

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

**Rare Plant Study
Study Plan Section 11.8**

**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.

Prepared by

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1. INTRODUCTION

Section 1 (Part A) of the June 2014 ISR for this Rare Plant Study (Study Plan 11.8) 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 11.8 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 11.8 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 11.8 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 locate populations of rare vascular plant species that may occur in the Upper and Middle Susitna River Basin (upstream of Gold Creek) and may be affected by the Project.

The study objectives are established in RSP Section 11.8.1:

- Identify habitats in the Project area that may harbor rare vascular plant species previously found within a broad region surrounding the Project area.
- Locate populations of rare vascular plant species that may occur in those portions of the Project area that would be disturbed by Project construction and operations activities.
- Estimate population sizes for any rare species found and map their locations

2.2. Study Components

This study consists of the following components:

- Compile a list of rare vascular plant species that were previously found within a broad region surrounding the Project area (from collections records) and identify the habitats in the Project area that may harbor those rare species.
- Locate populations of rare vascular plant species occurring in those portions of the Project area that could be disturbed by Project construction and operations activities.
- Estimate population sizes for any rare species found and map their locations.

3. STATUS, HIGHLIGHTED RESULTS, AND ACHIEVEMENTS

The following tasks were completed in 2013 and reported in Part A of the ISR for Study 11.8.

- The habitats for a list of rare vascular plant species that could occur in the study area (based on previous collections of rare species in the region) were identified and field transects were allocated to survey those habitats.
- Two field surveys were conducted to search for rare plants in the study area. Field surveys were conducted in early July and late July/early August 2013.
- Populations of two rare species were located: *Vicia americana* in the Gold Creek Camp area and *Eriophorum viridicarinatum* on a terrace above the Susitna River near the mouth of Watana Creek. Population sizes for both species were estimated in the field.

Because AEA has not conducted additional work on this study since the June 2014 ISR, there are no further updates to report for Study 11.8. The information presented in the ISR (Part A) is up to date.

4. SUMMARY OF STUDY 11.8 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
11.8. Rare Plant 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 rare plants.	RSP for Study 11.8
FERC Study Plan Determination for Study 11.8	2/1/2013	This document presents FERC approval of Study 11.8, which approved AEA's Revised Study Plan with no recommended changes.	FERC SPD for Study 11.8
Draft Initial Study Report for Study 11.8	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 11.8. This draft ISR was later republished as Part A of the final ISR.	Draft ISR for Study 11.8

Title	Date	Description	Link
Initial Study Report for Study 11.8	6/3/2014	This document is the Initial Study Report (Parts A, B and C) for Study 11.8. 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 11.8 ISR Part B for Study 11.8 ISR Part C for Study 11.8
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 botanical studies filed by AEA	Transcripts from ISR Meeting Materials from ISR Meeting

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 11.8.

6. VARIANCES

6.1. 2013 Study Season

As noted in Section 4 of the ISR (Part A) for this study, AEA encountered no variances when implementing this study in 2013.

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 11.8.3) 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 modifications described above, the steps necessary for AEA to complete this study are summarized below:

- Conduct field surveys to locate any additional populations of rare vascular plant species that occur in those portions of the Project area that were not surveyed in 2013 and could be disturbed by Project construction and operations activities (RSP Section 11.8.4.1); and
- Estimate population sizes for any rare vascular plant species found and map their locations in GIS (RSP Section 11.8.4.1).