

# Initial Study Report Meeting

## ***Study 13.6 Paleontological Resources***

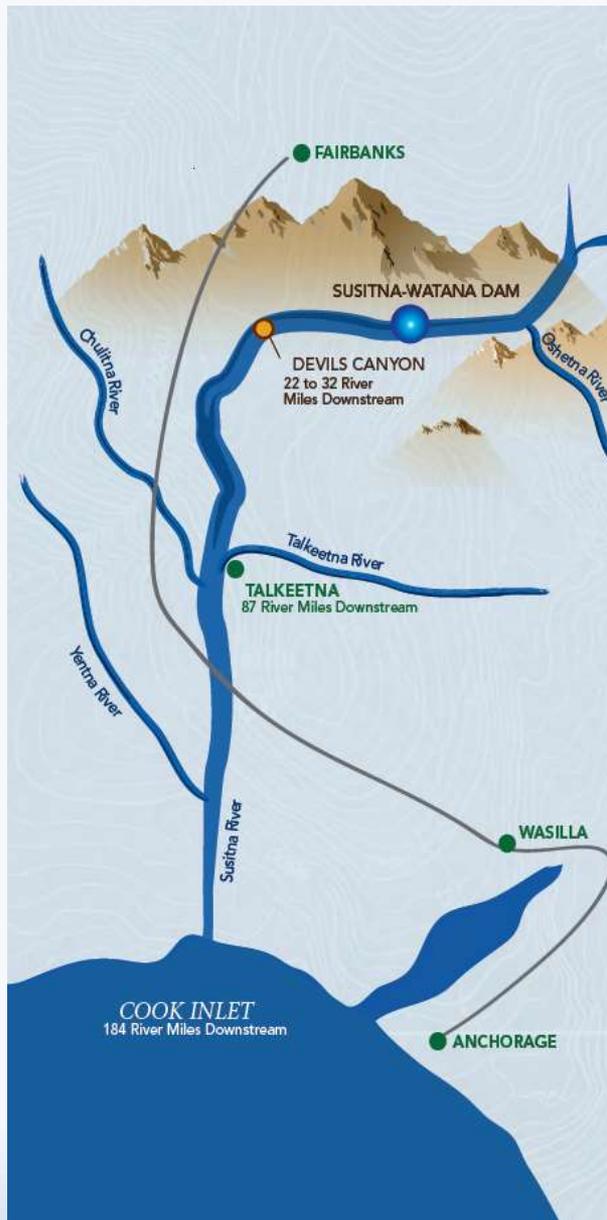
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# Study 13.6 Status

## ISR Documents (ISR Part D Overview):

- Initial Study Report Parts A, B, and C (June 3, 2014)

## Status:

- The following tasks were completed in 2013 and reported in ISR Part A:
  - The study team **conducted a literature review** and **prepared a map of known fossil finds** based on information from such
  - The **archaeological field crews discovered four plant fossils** during field investigations.
- **No additional work has been conducted on this study since 2013.**

## *Study 13.6 Objectives*

The objective of this study is to determine the effects of the proposed Project on paleontological resources by locating, documenting, and evaluating paleontological resources within the study area.

## *Study 13.6 Components*

- Identification of Potential Impacts to Paleontological Resources (ISR Part A, Section 4.1; pg 2).
- Determination of Field Survey and Monitoring Needs (ISR Part A, Section 4.2; pg 2).
- Field Survey (ISR Part A, Section 4.3; pg 2).

## *Study 13.6 Variances*

The variances are schedule related; the following tasks were deferred to a future year of study:

- Identify potential impacts to paleontological resources.
- Determine the need for field survey and monitoring efforts.
- Conduct field surveys.

# Study 13.6 Summary of Results

## (ISR Part A, Section 5)

- The potential fossil-bearing rock units identified in the literature review included:
  - The Wrangellia Terrane
  - Kahiltna Flysch
  - Windy Terrane
  - Susitna Terrane
  - Chulitna Group of Terranes
  - Quaternary Cover Sequences
- Spreadsheet prepared summarizing information from approximately 100 fossil locations in these potential fossil-bearing rock units.
- Most fossil locales occur in two distinct, northeast-striking belts on the east-central and western portions of the study area, with a scattering of fossils in other locales.
- Three fossil localities occur within the inundation zone.
- Twelve fossil localities occur within the transportation corridors.

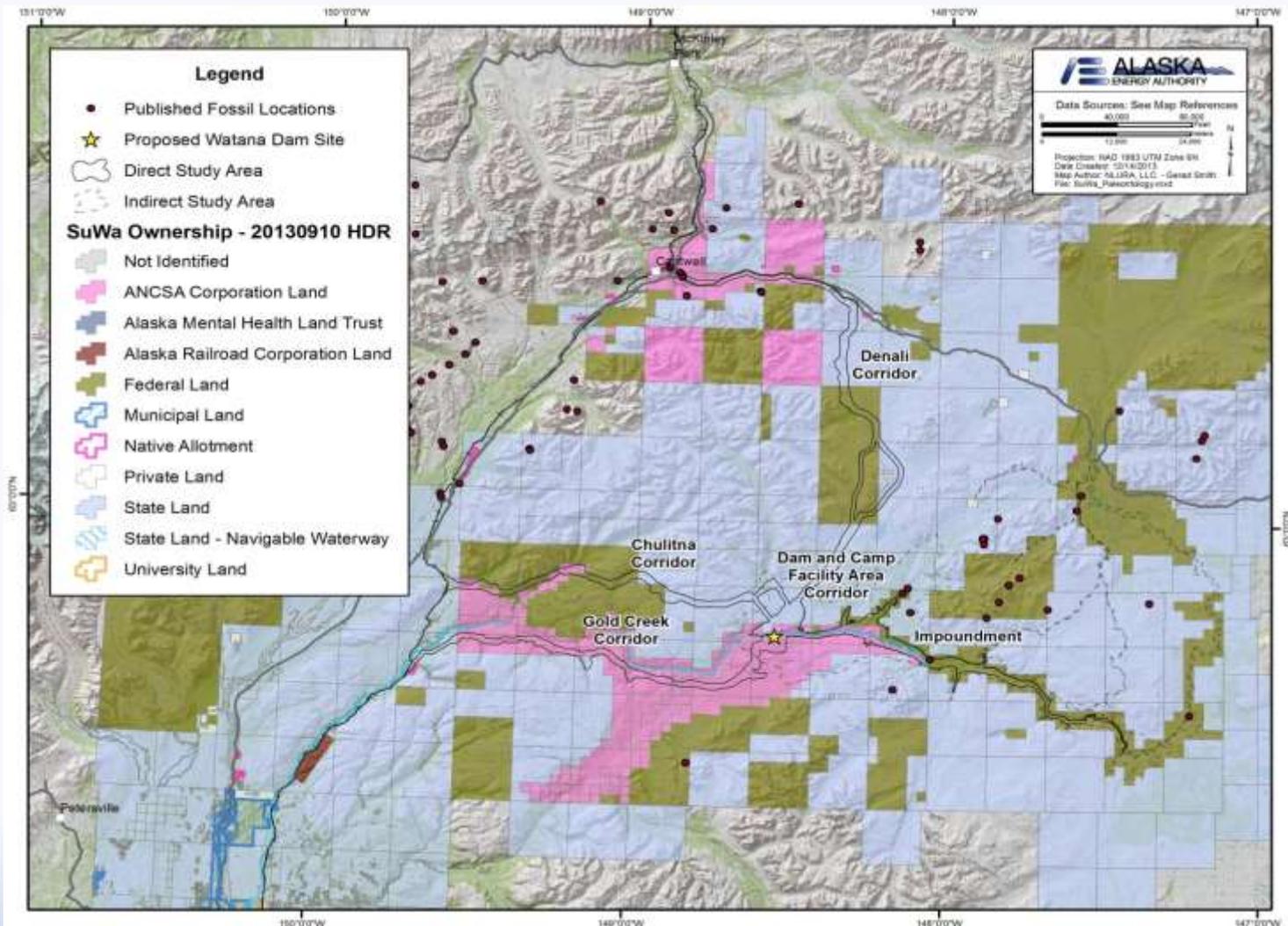
# *Study 13.6 Summary of Results*

## *(ISR Part A, Section 5)*

- Analysis of the existing paleontological site inventory as derived from the literature search indicates that none of the known fossil finds in the study area are of critical scientific importance.
- Archaeological crews performing fieldwork in 2013 reported four fossil plant finds in the study area.
- The sites were assigned Alaska Heritage Resources Survey (AHRS) numbers and added to the paleontological site inventory.

# Study 13.6 Summary of Results

## (ISR Part A, Section 5)



# *AEA's Proposed Modifications to Study 13.6*

## *(ISR Part D, Section 7)*

- The Chulitna Corridor was eliminated from the study area (ISR Part D Overview, Section 1.3) and the Denali East Corridor Option was added to the study area as an additional, alternative north-south corridor alignment for transmission line and road access from the dam site to the Denali Highway (ISR Part C, Section 7.1.2)

## ***Steps to Complete Study 13.6***

***(ISR Part D, Section 8)***

- ***Identify potential impacts to paleontological resources:***  
The study team will determine the geologic units that may be impacted by the proposed Project and the associated PFYC classes. Information about known localities and previous paleontological research will be consulted in making these determinations, requiring examination of mapped rock units and archived paleontological records at the USGS and other agencies. Based on this information, AEA will evaluate the risk of impacting significant paleontological resources.

## ***Steps to Complete Study 13.6***

***(ISR Part D, Section 8)***

- ***Determine need for field survey and monitoring efforts:***  
The need for field survey and monitoring efforts will vary by location and will be determined largely upon the basis of the PFYC classifications for the particular location.
- ***Field Surveys:***  
Field surveys will generally be undertaken for PFYC Class 4 and 5 units, especially exposed bedrock areas (Class 4a and 5a). Class 3 units may or may not require a survey. Local conditions, such as vegetated areas or pockets of bedrock exposure, may affect the need and intensity of field surveys.

## *Licensing Participants Proposed Modifications to Study 13.6?*

- Agencies
- CIRWG members and Ahtna
- Public