

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

**Aquatic Resources Study within the Access Alignment,
Transmission Alignment, and Construction Area
Study Plan Section 9.13**

**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 Aquatic Resources Study within the Access Alignment, Transmission Alignment, and Construction Area (Study Plan 9.13) 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 detailed below, AEA's recent activities for Study 9.13 consisted of the following:

- On October 15, 2014, AEA held an ISR meeting for the Fisheries studies.

The primary purpose of this Part D Supplemental Information to the ISR for Study 9.13 is to identify all documents associated with this study, provide a summary of variances and modifications presented in the ISR, and identify AEA's plans for completing Study 9.13 in a manner that meets the objectives of the Commission-approved Study Plan.

2. BACKGROUND

2.1. Purpose of Study

The goals of the study are to: (1) characterize baseline conditions of the aquatic habitat and fish species composition in the vicinity of the proposed Project's infrastructure including access roads, transmission lines, airports, construction areas, and operation facilities; (2) evaluate the potential for the proposed Project's infrastructure to affect these resources; (3) provide data for determining the least environmentally damaging alternative for purposes of U.S. Army Corps of Engineers issuance of a dredge and fill permit under Section 404(c) of the Clean Water Act; and (4) provide data for developing any necessary PM&E measures, which may include resource management and monitoring plans.

The study objectives are established in RSP Section 9.13.1:

- Characterize the aquatic habitats and fish assemblages at potential stream crossings within a 200-meter (650-foot) buffer zone along proposed access road and transmission line alignments.
- Describe aquatic habitats and species present within the construction area for the dam and related hydropower facilities.

2.2. Study Components

This study consists of the following components:

- Synthesis of existing information.

- Field data collection of aquatic habitat and fish distribution.

3. STATUS, HIGHLIGHTED RESULTS, AND ACHIEVEMENTS

The following tasks were completed in 2013 and reported in Part A of the ISR for Study 9.13:

- The study team reviewed historical information and assembled fish distribution and abundance data from studies conducted in 2012 and 2013 (RSP Sections 9.5.1 and 9.6.1), data from the 2012 studies of barriers to fish passage (RSP Section 9.12.1) to construct preliminary summary tables and maps for each access corridor.
- The study team coded streams and water bodies by fish presence (e.g., anadromous fish, resident fish, no fish captured or observed) and identified streams and water bodies for which no data records were found. Locations were characterized as follows: (1) sites not previously surveyed; (2) sites with no previously documented fish presence; (3) sites with fish presence documented downstream of the potential crossing location; and (4) sites with fish presence documented upstream of the potential crossing location.

Because AEA has not conducted additional work on this study since the June 2014 ISR, there are no further updates to report for Study 9.13. The information presented in the ISR (Part A) is up to date.

4. SUMMARY OF STUDY 9.13 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
9.13. Aquatic Resources Study within the Access Alignment, Transmission Alignment, and Construction Area (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 aquatic resources.	RSP for Study 9.13
FERC's Study Plan Determination for Study 9.13	2/1/2013	This document presents FERC approval of Study 9.13, which approved AEA's Revised Study Plan with no recommended changes.	FERC SPD for Study 9.13
Draft Initial Study Report for Study 9.13	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 9.13. This draft ISR was later republished as Part A of the final ISR.	Draft ISR for Study 9.13

Initial Study Report for Study 9.13	6/3/2014	This document is the Initial Study Report (Parts A, B and C) for Study 9.13. 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 9.13 ISR Part B for Study 9.13 ISR Part C for Study 9.13
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 fish and aquatics 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 9.13.

6. VARIANCES

6.1. 2013 Study Season

The following variances are reported in the June 2014 ISR:

- As described in RSP Section 9.13.4.1, the synthesis of existing information from Alaska Freshwater Fish Inventory (AFFI) was intended to fully occur during 2013 prior to field data collection to identify data gaps and to prioritize sampling effort. As of the June 2014 ISR, a preliminary synthesis of currently available data had been prepared. However, other aspects of this task, including: incorporation of existing data into a geospatial database, identification of data gaps, prioritization of initial sampling and refinement of field sampling, and obtaining input from agencies were deferred.
- RSP Section 9.13.4.2 noted that AEA would undertake field data collection in the study area during 2013. The study team did not perform field work in 2013 due to lack of access to Cook Inlet Region Working Group lands.

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 modifications for this study following the 2013 study season. These modifications are generally summarized as follows:

- As explained in Section 1.3 of the ISR Part D Overview and 9.13 ISR Part C, Section 7.1.2, the study area has been changed from that described in the RSP (Section 9.13.3) by adding the Denali East Option road and transmission line alternative corridor to the study area.
- As described in Study 9.13 ISR Part C, Section 7.1.2 AEA has deferred completion of field data collection of aquatic habitat and fish distribution, and plans to complete the field work in a single study season. AEA will maintain the ability to fill in data gaps and address realignment needs related to aquatic resources with the completion of field work in one study season.

7.2. Modifications Identified since the June 2014 ISR

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:

- Continue synthesis of existing information on aquatic habitats and fish assemblages, including: incorporation of existing data into a geospatial database, identification of data gaps, prioritization of initial sampling and refinement of field sampling, and obtaining input from agencies.
- Conduct field data collection efforts along the potential access and transmission corridors and in the vicinity of construction areas and potential airport locations.
- Conduct data analysis and reporting, including incorporating data generated in this study into the Project's geospatial database.