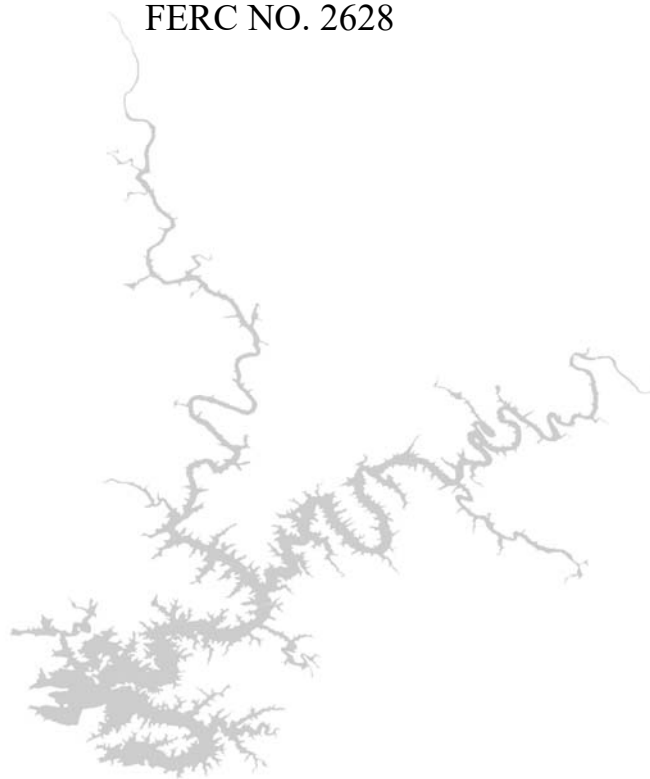




# **THREATENED AND ENDANGERED SPECIES STUDY PLAN**

**R. L. HARRIS HYDROELECTRIC PROJECT**  
FERC NO. 2628



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# THREATENED AND ENDANGERED SPECIES STUDY PLAN

## 1.0 INTRODUCTION

Alabama Power Company (Alabama Power) is initiating the Federal Energy Regulatory Commission (FERC) relicensing of the 135-megawatt (MW) R.L. Harris Hydroelectric Project (Harris Project), FERC Project No. 2628. The Harris Project consists of a dam, spillway, powerhouse, and those lands and waters necessary for the operation of the hydroelectric project and enhancement and protection of environmental resources. These structures, lands, and water are enclosed within the FERC Project Boundary. Under the existing Harris Project license, the FERC Project Boundary encloses two distinct geographic areas, described below.

Harris Reservoir is the 9,870-acre reservoir (Harris Reservoir) created by the R.L. Harris Dam (Harris Dam). Harris Reservoir is located on the Tallapoosa River, near Lineville, Alabama. The lands adjoining the reservoir total approximately 7,392 acres and are included in the FERC Project Boundary. This includes land to 795 feet mean sea level (msl)<sup>1</sup>, as well as natural undeveloped areas, hunting lands, prohibited access areas, recreational areas, and all islands.



The Harris Project also contains 15,063 acres of land within the James D. Martin-Skyline Wildlife Management Area (Skyline WMA) located in Jackson County, Alabama. These lands are located approximately 110 miles north of Harris Reservoir and were acquired and incorporated into the FERC Project Boundary as part of the FERC-approved Harris Project Wildlife Mitigative Plan and Wildlife Management Plan. These lands are leased to, and managed by, the State of Alabama for wildlife management and public hunting and are part of the Skyline WMA (ADCNR 2016b).

For the purposes of this study plan, “Lake Harris” refers to the 9,870-acre reservoir, adjacent 7,392 acres of Project land, and the dam, spillway, and powerhouse. “Skyline” refers to the 15,063 acres of Project land within the Skyline WMA in Jackson County. “Harris Project” refers to all the lands, waters, and structures enclosed within the FERC Project Boundary, which includes both Lake Harris and Skyline. Harris Reservoir refers to the 9,870-acre reservoir only; Harris Dam refers to the dam, spillway, and powerhouse. The Project Area refers to the land and water in the Project Boundary and immediate geographic area adjacent to the Project Boundary (Alabama Power Company 2018).

Lake Harris and Skyline are located within two river basins: the Tallapoosa and Tennessee River Basins, respectively. The only waterbody managed by Alabama Power as part of their FERC license for the Harris Project is the Harris Reservoir.

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<sup>1</sup> Also includes a scenic easement (to 800 feet msl or 50 horizontal feet from 793 feet msl, whichever is less, but never less than 795 feet msl).

## **Background and Existing Information**

During the October 19, 2017 issue identification workshop, representatives from the United States Fish and Wildlife Service (USFWS) and Alabama Department of Conservation and Natural Resources (ADCNR) noted that there may be several species of federally protected bats using Project lands around the Harris Project. The USFWS also noted that there may be some aquatic species of concern in the Project Area (areas adjacent to the Project Boundary that could be influenced by Project operations). The USFWS and ADCNR requested that potential impacts to threatened or endangered species currently in the Harris Project Boundary be addressed during the relicensing process.

During preparation of the Harris Pre-Application Document (PAD), research identified several federally protected species that are present in the counties where the Harris Project is located (**Table 1**). Additionally, research concluded a potential for federally protected species to be located within the Lake Harris or Skyline Project Areas.

### **1.1 Resource Management Goals**

The FERC has a responsibility under Section 7 of the Endangered Species Act (ESA) to consult with USFWS on the presence of federally protected species that may be adversely impacted by operation of the Harris Project. FERC may require Alabama Power to implement measures to protect or enhance any critical habitat or populations of protected species impacted by the Project.

### **1.2 Current Operations and Operational Alternatives**

The Threatened and Endangered (T&E) Species study will assess the presence of any Federal and/or State protected species occurring on Harris Project lands and waters and determine if Project operations would likely have an effect (positive or negative) on these species. If Harris Project effects are identified, Alabama Power will consult with USFWS and ADCNR to ensure adequate protection for these species. If Section 7 consultation is necessary, the study will also provide the basis for such need.

Any effects on T&E species from potential changes in operations will be analyzed in the R.L. Harris Project Operating Curve Change Feasibility Study and the Downstream Release Alternatives Study.

## **2.0 GOALS AND OBJECTIVES**

The goals of this study are to assess the probability of populations of currently listed T&E species or their critical habitat occurring within the Harris Project Boundary or Project Area and determine if there are project related impacts (i.e., lake fluctuations, downstream flows, recreation and shoreline management activities, timber management, etc.). Section 7 of the ESA gives USFWS federal mandatory conditioning authority to identify and limit the impacts of the Harris Project on any species federally listed as threatened or endangered within the Harris Project Boundary or Project Area. ADCNR has developed a policy to enhance T&E species through protection of habitat, supplemental stocking, and/or reintroduction of species to historic habitats. If Project

related impacts are identified, ADCNR and USFWS have expressed interest in determining ways to limit those impacts.

This study will also include developing a list of extant species that may have been extirpated from the Project Vicinity and identify the factors that may have contributed to their extirpation.

**Table 1**      **FEDERALLY THREATENED AND ENDANGERED SPECIES POTENTIALLY OCCURRING IN ALABAMA COUNTIES WITHIN THE R.L. HARRIS PROJECT**

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS <sup>1</sup>	STATE PROTECTED	COUNTY(IES) OF OCCURRENCE	OCCURRENCE	DOCUMENTED HISTORIC RANGE IN AL
<i>Picoides borealis</i>	Red-Cockaded Woodpecker	E	Yes	Clay & Randolph		Statewide in appropriate habitat
<i>Notropis albizonatus</i>	Palezone Shiner	E	Yes	Jackson		Tennessee River system
<i>Erimonax monachus</i>	Spotfin Chub	T	Yes	Jackson		Tennessee River system
<i>Hamiota altilis</i>	Fine-lined Pocketbook mussel	T		Cleburne	Yes	Coosa, Tallapoosa, Cahaba River systems
<i>Lampsilis virescens</i>	Alabama Lampmussel	E		Jackson		Tennessee River system
<i>Villosa trabalis</i>	Cumberland Bean	E		Jackson		Tennessee River system
<i>Fusconaia cuneolus</i>	Finerayed Pigtoe	E		Jackson		Tennessee River system
<i>Toxolasma cylindrellus</i>	Pale Lilliput	E		Jackson		Tennessee River system
<i>Quadrula cylindrica</i>	Rabbitsfoot	T		Jackson		Tennessee River system
<i>Fusconaia cuneolus</i>	Shiny Pigtoe	E		Jackson		Tennessee River system
<i>Epioblasma triquetra</i>	Snuffbox	E		Jackson		Tennessee River system
<i>Pleurobema georgianum</i>	Southern Pigtoe	E		Clay		Coosa River system
<i>Pleurobema dolabellodes</i>	Slabside Pearlymussel	E		Jackson		Tennessee River system
<i>Myotis sodalis</i>	Indiana Bat	E	Yes	Clay, Cleburne, Randolph, Chambers, Tallapoosa, & Jackson	Yes	Statewide in appropriate habitat
<i>Myotis septentrionalis</i>	Northern Long-eared Bat	T	Yes	Clay, Cleburne, Randolph, Chambers, Tallapoosa, & Jackson	Yes	Piedmont and Cumberland regions
<i>Myotis grisescens</i>	Gray Bat	E	Yes	Jackson	Yes	Statewide in appropriate habitat
<i>Amphianthus pusillus</i>	Little Amphianthus	T		Randolph, Chambers, & Tallapoosa	Yes	Piedmont region (Bridges 1988)
<i>Platanthera integrilabia</i>	White Fringeless Orchid	T		Clay, Cleburne, Jackson, Chambers, & Tallapoosa		Talladega National Forest
<i>Apios priceana</i>	Price's Potato-bean	T		Jackson	Yes	Statewide in appropriate habitat
<i>Clematis morefieldii</i>	Morefield's Leather Flower	E		Jackson		Northern regions of state (USFWS 2007)

Source: Mirarchi et.al. 2004, USFWS 2016a, USFWS 2016b, Williams et.al. 2008, FERC 2018; <sup>1</sup> E = Federally listed as Endangered, T = Federally listed as Threatened

### **3.0 PROJECT NEXUS AND GEOGRAPHIC SCOPE**

The study will assess the likelihood of currently listed aquatic and/or terrestrial T&E species occurring within the Harris Project Boundary or in the Tallapoosa River downstream of Harris Dam through Horseshoe Bend. The study will determine if Harris Project related activities impact these populations or habitat. The study will assess the likelihood of T&E species occurring within the Skyline Project Boundary, with an emphasis on potential impacts of current operations (timber management) on populations of bats or their habitats. This study will also assess the factors that may have contributed to the extirpation of some species from the Project Vicinity.

### **4.0 METHODS**

Information will be collected from various sources, including ADCNR, USFWS, and Alabama Natural Heritage Program databases, to appropriately characterize the status of T&E species in the Project vicinity.

#### **4.1 Threatened and Endangered Species**

- Compile a list of T&E species and critical habitats documented as occurring in counties surrounding the Harris Project and the downstream reach of the Tallapoosa River from Harris Dam through Horseshoe Bend.
- Additional species of concern may be added at the request of USFWS and/or ADCNR if determined to be appropriate.
- Request a list of Alabama state protected species with occurrence records in the study area from Alabama Natural Heritage Program.
- Review literature of agreed upon species to gather habitat requirement data and to describe historical range of species (those existing and extirpated).
- Identify factors affecting the status of each species.
- Use a Geographic Information System (GIS) to map habitat information (land use, tree stand data, aquatic habitat data) to determine possible areas in the geographic scope that T&E species may utilize.

#### **4.2 Data Analysis**

- Summarize collected data of areas within the geographic scope that provide habitat requirements for T&E species.
- Determine if these areas are potentially impacted by Harris Project operations.
- Consult with stakeholders.
- Provide GIS overlays to consulting agencies.
- If applicable, recommend potential future field sampling. The specific methods for any future field sampling will be developed in consultation with USFWS.

### **5.0 REPORTS**

As the various components of this study are completed and available for review and comment, Alabama Power will share results with HAT 3 through written documentation and stakeholder

meetings, as discussed in Section 2.0 of the PAD. Stakeholders will have between 7-30 days to review and comment on documents, depending on the document length and complexity. Additional meetings (in-person and via conference call) will be held as necessary to discuss study results and solicit stakeholder input. Detailed location data for T&E species will not be provided to the public without prior approval of USFWS.

Draft and final reports, if applicable to the study, will be filed with FERC as well as provided to the HAT members and posted to the Harris relicensing website for access by the general public. The results of the study may serve as the basis for USFWS to determine the need for a Biological Assessment or formal Section 7 consultation

As part of the Integrated Licensing Process (ILP), FERC requires licensees to file two status reports: the Initial Study Report and Updated Study Report. These reports provide a status update on all the FERC-approved relicensing studies. Alabama Power will prepare these FERC reports per the requirements of 18 CFR 5.15(c) and (f).

While not required in FERC’s ILP process, Alabama Power will also file two Progress Updates during the relicensing process to provide additional updates to FERC, stakeholders, and the general public on the status of the relicensing studies, any interim work products, and any draft and final reports issued. The Progress Update will also include HAT meeting summaries. The first Progress Update will be distributed (and filed with FERC) in October 2019, approximately six months prior to the Initial Study Report; the second update will be distributed (and filed with FERC) in October 2020, approximately six months prior to the Updated Study Report.

## 6.0 SCHEDULE

This schedule corresponds to the FERC-approved Harris Project Process Plan and Schedule. Consultation meeting dates will be finalized with HAT 3 members upon FERC approval of the study plan.

FERC Study Plan Determination	April 2019
Consultation with HAT 3	April 2019 – November 2021
Develop GIS Overlays and Maps	April 2019 – July 2019
Meeting with HAT 3 to discuss GIS and need for field verification	August/September 2019
Progress Update	October 2019
Field Verification, if required	October 2019 – September 2020
Draft T&E study report to HAT 3	February 2020
Initial Study Report	April 2020
Initial Study Report Meeting	April 2020
HAT 3 Meeting(s), as needed,	April 2020 – April 2021 <sup>2</sup>
Progress Update	October 2020
Final T&E study report to HAT 3	January 2021
Updated Study Report	April 2021
Updated Study Report Meeting	April 2021

<sup>2</sup> Meeting dates will be determined with the HAT 3 members based on initial studies.



## **7.0 COST AND EFFORT**

Alabama Power estimates that the cost to consult on and implement this study plan, including costs to develop the T&E species database and prepare a draft and final report, is \$50K.

## **8.0 REFERENCES**

Alabama Department of Conservation and Natural Resources (ADCNR). 2016b. Wildlife Management Areas. Available at: <http://www.outdooralabama.com/wildlife-management-areas>. Accessed November 2016.

Alabama Power Company. 2018. Pre-Application Document for the Harris Hydroelectric Project (FERC No. 2628). Alabama Power Company, Birmingham, AL.

Federal Energy Regulatory Commission (FERC). 2018. List of Threatened, Endangered, Candidate, and Proposed Species Generated by ECOS-IPaC Website on July 27, 2018. Washington, D.C.

Mirarchi. Ralph E., ed. 2004. Alabama Wildlife, Volume One. A Checklist of Vertebrates and Selected Invertebrates: Aquatic Mollusks, Fishes, Amphibians, Reptiles, Birds and Mammals. The University of Alabama Press, Tuscaloosa, AL.

U.S. Fish and Wildlife (USFWS). 2016a. IPaC Trust Resources Report. R.L. Harris Project Lands Near Reservoir. Generated November 9, 2016.

U.S. Fish and Wildlife (USFWS). 2016b. IPaC Trust Resources Report. R.L. Harris Skyline Wildlife Management Area. Generated November 9, 2016.

Williams, J.D., A.E. Bogan, and J.T. Garner. 2008. Freshwater Mussels of Alabama and the Mobile Basin in Georgia, Mississippi and Tennessee. The Univ. of Alabama Press.