin.

5.0 STUDY AREA AND STUDY SITES

The study area will encompass Lake Martin, Alabama Power-owned lands within the Project Boundary, and significant point sources on specific tributaries as they pertain to point source discharges.

6.0 PROPOSED METHODOLOGY

The identification of regulated discharges available to the public on Lake Martin and Section 319 non-point source pollutants will be accomplished through the use of secondary data sources.

6.1 Data Collection Techniques

Existing information on regulated discharges and Section 319 non-point source pollutants for Lake Martin will be collected for this study. Up to date (May 2009) data will be requested from the ADEM, Tallapoosa, Coosa, and Elmore Counties.

Once a list of regulated discharge locations and Section 319 non-point source pollutants is gathered and other existing literature has been compiled and reviewed, a draft report will be issued to Martin Issue Group (MIG) 2 for their review and comment. The report will include a list of the NPDES locations, owners, and effluent limits and sources and types of non-point source pollution for Lake Martin. Comments received from MIG2 will be incorporated into a final report.

6.2 Data Analysis

Alabama Power will create GIS overlays of the regulated discharge information for use during relicensing. Other than a literature review and preparation of the GIS overlays, there will be no data analysis associated with this study. The GIS overlays may be compared with areas of Lake Martin experiencing water quality problems to better understand the impacts of discharges. GIS overlays will be provided to MIG members upon request.

7.0 CONSISTENCY WITH GENERALLY ACCEPTED SCIENTIFIC PRACTICE

The planned study methods discussed above are consistent with general practices for examining point and non-point source pollution impacts and have been accepted by the federal and state agencies and other interested stakeholders during relicensing discussions held in 2007 and 2008.

8.0 PRODUCTS

A draft report will be distributed to the MIG 2 for review and comment within 6 to 8 months of completion of the point source data collection. A final report will be provided as part of the draft license application that will include raw data, GIS overlays (shapefiles), and training guidelines for non-point source pollution detection.

9.0 SCHEDULE

This schedule corresponds to Alabama Power’s Process Plan and Schedule filed with FERC on February 16, 2009. Actual consultation meeting dates will be determined with MIG 1 members upon FERC approval of the study plan.

Alabama Power Files Final Study Plan	March 2009
FERC Approval	April 2009
Draft Report (including GIS overlays)	August 2009
MIG 2 Consultation	September 2009 – December 2010
Initial Study Report.....	November 2009
Initial Study Report Meeting	December 2009
Final Report	January 2010
FERC Updated Study Report.....	September 2010
Updated Study Report Meeting	September 2010

10.0 LEVEL OF EFFORT AND COST

Alabama Power estimates the cost of consulting of developing the study plan, collecting and reviewing existing information, and reporting is approximately \$35,000.

11.0 REFERENCES

Alabama Department of Environmental Management – National Pollution Discharge Elimination System <http://www.adem.state.al.us/WaterDivision/WaterDivisionPP.htm> accessed on 11-07-07.