

**Susitna-Watana Hydroelectric Project
(FERC No. 14241)**

**Evaluation of Wildlife Habitat Use
Study Plan Section 10.19**

**Part D: Supplemental Information to
June 2014 Initial Study Report**

Prepared for

Alaska Energy Authority



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

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TABLE OF CONTENTS

1. Introduction.....	1
2. Background	1
2.1. Purpose of Study	1
2.2. Study Components	1
3. Status, Highlighted Results, and Achievements.....	2
4. Summary of Study 10.19 Documents	2
5. New Study Documentation Supplementing the ISR.....	3
6. Variances	3
6.1. 2013 Study Season	3
6.2. 2014 Study Season	3
7. Study Plan Modifications	3
7.1. Modifications Identified in ISR.....	3
7.2. Modifications Identified since the June 2014 ISR	4
8. Steps to Complete the Study	4

1. INTRODUCTION

Section 1 (Part A) of the June 2014 ISR for the Evaluation of Wildlife Habitat Use (Study 10.19) details the development of this study from the Revised Study Plan (RSP) in 2012, through the end of the 2013 study season. Section 7 of the ISR (Part C), filed in June 2014, sets forth AEA's plan and schedule, at that time, for completing this study and meeting the objectives of the RSP.

As detailed in Section 2.2 of the ISR Part D Overview, various circumstances have required AEA to extend the original timeframe for completing the Commission-approved Study Plan. As explained in the June 2014 ISR, Study 10.12 was not implemented in the 2013 study season. Since that time, this study continues to be deferred.

The primary purpose of this Part D Supplemental Information to the ISR for Study 10.19 is to identify all documents associated with this study, provide a summary of variances and modifications presented in the ISR (Parts A and C), and identify AEA's plans for completing Study 10.19 in a manner that meets the objectives of the Commission-approved Study Plan.

2. BACKGROUND

2.1. Purpose of Study

The goal of the study is to provide Project-specific habitat evaluation information for birds, mammals, and amphibians to facilitate quantitative assessments of the impacts on wildlife habitats from development of the proposed Project.

The study objectives are established in RSP Section 10.19.1:

- Use Project-specific survey data and the scientific literature to determine local habitat associations for those wildlife species occurring in the Project area that are of conservation, management, cultural, or ecological concern and that are specific to the wildlife habitat types to be mapped in the Project area.
- Categorically rank habitat values for each wildlife species of concern for each of the wildlife habitat types that will be mapped in the Project area.

2.2. Study Components

This study consists of the following components:

- Selection of a set of bird, mammal, and amphibian species of concern for which Project-related habitat impacts will be evaluated.
- Use Project-specific wildlife survey data, from Studies 10.5 through 10.18, and the scientific literature, when needed, to assess habitat associations for the wildlife species selected for evaluation.

- Categorically rank habitat values for each wildlife species for each of the wildlife habitat types being mapped in the study area (see Studies 11.5 and 11.6).

3. STATUS, HIGHLIGHTED RESULTS, AND ACHIEVEMENTS

Section 7 of ISR 10.19 (Part C), filed in June 2014, described that the implementation of this study was deferred. AEA has not completed any additional work on this study since the June 2014 ISR. Therefore, there are no results or updates to report for this study.

4. SUMMARY OF STUDY 10.19 DOCUMENTS

Since filing of the RSP in 2012, AEA and FERC have prepared several documents pertaining to this study. To aid review by FERC staff and licensing participants, each of these documents is listed below. Each of these documents is accessible on AEA's Project licensing website (<http://www.susitna-watanahydro.org/type/documents/>) by clicking on the entry in the "Link" column in the table. In addition, these documents are available on FERC's eLibrary system (<http://www.ferc.gov/docs-filing/elibrary.asp>), in Docket No. P-14241.

Title	Date	Description	Link
10.19. Evaluation of Wildlife Habitat Use Study (Revised Study Plan)	12/14/2012	This document presents the plan for this study, including goals, objectives, the study area, and proposed study methods for the wildlife habitat use study.	RSP for Study 10.19
FERC Study Plan Determination for Study 10.19	2/1/2013	This document presents FERC approval of Study 10.19, which approved AEA's Revised Study Plan with no recommended changes.	FERC SPD for Study 10.19
Draft Initial Study Report for Study 10.19	2/3/2014	This draft of the ISR summarized the study methods and variances during the 2013 study season, and presented preliminary data collected for Study 10.19. This draft ISR was later republished as Part A of the final ISR.	Draft ISR for Study 10.19
Initial Study Report for Study 10.19	6/3/2014	This document is the Initial Study Report (Parts A, B and C) for Study 10.19. Part A republishes the Draft ISR. Part B identifies supplemental information and errata in Part A. Part C presents study modifications and plans for completing the study.	ISR Part A for Study 10.19 ISR Part B for Study 10.19 ISR Part C for Study 10.19
Initial Study Report Meetings, October 21, 2014 (Parts A and B)	11/15/2014	Transcripts and AEA's agenda and PowerPoint presentations for the ISR meeting concerning the Project wildlife studies filed by AEA.	Transcripts from ISR Meeting Materials from ISR Meeting

5. NEW STUDY DOCUMENTATION SUPPLEMENTING THE ISR

Because this study has been deferred, no additional reports or documents are available to supplement the ISR for Study 10.19.

6. VARIANCES

6.1. 2013 Study Season

The following variance is reported in the June 2014 ISR:

- This study was not implemented in 2013. The study will be fully completed in the next study season. Deferring the entire study to the next study season will meet the Study Plan objectives by initiating work only after completion of the two mapping studies upon which this study depends: the Vegetation and Wildlife Habitat Mapping Study in the Upper and Middle Susitna Basin (Study 11.5) and the Riparian Vegetation Study Downstream of the Proposed Susitna-Watana Dam (Study 11.6), as contemplated by the Study Plan (RSP Section 10.19.4.2).

6.2. 2014 Study Season

Because this study has been deferred, no variances were encountered during the 2014 study season.

7. STUDY PLAN MODIFICATIONS

7.1. Modifications Identified in ISR

Section 7 of the ISR (Part C) details modifications for this study following the 2013 study season. These modifications are generally summarized as follows:

- The study area has changed from that described in the RSP (Section 10.19.3). As described in Section 1.3 of the ISR Part D Overview, AEA has eliminated the Chulitna Corridor and added the Denali East Option road and transmission line alternative corridor to the study area. For this study, the corridor addition to the study area includes a 2-mi buffer surrounding the center lines of the road and transmission line alignments of the new Denali East Option (ISR 10.19, Part C, Figure 7.1-1), which matches the 2-mi buffers used on the other potential road and transmission line corridors included in the study area. The study area buffer size was described as 4 mi in the Study Plan, but has been reduced to 2 mi (see the second modification below).
- For those portions of the study area in the Upper and Middle Susitna Basin, the RSP (Section 10.19.3) indicates that the study area consists of a 4-mi buffer surrounding those areas that could be directly affected by Project construction and operations (the proposed Watana Reservoir, the Project dam site and associated infrastructure areas, and the three

alternative Susitna–Watana Transmission Line/Road corridors). The study area buffer in the Upper and Middle Susitna Basin had been modified to 2-mi (ISR 10.19, Part C, Figure 7.1-1) following the reduction in the study area buffer for the mapping of wildlife habitats in the Vegetation and Wildlife Habitat Mapping Study in the Upper and Middle Susitna Basin (ISR 11.5, Part C, Section 7). With this modification, the study area will match the 2-mi buffer study area used in Study 11.5. The 2-mi buffer study areas used in both studies will result in sufficient information to rank habitat values for wildlife species and to assess impacts to those species in the License Application (see ISR 11.5, Part C, Section 7.1.2).

- The RSP (Section 10.19.4.1) indicates that only bird species of conservation, management, cultural, or ecological concern would be selected for analysis of habitat use for this study. This approach will be modified so that all bird species recorded in the study area will be evaluated for use of each of the wildlife habitats mapped in Studies 11.5 and 11.6. Including habitat evaluations for all bird species will provide licensing participants with more information to use in assessing baseline conditions and impacts of the proposed Project because habitat value rankings will be available for all recorded bird species and all mapped wildlife habitats in the Project area in the Upper and Middle Susitna Basin and in riparian areas along the Susitna River downstream of the Project dam site. This modification will enhance the achievement of the study objectives by providing a larger data set for analysis of baseline conditions and Project impacts.

7.2. Modifications Identified since the June 2014 ISR

Other than the modifications identified in Section 7.1, AEA has identified no modifications of the methods for this study since the June 2014 ISR.

8. STEPS TO COMPLETE THE STUDY

In light of the variances and modifications described above, the steps necessary for AEA to complete this study are summarized below:

- Select a set of wildlife species of concern to evaluate for habitat use (RSP Section 10.19.4.1).
- Conduct a review of the scientific literature to assemble applicable habitat-use information for the bird, mammal, and amphibian species occurring in Interior and Southcentral Alaska that will be evaluated in this study (RSP Section 10.19.4.1).
- Categorically rank wildlife habitat values for each wildlife species and mapped wildlife habitat (see Studies 11.5 and 11.6) based on Project-specific wildlife survey data (Studies 10.5 through 10.18), the scientific literature, and field experience with the wildlife species in question elsewhere in Alaska (RSP Section 10.19.4.1).