

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

**Health Impact Assessment Study
Study Plan Section 15.8**

**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 Health Impact Assessment Study (Study Plan 15.8) 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. However, AEA has made meaningful progress with Study 15.8 since the filing of the ISR in June 2014. As detailed below, AEA's recent activities for Study 15.8 have consisted of the following:

- Community health facilities and services field activities in the Middle Copper River Basin communities of Tazlina, Gakona, and Gulkana.
- Data gap review of interdependent study ISRs.
- Data gap review of Engineering Feasibility Study (December 2014).
- Review of Section 5.1 Baseline Health Conditions of Health Impact Assessment Study Plan Section 15.8 to determine which data could be updated since the filing of the report.
- On October 15, 2014, AEA held an ISR meeting for the Health Impact Assessment Study.
- The study team completed the 2014-2015 Study Implementation Report in November 2015.

The primary purpose of this Part D Supplemental Information to the ISR is to report on the implementation of the Study Plan from the filing of the ISR in June 2014, through the filing of this ISR Part D. In light of this additional implementation, this Part D also identifies AEA's plans for completing Study 15.8 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 analyze the potential positive and negative impacts of the Project on the health of residents in the impacted community.

The study objectives are established in RSP Section 15.8.1.1:

- Identify potentially affected communities (PACs) and establish a community engagement plan (where relevant).

- Through a review of the FERC scoping meetings and ongoing community engagement, identify public issues and concerns about how community health might be affected during construction and operation of the Project.
- Collect baseline health data at the state level, borough, or census area level, tribal level, and at the potentially affected community level, as possible.
- Identify data gaps and determine the most efficient method to fill those gaps, through community consultation and coordination with other studies, such as the Subsistence Resources Study (Study 14.5), Regional Economic Evaluation Study (Study 15.5), Social Conditions and Public Goods and Services Study (Study 15.6), and Recreation Resources Study (Study 12.5).
- Evaluate the baseline data against the Project description to initially determine the nature and extent of potential impact pathways, both positive and negative.
- Prepare a Health Impact Assessment report that is transparent, scientifically rigorous, and understandable to the public.

2.2. Study Components

The study consists of the following components:

- Identify PACs and establish a community engagement plan.
- Identify public issues and concerns regarding how community health might be affected during construction and operation of the Project.
- Collect baseline health data at the state, borough, or census area level, tribal level, and PAC level, as available.
- Identify data gaps and determine the most efficient method to fill those gaps, through community consultation and coordination with other interdependent studies.
- Evaluate the baseline data against the Project description to initially determine the nature and extent of potential impact pathways, both positive and negative.

3. STATUS, HIGHLIGHTED RESULTS, AND ACHIEVEMENTS

The following tasks were completed in 2013 and reported in Part A of the June 2014 ISR for Study 15.8:

- The study team developed Project-specific criteria for establishing the PAC's analysis framework (PACs for health may not be the same as for other social sciences and must be established).
- The study team coordinated through community engagement, other social study areas, and other AEA licensing participant engagement programs to gather enough of the appropriate information to meet HIA needs.

- The study team identified potential health concerns and issues related to the Project.
- The study team initiated an analysis of available federal, state, regional, tribal, community, and household level health data.

The study team has completed the following activities for Study 15.8 since the June 2014 filing of the ISR:

- Implementation of community health facilities and services field activities in the Middle Copper River Basin communities of Tazlina, Gakona, and Gulkana.
- The study team conducted a complete data gap review to determine steps needed to complete the study. This included a review of the interdependent studies to determine which gaps still remain for these studies. A review of the Engineering Feasibility Study was also performed to determine which project description elements are still needed to complete the HIA.

4. SUMMARY OF STUDY 15.8 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
15.8. Health Impact Assessment 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 Health Impact Assessment Study.	RSP for Study 15.8
FERC Study Plan Determination for Study 15.8	2/1/2013	This document presents FERC approval of Study 15.8, which approved AEA's Revised Study Plan with no recommended adjustments.	FERC SPD for Study 15.8
Draft Initial Study Report for Study 15.8	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 15.8. This draft ISR was later republished as Part A of the final ISR.	Draft ISR for Study 15.8

Title	Date	Description	Link
Initial Study Report for Study 15.8	6/3/2014	This document is the Initial Study Report (Parts A, B, and C) for Study 15.8. 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 15.8 ISR Part B for Study 15.8 ISR Part C for Study 15.8
Initial Study Report Meetings, October 23, 2015 (Parts A and B)	11/15/2014	Transcripts and AEA's agenda and PowerPoint presentations for the ISR meeting concerning Health Impact Assessment filed by AEA.	Transcripts from ISR Meeting Materials for ISR Meeting
Health Impact Assessment Study (15.8) – 2014-2015 Study Implementation Report	11/6/2015	Study Implementation Report: a summary of results in 2014-2015.	2014 SIR for Study 15.8

5. NEW STUDY DOCUMENTATION SUPPLEMENTING THE ISR

The following table identifies and describes additional reports and other documents that update, refine, or otherwise supplement certain sections of the ISR pertaining to this Study 15.8, during AEA's continued implementation of the Study Plan since the ISR was filed in June 2014.

ISR Reference	Description
Part A, Section 4	This Section is updated and supplemented by the Study Implementation Report Section 4, describing 2014–2015 Study Plan implementation.
Part A, Section 5	This Section is updated and supplemented by the Study Implementation Report Section 5, describing the results of 2014-2015 Study Plan implementation.

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

As noted in Section 4 of the Study Implementation Report for this study, AEA encountered no variances when implementing this study in 2014.

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 HIA analysis included in the Updated Study Report (USR) will not serve as a final HIA for the Project. The analysis included in the USR will serve as a template that can be updated and included in the FERC License Application once the AEA Project proposal is finalized. The USR, therefore, will not describe specific impacts or include a ranking and rating, but will include a “high level” overview of potential impact mechanisms and effects.

7.2. Modifications Identified since the June 2014 ISR

As detailed in the Study Implementation Report for this study, AEA plans modifications to this study to complete the study in a manner that meets Study Plan objectives. These modifications are generally summarized as follows:

- AEA will update baseline health data to the most current available to perform the HIA.

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. As necessary and appropriate, these steps have been updated from those appearing in Section 7 of the ISR (Part C):

- As described in Section 7.2, the baseline health data reported in the ISR will be updated to the most current available.
- Review all interdependent study results relevant for HIA input and communicate with study leads regarding these results, to evaluate potential impact mechanisms.
- Continue follow up as appropriate with key informant interviews in Health related PACs after TLK workshop processes to identify cultural health beliefs and concerns.
- Continue to fill baseline data gaps identified during the ISR process, and develop methodology to fill data gaps, as appropriate, where no data currently exists.
- Identify potential impact mechanisms and potential health effects by Health Effects Category to provide input into Project design, construction, transportation routes, housing, etc.
- All health-related data collected will undergo complete analysis for compliance with the ADHSS Section of Epidemiology’s recently updated data release protocols before being included in the final HIA document, or released to other agencies or entities. All results

of key informant interviews will be aggregated geographically according to HEC and by potential impact mechanisms.