

## **1.0 DRAFT THREATENED AND ENDANGERED SPECIES STUDY PLAN ANNOTATED OUTLINE**

### **1.1 PROJECT NEXUS AND RATIONALE FOR STUDY [§ 5.9(B)(4)-(5)]**

The proposed operations and maintenance of the Cutler Hydroelectric Project (Project) under a new license could potentially affect suitable habitat for Ute ladies'-tresses orchid, a federally-listed species under the Endangered Species Act (ESA) (ESA 1972, as amended), known to occur in the Project Boundary. No other federally-listed threatened or endangered species is likely to occur within the Project Area.

Under authority of the ESA, the US Fish and Wildlife Service (USFWS) requires surveys of suitable habitat in a project area that could be affected by a proposed project or action. The proposed changes in Project operations could affect water levels of this species' habitat, which are an essential parameter of its habitat. Therefore, field surveys utilizing the approved survey protocol are necessary for this species.

### **1.2 STUDY GOALS AND OBJECTIVES [§ 5.9(B)(1)]**

The Threatened and Endangered Species (T&E) Study Plan (Study Plan) will address the following goals and objectives:

- Identification of federally listed and other protected plant and terrestrial/aquatic wildlife species potentially occurring in the Project Area.
- Assessment of direct, indirect, or cumulative impacts on such species resulting from the proposed Project operating scenarios.

### **1.3 RELEVANT RESOURCE MANAGEMENT GOALS AND PUBLIC INTEREST CONSIDERATIONS [§ 5.9(B)(2)]**

This Study Plan will review and incorporate existing information related to federally listed species and habitat occurring in the Project Boundary. References for studies, reports, and other sources of information analyzed as part of this study will be provided in this section as they are identified. Information sources may include but are not limited to the following:

1. US Fish and Wildlife Service. 1992. Interim Survey Requirements for Ute Ladies'-tresses Orchid (*Spiranthes diluvialis*).
2. PacifiCorp. 2019. Pre-Application Document. March 29, 2019.
3. Fertig, W. B., R. Black, and P. Wolken. 2005. Rangewide Status Review of Ute Ladies'-Tresses (*Spiranthes diluvialis*).
4. US Wildflower's database of wildflowers for Utah, <https://uswildflowers.com/wfquery.php?State=UT>.

5. Biotics database. 2005. Utah Division of Wildlife Resources, NatureServe, and the network of Natural Heritage Programs and Conservation Data Centers.
6. Utah National Heritage Program. 2019. Data request/database search.

#### **1.4 STUDY AREA**

The study area for the Ute ladies-tresses orchid includes the Cutler Reservoir Project Boundary. Surveys will focus on suitable habitat for this species, which include wet meadow and shoreline habitat. All surveyed areas will be located inside the Project Boundary.

#### **1.5 METHODS [§ 5.9(B)(6)]**

The Interim Survey Requirements for Ute Ladies-tresses Orchid (*Spiranthes diluvialis*) November 23, 1992, issued by the USFWS, provided guidance for conducting surveys for Ute Ladies-tresses Orchid (USFWS 1992). Typically, this survey protocol requires three years of surveys because this species may not flower every year. However, because Ute Ladies-tresses is known to be present in the project area, only a single year of surveys will be required to confirm the current status of the population. Surveys must be conducted during the flowering window, typically mid-July through August. Survey timing will be adjusted based on flowering morphology of nearby known populations.

Areas to be surveyed include the known populations. In addition, the project area will be reviewed using a combination of aerial photo and geographic information system (GIS) combined with field reconnaissance to determine if there are additional areas where suitable habitat exists. If such areas are identified, they will be included in the detailed field surveys.

#### **1.6 ANALYSIS AND REPORTING**

The T&E Study Plan Report will document the analysis and results. This report will include a summary of all information collected and discussion of the findings. Specifically, the report will address the following:

- The status of the known populations, including estimates on the size (aerial extent) of the population, the number of individuals present, and the quality of the habitat (i.e., are there any management concerns that are adversely affecting the occupied habitat?).
- The results of the efforts to identify additional potentially suitable habitat outside of the known populations and the results of the field surveys of these areas.

An Initial Study Report (ISR) that follows the outline recommended in the USFWS Interim Survey Requirements (1992) will be prepared following the initial survey year. This report will be submitted to

PacifiCorp for review and filed with the Federal Energy Regulatory Commission (FERC). The ISR will be consulted upon by stakeholders. If no additional information is warranted, the ISR will identify why no second year of surveys are warranted and that an Updated Study Report (USR) will not be filed. A letter will be filed with FERC in lieu of the USR identifying the lack of need for a second year of studies. If additional information is warranted, an USR would be filed following a survey in year 2. All study reports will be submitted to the USFWS, as well as other stakeholders and filed with FERC.

### **1.7 SCHEDULE, PERIODIC REPORTING, AND ONGOING CONSULTATION**

Work will commence once the T&E Study Plan is approved. Existing data will be collected, organized, and used to prioritize field survey locations.

- Work can be conducted outside of the reservoir drawdown.

### **1.8 LEVEL OF EFFORT AND COST [§ 5.9(B)(7)]**

The level of effort and cost will be determined as this Study Plan is finalized.

### **1.9 REFERENCES**

United States Fish and Wildlife Service (USFWS). 1992. Interim Survey Requirements for Ute Ladies'-tresses Orchid (*Spiranthes diluvialis*). November 23, 1992.

[https://www.fws.gov/utahfieldoffice/Documents/Plants/SPDI\\_interimSurveyRequirements\\_1992.pdf](https://www.fws.gov/utahfieldoffice/Documents/Plants/SPDI_interimSurveyRequirements_1992.pdf).

United States Fish and Wildlife Service (USFWS). 2018. Cover page photo of Ute-ladies'-tresses orchid (*Spiranthes diluvialis*). Photo by Bekee Hotze. Accessed June 14, 2019. <https://www.fws.gov/mountain-prairie/es/uteLadiestress.php>.