

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

**Cultural and Paleontological Resources
Study Plan Section 13 Introduction**

Final Study Plan

Alaska Energy Authority



July 2013

13. CULTURAL AND PALEONTOLOGICAL RESOURCES

13.1 Introduction

AEA is undertaking studies addressing the effects of the proposed Project on cultural and paleontological resources. Information from these studies will be used to assist in identifying appropriate protection, mitigation, and enhancement measures that will be proposed in the AEA license application.

The Cultural Resources Study Plan (Section 13.5) outlines the purpose and framework for evaluating the potential effects of the Project on “historic properties.” Historic properties are prehistoric or historic districts, sites, buildings, structures, or objects – including properties of traditional religious and cultural importance to an Indian tribe – that are distinguished from other cultural resources in that they are included in or eligible for inclusion in the National Register of Historic Places (National Register). Section 106 of the National Historic Preservation Act (NHPA) requires the Federal Energy Regulatory Commission (FERC) to take into account the effects of licensing a hydropower project on any historic properties in the Project’s Area of Potential Effect (APE). Under Section 106, moreover, FERC must provide the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the Project’s effects on historic properties. To help ensure compliance with Section 106, FERC requires license applications to include a report discussing cultural resources in the proposed Project’s APE that may be affected by the proposed Project.

The Cultural Resources Study Plan proposes to identify, inventory, document, record, and evaluate cultural resources within the proposed APE. “Cultural resources” is a more general term than historic properties and includes both tangible and intangible aspects of cultural systems. A cultural resource study plan typically investigates archaeological sites and objects from the past that may lie within the proposed study area. Material cultural resources such as stone tool artifacts are used to identify and evaluate sites. Non-material cultural resources such as traditional place names and ethnogeography are important for identifying sites and especially for evaluating site significance. Non-material evidence of past human activity is now unattainable in vast regions of Alaska, but, in the Project study area, Alaska Native entities still have strong contemporary and traditional ties to the land. As shown in Figure 13.1-1, Cook Inlet Region, Inc. (CIRI) has extensive landholdings in the vicinity of the impoundment and the Chulitna and Gold Creek corridors. Ahtna, Incorporated (Ahtna) holds land along the northern portion of the Denali corridor near Cantwell. In addition to these large contiguous parcels, the two Native corporations – created under the Alaska Native Claims Settlement Act (ANCSA) of 1971 – have also selected smaller parcels under that act’s Section 14(h)(1) addressing traditional village and cemetery sites. Much of the proposed Project area is located in the western portion of the traditional territory of the Ahtna Athabascans, which included the upper Susitna River drainage upstream from Talkeetna and the upper Nenana River. The study area also encompasses the periphery of the traditional territory of the Dena’ina Athabascans, including part of the Talkeetna Mountains and middle Susitna River (Kari and Fall 2003; de Laguna and McClellan 1981; Kari 2008). As addressed further in the discussion of ethnogeographic resources (Section 13.5.2.2), linguistic data from this area has been accumulating for over 30 years and will be incorporated into the Cultural Resources Study Plan.

The Paleontological Resources Study Plan (Section 13.6) outlines a framework for evaluating the potential effects of the Project on paleontological resources. The Alaska Historic Preservation Act (AHPA) requires the Alaska Department of Natural Resources (ADNR) to locate, identify, and preserve information on paleontological resources. The AHPA also authorizes ADNR, prior to the undertaking of public construction or improvements by a governmental agency of the State, to survey the affected area for such resources and investigate and record information pertaining to those resources found. In addition, the Bureau of Land Management (BLM) assesses potential impacts to paleontological resources for federal actions on public lands under the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA). The framework outlined in the Paleontological Resources Study Plan meets these requirements, ensuring that paleontological resources that may be affected by the proposed Project are properly located, documented, and evaluated.

13.2. Nexus Between Project Construction / Existence / Operations and Effects on Resources to be Studied

13.2.1 Cultural Resources

NHPA Section 106 requires FERC to take into account the effect that licensing a hydropower project may have on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. These historic properties can include archaeological sites and isolated finds (both precontact/prehistoric and post-contact/historic); properties of religious and cultural significance to an Indian tribe (as defined at 36 CFR § 800.16(m)), including traditional cultural properties (TCPs); and built environment resources (material resources of an architectural or engineering nature). Because FERC's licensing of a hydroelectric project is an undertaking that may have an effect on historic properties, and because it is not always possible to identify all project-related effects that may occur over the long term of a license, FERC typically enters into a programmatic agreement (PA) with the state historic preservation officer, which requires, in turn, license applicants to develop and implement a Historic Properties Management Plan (HPMP) to guide the consideration and management of effects on historic properties during the term of the license. The Alaska Historic Preservation Act (AHPA) requires similar considerations for historic properties on state land.

The construction and operation of the Project is expected to have both direct and indirect effects on cultural resources. Changes to the character or use of such resources may occur through ground disturbance associated with construction of the dam and associated linear facilities (e.g., roads and transmission lines); through inundation within the impoundment; and (over the license term) potentially through reservoir shoreline erosion and gradual development of recreational facilities and trails. In addition, downstream impacts to historic properties are possible due to Project-induced stream-flow variation. Changing patterns of subsistence and recreational land use brought about by the Project also have the potential to affect historic properties.

Determining whether construction and operation of the proposed Project will affect any historic properties requires: systematic inventory of cultural resources within the APE for the Project; National Register eligibility determinations on cultural resources that may be affected by the Project; and assessment of potential Project-related effects on all National Register-eligible cultural resources. The 2013 and 2014 cultural resource investigations will continue the inventory and evaluation process beyond that of 1978-1985 to include the revised geography of

the current Project's direct and indirect APEs. All inventoried cultural resources that may be affected by the proposed Project will be evaluated for National Register eligibility. Eligible historic properties will be analyzed for potential Project-related effects. These investigations will be conducted in consultation with the Alaska State Historic Preservation Officer (SHPO), ACHP, federal land management agencies, Alaska Native entities, local agencies, and landholders. Restricted consultation/distribution lists may be necessary to protect sensitive locational information on cultural resources.

13.2.2 Paleontological Resources

Under FLPMA and NEPA, federal actions that may impact or result in a loss of paleontological resources on federal public or split-estate lands are evaluated, and necessary mitigation is identified.

The construction and operation of the Project may have both direct and indirect effects on paleontological resources. Surface-disturbing activities could cause direct adverse impacts to paleontological resources through the damage or destruction of fossils or the disturbance of the stratigraphic context in which they are located. Indirect adverse impacts may be created from increased accessibility to fossils, potentially leading to looting or vandalism activities. (BLM IM 2009-011).

Paleontological resources are protected in Alaska under the AHPA. (AS 41.35.010-41.35.240). The AHPA states that it is the policy of the State to "preserve and protect the historic, prehistoric, and archaeological resources of Alaska from loss, desecration, and destruction so that the scientific, historic, and cultural heritage embodied in these resources may pass undiminished to future generations." (AS 41.35.010). To this end, the legislature has found and declared that "the historic, prehistoric, and archaeological resources of the state are properly the subject of concerted and coordinated efforts exercised on behalf of the general welfare of the public in order that these resources may be located, preserved, studied, exhibited, and evaluated." (*Id.*). Under the regulations implementing the AHPA, "historic, prehistoric and archaeological resources" are defined to include paleontological resources." (11 AAC 16.900(24)). AS 41.35.070 requires, among other things, that:

- ADNR locate, identify, and preserve information regarding historic and prehistoric archaeological sites, locations, and remains
- Prior to any public construction or public improvement by the State, a governmental agency of the State, or a private person under contract with or licensed by the State or governmental agency of the State, the Department may survey the affected area to determine if the area contains historic, prehistoric, or archaeological values
- Upon a determination that historic, prehistoric, or archaeological sites, locations, or remains will be adversely affected by public construction or improvement, the proposed undertaking may not be commenced until the Department has performed the necessary investigation, recording, and salvage of the site, location, or remains (with such work to be performed expeditiously so as not to unduly impair, impede, or delay the project)
- Upon the discovery of any prehistoric, historic, or archaeological sites, locations, remains, or objects during the undertaking of public construction or improvements, the Department must be notified and its concurrence requested so that the construction or

improvement may continue, the Department shall survey the area to determine whether there is data that should be preserved in the public interest, and, if so, the Department will collect and preserve the data

If any known or previously undiscovered paleontological resources are encountered during construction or operation, the SHPO and a qualified paleontologist will be contacted to determine appropriate actions.

Determining whether construction and operation of the proposed Project will affect any paleontological resources requires appropriate studies within the area affected by the Project.

13.3 Resource Management Goals and Objectives

Federal, state, and borough agencies, as well as Alaska Native entities, have formal laws, regulations, and/or policies that may be relevant to analysis of Project impacts on cultural resources and inform the development of a HPMP. Other laws, regulations, and/or policies are relevant to the analysis of Project impacts on paleontological resources.

Federal Laws include:

- Historic Sites Act of 1935 (16 U.S.C. § 1982)
- National Historic Preservation Act of 1966 (as amended in 2006) (16 U.S.C. § 470)
- National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4347)
- Archaeological Data Preservation Act of 1974 (16 U.S.C. § 469)
- American Indian Religious Freedom Act of 1978 (42 U.S.C. § 1996)
- Archaeological Resources Protection Act of 1979 (16 U.S.C. §§ 470aa – 470ll)
- Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. § 3001 et seq.)
- Federal Lands Management Policy Act (43 U.S.C. §§ 1701 – 1784)
- Paleontological Resources Preservation Act (16 U.S.C. §§ 470aaa – 470aaa-11)

Federal Regulations include:

- 18 CFR Part 5: FERC Integrated License Application Process
- 18 CFR Part 380: Regulations Implementing the National Environmental Policy Act
- 36 CFR Part 60: National Register of Historic Places
- 36 CFR Part 79: Curation of Federally-Owned and Administered Archaeological Collections
- 36 CFR Part 800: Protection of Historic Properties
- 43 CFR Part 7: Protection of Archaeological Resources
- 43 CFR Part 10: Native American Graves Protection and Repatriation Act

Federal Executive Orders (E.O.) include:

- E.O. 11593: Protection and Enhancement of the Cultural Environment (1971)
- E.O. 13007: Indian Sacred Sites (1996)

Federal Agency Guidance includes:

- Bureau of Land Management IM 2009-011, Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources (2009)

State Laws include:

- AS 41.35: Alaska Historic Preservation Act

State Regulations include:

- 11 AAC 16.010 – 11 AAC 16.900: Alaska Historic Preservation Act

13.4 Summary of Consultation with Agencies, Alaska Native Entities and Other Licensing Participants Regarding Revised Study Plan Development

The Proposed Study Plan (PSP) for cultural and paleontological resources was developed using input from Technical Workgroup meetings with agencies and licensing participants, and was then posted to the AEA Susitna-Watana website for comment by all parties. Four Technical Workgroup meetings were held during the months leading up to November 14, 2012 (August 8, September 7, September 24, and October 17), and several dozen telephone calls and emails were exchanged with interested parties including in particular BLM, SHPO, and Matanuska-Susitna Borough. Topics included elements of the PSP as well as matters pertaining to the 2012 investigations and arrangements for site visits. Summary tables of comments and responses from formal comment letters filed with FERC through November 14, 2012 were provided in the Revised Study Plan (RSP) Appendix 1 filed December 14, 2012. Copies of the formal FERC-filed comment letters were included in RSP Appendix 2. In addition, a single comprehensive summary table of comments and responses from consultation, dated from PSP filing (July 16, 2012) through release of Interim Draft Revised Study Plans, were provided in RSP Appendix 3. Copies of meeting summaries from release of the PSP through the interim draft RSP were included in RSP Appendix 4, organized chronologically.

Consultation subsequent to the filing of the Revised Study Plan (RSP) is described within each Final Study Plan (FSP).