

AQUATIC RESOURCES MONITORING CONCEPTUAL PLAN

R.L. Harris Hydroelectric Project

FERC No. 2628

HARRIS DAM
RELICENSING



Prepared by:

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1 INTRODUCTION

On June 29, 2021, Alabama Power filed its Preliminary Licensing Proposal (PLP) for relicensing the R.L. Harris Hydroelectric Project (FERC No. 2628). In the PLP, Alabama Power indicated it would develop and implement an Aquatic Resources Monitoring Plan following implementation of a continuous minimum flow from Harris Dam. On October 1, 2021, Federal Energy Regulatory Commission (FERC) staff issued a letter to Alabama Power commenting on the PLP. In this letter, FERC staff required Alabama Power to develop “conceptual elements” for the Aquatic Resources Monitoring Plan that includes: (1) the goals of the monitoring; (2) preliminary criteria for determining success of the program; (3) anticipated methods for monitoring aquatic resources; (4) the number and general locations of monitoring sites; (5) provisions for reporting results and making recommendations; (6) monitoring and reporting frequency; (7) a schedule for developing and implementing the plan; and (8) estimated capital and annual costs associated with the plan.

2 MONITORING GOALS

The goal of the Aquatic Resources Monitoring Plan is to quantify the fish community at three sites downstream of Harris Dam and at a reference site upstream. Results will be used to compare the possible effects, if any, of the proposed continuous minimum flow compared with baseline sampling conducted during relicensing.

3 PRELIMINARY CRITERIA FOR DETERMINING SUCCESS

Patterns in fish community structure will be compared to the baseline established by the Auburn University fish community sampling conducted by Dr. Devries and Dr. Wright and presented in the Final Aquatic Resources Study Report. It is anticipated that fish community structure will show improvement (total species, total families, CPE, diversity) at downstream sites when compared to an upstream reference site or remain similar to baseline.

4 ANTICIPATED METHODS FOR MONITORING AQUATIC RESOURCES

Alabama Power will perform fish assemblage monitoring similar to the study conducted by Drs. DeVries and Wright (Auburn Study) during relicensing. The bimonthly sampling will consist of six, 10-minute transects at Horseshoe Bend, Wadley, the Harris Dam tailrace, and an unregulated reference site approximately 4 miles upstream of Lee's Bridge. Fish will be sampled using boat and barge electrofishing. Target fish (channel catfish, red breast sunfish, Alabama bass, and Tallapoosa bass) may be measured (TL (mm)) and weighed (g).

5 MONITORING SITES

There will be three sites located downstream of Harris Dam (tailrace, Wadley, and Horseshoe Bend) and one upstream reference site (approximately 4 miles upstream of Lee's Bridge).

6 MONITORING & REPORTING FREQUENCY

All four sites will be sampled for a total of 3 sample events (12 bi-monthly samples over 2 years for each sample event). The first sample event will occur following license issuance and will begin one year after the minimum flow system is fully operational, with each subsequent event occurring on a five-year interval.

Field collections and subsequent analysis will be summarized in a report. The report will be made available to resource agencies for review and discussed in a meeting/conference call the year following each full collection cycle. Reports and meeting summaries will be filed with FERC.

7 SCHEDULE FOR DEVELOPING AND IMPLEMENTING THE PLAN

Alabama Power will develop the Aquatic Resources Monitoring Plan, consult with appropriate agencies and file for FERC approval within 9 months of license issuance. Upon FERC approval of the Final ARM Plan, Alabama Power will begin monitoring on a 5-year interval for 3 events and will begin one year after the minimum flow system is fully operational.

8 ESTIMATED CAPITAL AND ANNUAL COSTS ASSOCIATED WITH THE PLAN

Alabama Power estimates the capital costs to develop Aquatic Resources Monitoring Plan is \$20,000. Each sample event is estimated to cost \$130,000. Therefore, the annual operations and maintenance costs (i.e. the ARM Plan implementation) over a 30 year license term is \$13,000. Cost includes collection of bi-monthly fish samples at four sites as outlined in the sampling protocol described above, summary and analysis of sampling results and reporting, and equipment expenditures.