

# EROSION MONITORING CONCEPTUAL PLAN

R.L. Harris Hydroelectric Project

FERC No. 2628



Prepared by:

**Alabama Power Company**

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# 1 INTRODUCTION

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On June 29, 2021, Alabama Power filed its Preliminary Licensing Proposal (PLP) for relicensing the R.L. Harris Hydroelectric Project (FERC No. 2628). The National Park Service (NPS) and Alabama Rivers Alliance (ARA) requested Alabama Power to develop an Erosion Monitoring Plan (EMP). The EMP includes: (1) the goals of the monitoring; (2) anticipated erosion parameters to be monitored and methods for monitoring those parameters; (3) the number and general locations of monitoring sites; (4) monitoring and reporting frequency; (5) a schedule for developing and implementing the plan; and (6) estimated capital and annual costs associated with the plan.

## **2 MONITORING GOAL**

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The goal of the Erosion Monitoring Plan (EMP) is to evaluate any change in downstream erosion following implementation of the 300 cfs continuous minimum flow (CMF).

### **3 ANTICIPATED EROSION PARAMETERS TO BE MONITORED AND MONITORING METHODS**

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Alabama Power will perform a High-Definition Stream Survey (HDSS) to collect geo-referenced video (forward, left, and right), water depth, side-scan sonar, and high-resolution GPS information downstream of Harris Dam.

## 4 MONITORING SITES

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The High-Definition Stream Survey conducted by Trutta during relicensing, which included a survey of the 44 river miles of the Tallapoosa River between Harris Dam and Horseshoe Bend, will be repeated following implementation of the 300 cfs (CMF).

## **5 MONITORING AND REPORTING FREQUENCY**

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The 3 downstream erosion surveys will be conducted concurrently with the 3 Aquatic Resources Management Plan sample events. The first survey will occur one year after the minimum flow system is fully operational, with each subsequent survey occurring on a five-year interval. Following each survey, a report will be developed, sent to appropriate resource agencies and filed with FERC.



## **6 SCHEDULE FOR DEVELOPING AND IMPLEMENTING THE EROSION MONITORING PLAN**

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Within 9 months of license issuance, Alabama Power will develop the EMP, consult with appropriate agencies and file with FERC for approval.

## **7 ESTIMATED CAPITAL AND ANNUAL COSTS ASSOCIATED WITH THE EROSION MONITORING PLAN**

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Alabama Power estimates the capital costs to develop Erosion Monitoring Plan is \$20,000. Each monitoring event is estimated to cost \$100,000. Therefore, the annual operations and maintenance costs (i.e. the EMP Plan implementation) over a 30 year license term is \$10,000.