

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

**Cultural Resources Study  
Study Plan Section 13.5**

**Initial Study Report  
Part C: Executive Summary and Section 7**

Prepared for

Alaska Energy Authority



**SUSITNA-WATANA HYDRO**

*Clean, reliable energy for the next 100 years.*

Prepared by

Northern Land Use Research Alaska LLC

Charles M. Mobley & Associates

URS Corporation

Ahtna, Inc.

Gwanshii

June 2014

## TABLE OF CONTENTS

**Executive Summary ..... ii**

**7. Completing the Study ..... 1**

    7.1. Proposed Methodologies and Modifications ..... 1

        7.1.1. Decision Points from Study Plan ..... 1

        7.1.2. Modifications to Study Plan..... 1

    7.2. Schedule ..... 2

    7.3. Conclusion ..... 2

    7.4. Figures..... 3

## LIST OF FIGURES

Figure 7.1-1 Map of the direct APE including the Denali East Option. .... 4

## EXECUTIVE SUMMARY

Cultural Resources Study 13.5	
Purpose	The goals of the Cultural Resources Study plan are to systematically inventory cultural resources within the Area of Potential Effects (APE), evaluate for National Register of Historic Places (NRHP) eligibility the inventoried cultural resources within the APE that may be affected by the Project, and assess Project-related effects on National Register-eligible historic properties within the APE (36 CFR § 800.5). Information from this study will be used to develop a Historic Properties Management Plan for the appropriate management of historic properties affected by the Project.
Status	The study team is currently analyzing field data collected in 2012 and 2013. These data sets are incomplete. Data collection will continue in 2014 and 2015. The ethnogeographic component for Ahtna commenced in 2013, and AEA plans to initiate this work for Dena'ina in 2014.
Study Components	The Cultural Resources Study has three components: <ul style="list-style-type: none"> <li>• Inventory and Evaluation: Systematic inventory of archaeological and structural cultural resources within the APE and NRHP evaluation of those that may be affected by the Project.</li> <li>• Ethnogeography: Assembly of ethnographic and linguistic information to help inventory and evaluate historic properties—particularly Traditional Cultural Properties—that may be affected by the Project.</li> <li>• Paleoenvironmental: A lake-coring effort to obtain environmental information for evaluating the prehistoric cultural resources in their temporal and ecological context.</li> </ul>
2013 Variances	<p>The Study Plan (RSP Section 13.5.4.7) stated that all Traditional Cultural Properties information would be incorporated into a geodatabase. To date, however, there has not been sufficient data to support such a file.</p> <p>The Dena'ina ethnogeography component of the Study Plan (FERC February 11 SPD) was not initiated in 2013 due to ongoing discussions with Cook Inlet Regional Working Group (CIRWG) members.</p> <p>The study team received no responses to its recruitment and advertising efforts for the archaeological internship described in the Study Plan (RSP Section 13.5.4.11), so this program was not initiated in 2013.</p>
Steps to Complete the Study	AEA is advancing all three components of the cultural resource study in 2014 and 2015. The paleoenvironmental investigation will begin with a lake-coring effort in 2014, followed by detailed laboratory analyses of the resulting sediment cores. The ethnogeography investigation in 2014 will continue analysis of the 2013 fieldwork devoted to Ahtna use of the study area, and will also include an effort addressing Dena'ina use of the study area. The archaeological investigation in 2014 will focus on inventory of

Cultural Resources Study 13.5	
	<p>historic sites on state and federal lands; re-recording known sites on CIRWG, Ahtna, and Alaska Railroad Corporation (ARRC) lands; and survey for the Denali East Option.</p> <p>Cultural resource field tasks to be completed in 2015 include: inventory survey on private land within the direct APE; inventory survey on lands within the indirect APE; and evaluation of potentially affected sites on lands within the direct and indirect APE.</p>
Highlighted Results and Achievements	<p>Overall, the study is proceeding as planned. The archaeological investigation has recorded or re-recorded 167 Alaska Heritage Resource Survey (AHRS) sites in the direct APE, of which 85 are previously unknown cultural resources. Ethnogeographic information including a large Ahtna language place name database and atlas has been updated and integrated into site location models and geographic information systems databases.</p>

## 7. COMPLETING THE STUDY

### 7.1. Proposed Methodologies and Modifications

To complete the study, AEA will implement the methods in the Study Plan except as described in Sections 7.1.1 and 7.1.2. These activities include:

- *Inventory and Evaluation*: Systematic inventory of archaeological and structural cultural resources within the APE and NRHP evaluation of those that may be affected by the Project (RSP Sections 13.5.4.2, 13.5.4.3, 13.5.4.5 to 13.5.4.7).
- *Ethnogeography*: Assembly of ethnographic and linguistic information to help inventory and evaluate historic properties—particularly Traditional Cultural Properties—that may be affected by the Project (RSP Section 13.4.5.8).
- *Paleoenvironmental*: A lake-coring effort to obtain environmental information for evaluating the prehistoric cultural resources in their temporal and ecological context (RSP Section 13.5.4.4).

#### 7.1.1. Decision Points from Study Plan

RSP Section 13.5.4.5 provides that, following the Phase I inventory, AEA will prepare a recommendation for Phase II NRHP evaluation for sites that may be affected by the Project. As AEA completes the Phase I inventory, it will develop a written sampling strategy for the Phase II NRHP evaluation work, which will be circulated to the Cultural Resources Technical Work Group for review and comment before initiating the Phase II evaluation effort. Because some areas within the study area still require Phase I inventory (e.g., CIRWG lands, Denali East Option), the Phase II NRHP evaluation plan may be prepared and distributed in phases, as AEA completes the remaining inventory work.

#### 7.1.2. Modifications to Study Plan

As described in the ISR Overview and depicted in Figure 1, AEA has added the Denali East Option road and transmission corridor to the study area. The modified study area showing the Denali East Option is depicted in Figure 7.1-1. The addition of the Denali East Option expands the temporal scope of the archaeological investigation under the FERC-approved Study Plan.

Also, adding the Denali East Option to the direct APE could affect the sequence of Phase I inventory and Phase II NRHP evaluation within some parts of the study area. The FERC-approved Study Plan indicated that Phase I inventory within the direct APE would be conducted prior to Phase II NRHP evaluation (RSP Section 13.5.4.5). However, inventory work within the direct APE to date has not addressed CIRWG lands or sites reflecting the historic period on state and federal land. Additionally, the proposed Denali East Option creates the need for additional archaeological inventory to address the new lands being considered. Due to the amount of Phase I inventory work remaining, AEA does not anticipate completing this work in 2014. Consequently, 2015 could involve field investigations in which some sites are inventoried and

evaluated at the same time, rather than in the preferred seasonal phasing outlined in the Study Plan.

## 7.2. Schedule

In general, the schedule for completing the FERC-approved Study Plan is dependent upon several factors, including Project funding levels authorized by the Alaska State Legislature, availability required data inputs from one individual study to another, unexpected weather delays, the short duration of the summer field season in Alaska, and other events outside the reasonable control of AEA. For these reasons, the Study Plan implementation schedule is subject to change, although at this time AEA expects to complete the FERC-approved Study Plan through the filing of the Updated Study Report (USR) by February 1, 2016, in accordance with the ILP schedule issued by FERC on January 28, 2014.

With regard to this specific study, AEA expects to complete data collection in both the 2014 and 2015 study seasons. In 2014, AEA plans to: (1) complete field investigations for the paleoenvironmental component of the study; (2) begin ethnogeographic study of Dena'ina and complete the ethnogeography investigation of Ahtna use of the study area; and (3) conduct archaeological fieldwork, limited to recording known sites on CIRWG, Ahtna, and Alaska Railroad Corporation (ARRC) lands, surveying for historic period sites on state and federal land, surveying lands within the Denali East Option, and visiting one or more snow patches.

AEA plans to complete all remaining data collection and analysis for this study in 2015, which will be reported in the USR.

## 7.3. Conclusion

The ethnogeography and archaeology investigations in 2013 (and 2012 in the case of archaeology) along with the planned 2014 work continuing those studies and including a lake-coring effort, will further the objectives in the Study Plan. The 2014 ethnographic fieldwork focusing on Dena'ina use of the study area, and completion of the Ahtna ethnogeography effort of 2013, will provide context within which to evaluate historic sites, suggest site leads for the archaeological teams to investigate, and yield the information necessary to determine whether any traditional cultural properties (TCPs) are present. The lake-coring fieldwork in 2014 and the subsequent laboratory analyses of the sediment cores is expected to help establish a long-term model of regional environmental change within which to interpret the archaeological record. It may also suggest geomorphological criteria with which to target site discoveries dating to certain time periods. Evaluation of cultural resources will be aided by the more complete archaeological inventory, additional ethnogeography information including specific data on the potential for TCPs, and the initial results of the lake-coring effort.

This Subsistence Resources Study (Study 14.5) is contributing to the ethnographic study. AEA expects the approved Study Plan objectives for study to be achieved even with the addition of the Denali East Option road and transmission corridor to the study area, as there is adequate time to perform the field work in 2014 and 2015 and this modification will not affect the scope or methods of the investigations. The results of this study will be reported in the USR.

## 7.4. Figures



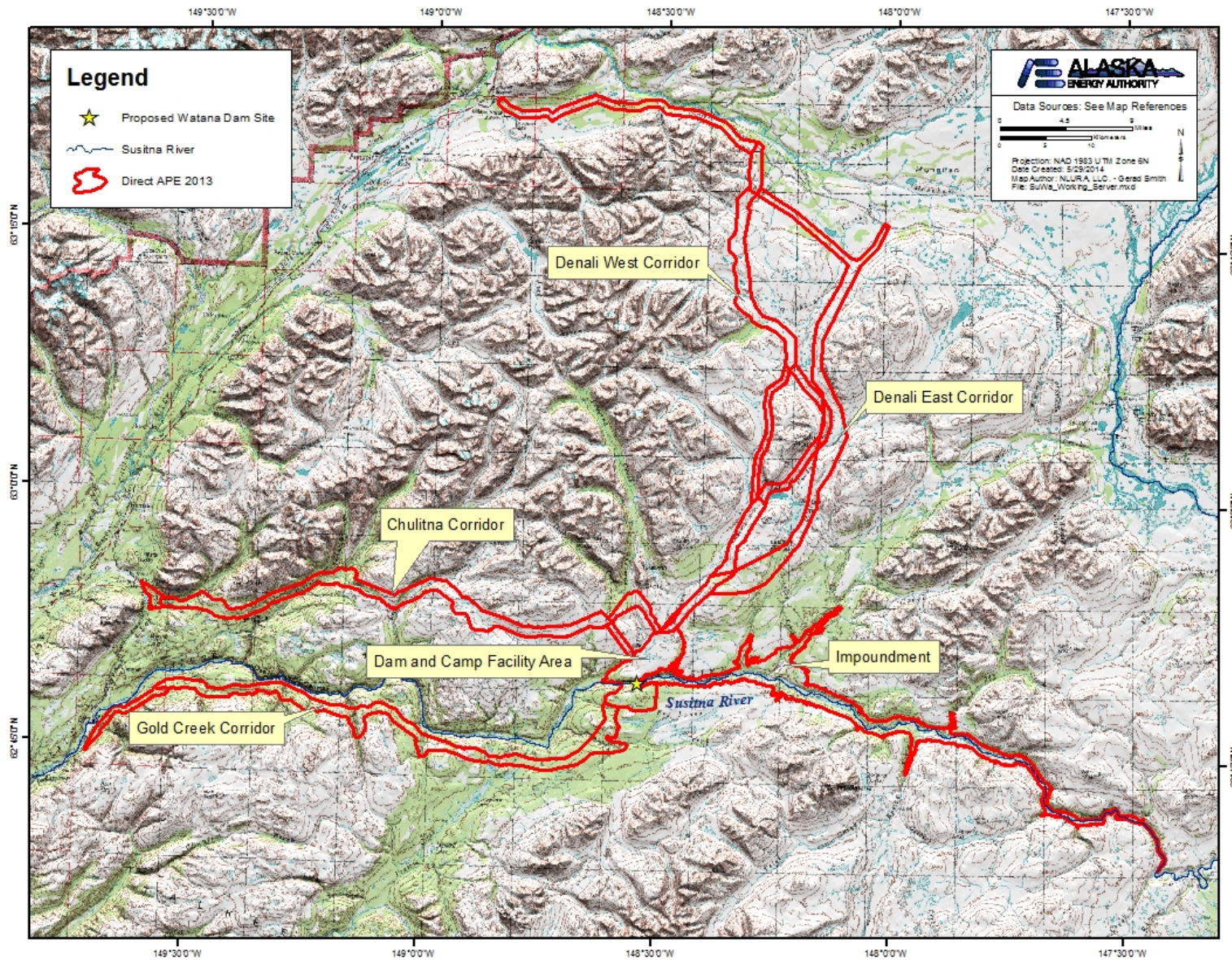


Figure 7.1-1 Map of the direct APE including the Denali East Option.