

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

**Aesthetic Resources Study  
Study Plan Section 12.6**

**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.*

Prepared by

AECOM

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## 1. INTRODUCTION

Section 1 (Part A) of the June 2014 ISR for the Aesthetic Resources Study (Study Plan 12.6) 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. However, AEA has made meaningful progress with Study 12.6 since the filing of the ISR in June 2014. As detailed below, AEA's recent activities for Study 12.6 have consisted of the following:

- On October 23, 2014 AEA held an ISR meeting for the Aesthetics Resources Study.
- The study team analyzed baseline long-term and short-term soundscape data collected during the 2013 field season.
- In October 2015, the study team prepared the Study Implementation Report for Study 12.6, which summarizes the results of the soundscape analysis.

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 12.6 in a manner that meets the objectives of the Commission-approved Study Plan.

## 2. BACKGROUND

### 2.1. Purpose of Study

The goals and objectives of the study, as set forth in RSP Section 12.6.1, are to inventory and document baseline aesthetic (e.g., visual, auditory) conditions within the Aesthetic Resources Study area and evaluate the potential effects to aesthetic resources that may result from construction and operation of the proposed Project. The analysis will focus on assessing these potential impacts and will help identify potential design and other mitigation options.

### 2.2. Study Components

The study consists of the following components:

- Development of viewshed models for major project features, and both pre- and post-conditions of the Susitna River.
- Collect photography and field observations at identified Key Observation Points (KOPs) to determine baseline visual resource conditions.

- Desktop data collection to assess scenic quality, visual distance zones, and visual sensitivity; collecting long-term and short-term sound data at select locations across all seasons to determine baseline soundscape conditions.
- Focus groups to gather additional data on visual sensitivity and address visual preference of each alternative.
- Coordination with other resource disciplines to obtain data and information relevant to the aesthetics resources study.
- Generating photosimulations of the proposed project components from select KOPs for assessing impacts to visual resources.
- Modeling existing and proposed soundscape for assessing potential sound impacts.
- Identifying avoidance and mitigation measures based on baseline data, impact analyses and design recommendations.

### **3. STATUS, HIGHLIGHTED RESULTS, AND ACHIEVEMENTS**

This multi-year study was initiated in 2012 with preliminary evaluations the results of which are reported in the 2012 technical memorandum for this study. The following tasks were completed in 2013 and reported in Part A of the June 2014 ISR for Study 12.6:

- Completion of viewshed models for each road and transmission corridor considered, including the Denali East Option road and transmission line corridor.
- Identification of 30 planning documents/websites having a nexus to the primary and/or secondary study area.
- Classification of lands within the primary and secondary study areas into 31 discrete landscape character types based on shared attributes of landform, vegetation, water, and cultural modification.
- Baseline field assessment at 135 analysis locations across the four seasons.
- Baseline data collection of landscape character, scenic quality and visual sensitivity.
- Collection of baseline photography to support future development of photosimulations.
- Reviews of laws, ordinances, regulations, standards, and guidance that may influence the Project construction and operation noise impact assessment.
- Long- and short-term recording of baseline soundscape data.

The study team has completed the following activities for Study 12.6 since the June 2014 filing of the ISR:

- The study team analyzed and summarized baseline soundscape data.

- On October 23, 2014 AEA held an ISR meeting for the Aesthetics Resources Study.

#### 4. SUMMARY OF STUDY 12.6 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
12.6. Aesthetics Resources 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 aesthetic resources.	<a href="#">RSP for Study 12.6</a>
FERC Study Plan Determination for Study 12.6	2/1/2013	This document presents FERC approval of Study 12.6, which approved AEA's Revised Study Plan with recommended adjustments.	<a href="#">FERC SPD for Study 12.6</a>
Aesthetics Resources Report (Technical Memorandum)	2/11/2013	Report on 2012 Aesthetics Resources Study.	<a href="#">Feb. 2013 TM for Study 12.6</a>
Draft Initial Study report for Study 12.6	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 12.6. This draft ISR was later republished as Part A of the final ISR.	<a href="#">Draft ISR for Study 12.6 (File 1)</a> <a href="#">Draft ISR for Study 12.6 (File 2)</a>
Initial Study Report for Study 12.6	6/3/2014	This document is the Initial Study Report (Parts A, B, and C) for Study 12.6. 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.	<a href="#">ISR Part A for Study 12.6 (File 1)</a> <a href="#">ISR Part A for Study 12.6 (File 2)</a> <a href="#">ISR Part B for Study 12.6</a> <a href="#">ISR Part C for Study 12.6</a>
Initial Study Report Meetings, October 23, 2014	11/5/2014	Transcripts and AEA's agenda and PowerPoint presentations for the ISR meeting concerning the Project aesthetic studies.	<a href="#">Transcripts from ISR Meeting</a> <a href="#">Materials from ISR Meeting</a>
Aesthetic Resources Study (12.6) – 2014 Study Implementation Report	11/4/2015	Study Implementation Report: a summary of the updated and complete soundscape analysis.	<a href="#">2014 SIR for Study 12.6</a>

## 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 12.6, 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 2014 Study Implementation report, describing the 2014 study plan implementation.
Part A, Section 5	This Section is updated and supplemented by the 2014 Study Implementation Report, Section 5, describing the results of 2014 study plan implementation.

## 6. VARIANCES

### 6.1. 2013 Study Season

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

### 6.2. 2014 Study Season

As noted in Section 12.6 of the 2014 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

As detailed in Section 7 of the ISR (Part C), AEA plans no modifications of the methods for this study. However, the study area has been changed from that described in the RSP (Section 12.6.3). 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.

### 7.2. Modifications Identified since the June 2014 ISR

As detailed in the Study Implementation Report, AEA plans no modifications of the methods for this study.

## 8. STEPS TO COMPLETE THE STUDY

In light of the modification described above, the steps necessary for AEA 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):

- Develop viewshed models for pre- and post-Project conditions of the inundation zone of the Susitna River to depict expected changes in viewshed areas (RSP Section 12.6.4).
- Baseline data collection of basic landscape components (RSP Section 12.6.4).
- Produce photosimulations to illustrate the expected visibility of Project components (RSP Section 12.6.4).
- Modeling of Project sound levels to complete the soundscape analysis (RSP Section 12.6.4).