

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

**Paleontological Resources Study
Study Plan Section 13.6**

**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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1. INTRODUCTION

Section 1 (Part A) of the June 2014 ISR for this Paleontological Resources Study (Study Plan 13.6) 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. The most recent work conducted by AEA on this Study 13.6 is detailed in the June 2014 ISR, as AEA has not conducted any additional work since that time.

The primary purpose of this Part D Supplemental Information to the ISR for Study 13.6 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 13.6 in a manner that meets the objectives of the Commission-approved Study Plan.

2. BACKGROUND

2.1. Purpose of Study

The goal of this study is to determine the effects of the proposed Project on paleontological resources by locating, documenting, and evaluating paleontological resources within the study area

2.2. Study Components

The study components for this study are summarized as follows:

- Identify potential impacts to paleontological resources by determining the geologic units that may be impacted by the proposed Project and the associated Potential Fossil Yield Classification (PFYC) classes.
- Determine the need for field surveys and monitoring efforts.
- Undertake field surveys.

3. STATUS, HIGHLIGHTED RESULTS, AND ACHIEVEMENTS

The following tasks were completed in 2013 and reported in Part A of the ISR for Study 13.6:

- The study team conducted a literature review and prepared a map of known fossil finds based on information from such review.

- The archaeological field crews discovered four fossil plant discoveries during field investigations.

Because AEA has not conducted additional work on this study since the June 2014 ISR, there are no further updates to report for Study 13.6. The information presented in the ISR (Part A) is up to date.

4. SUMMARY OF STUDY 13.6 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
13.6. Paleontological Resources (Revised Study Plan)	12/14/2012	This document presents the plan this study, including goals, objectives, the study area, and proposed study methods for paleontological resources.	RSP for Study 13.6
FERC Study Plan Determination for Study 13.6	2/1/2013	FERC SPD for Study 13.6, which approved the study with no additional recommendations.	FERC SPD for Study 13.6
Draft Initial Study Report for Study 13.6	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 13.6. This draft ISR was later republished as Part A of the final ISR.	Draft ISR for Study 13.6
Initial Study Report for Study 12.6	6/3/2014	This document is the Initial Study Report (Parts A, B and C) for Study 13.6. 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 13.6 ISR Part B for Study 13.6 ISR Part C for Study 13.6
Initial Study Report Meetings, October 22, 2014 (Parts A and B)	11/14/2014	Transcripts and AEA's agenda and PowerPoint presentations for the ISR meeting concerning the Project paleontological studies filed by AEA.	ISR Meeting Materials ISR Meeting Transcripts

5. NEW STUDY DOCUMENTATION SUPPLEMENTING THE ISR

Because AEA has not conducted additional work on this study since the June 2014 ISR, no additional reports or documents are available to supplement the ISR for this Study 9.10.

6. VARIANCES

6.1. 2013 Study Season

The following variance is reported in the June 2014 ISR.

- While AEA completed an initial literature review relevant to the determination of geologic units that may be impacted by the Project and associated PFYC classes, AEA did not conduct field surveys in the 2013 study season.

6.2. 2014 Study Season

Because AEA has not conducted additional work on this study since the June 2014 ISR, 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 one modification for this study:

- As explained in Section 1.3 of the ISR Part D Overview and Section 7.1.2 of Part C of the ISR for this study, the study area has been changed from that described in the RSP (Section 13.6.3) by adding the Denali East Option road and transmission line alternative corridor to the study area.

7.2. Modifications Identified since the June 2014 ISR

Other than the modification identified in Section 7.1 regarding the study area, AEA has identified one additional modification to this study since filing the June 2014 ISR:

- As explained in Section 1.3 of the ISR Part D Overview, AEA removed the Chulitna Corridor from the study area.

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:

- *Identify potential impacts to paleontological resources:* The study team will determine the geologic units that may be impacted by the proposed Project and the associated PFYC classes. Information about known localities and previous paleontological research will be consulted in making these determinations, requiring examination of mapped rock units and archived paleontological records at the USGS and other agencies. Based on this information, AEA will evaluate the risk of impacting significant paleontological resources.
- *Determine the need for field survey and monitoring efforts:* The need for field survey and monitoring efforts will vary by location and will be determined largely upon the basis of the PFYC classifications for the particular location.
- *Field Surveys:* Field surveys will generally be undertaken for PFYC Class 4 and 5 units, especially exposed bedrock areas (Class 4a and 5a). Class 3 units may or may not require a survey. Local conditions, such as vegetated areas or pockets of bedrock exposure, may affect the need and intensity of field surveys.