

Initial Study Report Meeting

Study 9.13 Aquatic Resources Study within the Access Alignment, Transmission Alignment, and Construction Area

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Prepared by

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Study 9.13 Objectives

- Characterize the aquatic habitats and fish assemblages at potential stream crossings within a 200-meter (650-foot) buffer zone along proposed access road and transmission line alignments
- Describe aquatic habitats and species present within the construction area for the dam and related hydropower facilities

Study 9.13 Components

- Synthesis of Existing Information
(ISR Part A, Section 4.1; pg 2)
- Field Data Collection
(ISR Part A, Section 4.2; pg 2)

Study 9.13 Variances

AEA has **rescheduled the implementation** of the field study components to 2015. The rescheduling of this study component is not anticipated to impair AEA's ability to meet study objectives. Undertaking the field data collection and completing this study in 2015 will allow the study to benefit from additional information coming from other study efforts as additional results become available.

Study 9.13 Summary of Results in ISR (ISR Study 9.13, Part A – Section 5)

Review of 1980s studies, the Anadromous Waters Catalog, and the Alaska Freshwater Fish Inventory database:

1. Denali Corridor (West Option)

- 38 possible stream crossings in Susitna and Nenana watersheds.
- Resident fishes present (Dolly Varden, Arctic grayling, slimy sculpin).
- No anadromous species documented.

2. Chulitna Corridor (Note - AEA Proposal to Eliminate Chulitna Corridor from Further Study (September 17, 2014))

- 23 possible stream crossings in Susitna watershed.
- Resident fishes
- Anadromous salmon documented in 3 larger streams, e.g. Indian River, Portage and Thoroughfare creeks.

3. Gold Creek Corridor

- 17 possible stream crossings in the Susitna watershed.
- Resident fishes documented downstream of crossings include Dolly Varden, Arctic grayling, rainbow trout, and slimy sculpin.
- Anadromous salmon documented in Fog, Chinook, Cheechako, Unnamed Tributary, and Gold creeks.

AEA Proposed Modifications to Study 9.13 in ISR (ISR Study 9.13, Part C – Section 7.1.2)

The study area has changed from the RSP (Section 9.13.3). **AEA has added the Denali East Option road and transmission line corridor to the study area** to provide an alternative to crossing higher elevation BLM lands just south of the Denali Highway. **The corridor addition includes a 200 meter buffer** along the alignments which matches the 200 meter buffers used on the other potential road and transmission line corridors included in the study area.

The FERC-approved Study Plan anticipated two years of field work, with the second year designed primarily to accommodate resampling sites with data gaps or potential refinements in the corridor alignment. With the **field work now being conducted in the 2015 field season, the proposed modification incorporates two sampling events during the open water period**. With two events the ability to fill in data gaps and to address realignment needs related to aquatic resources will be maintained. Thus these field events will be sufficient to allow AEA to collect all of the data in one year to meet study plan objectives.

Study 9.13 Summary of Results since ISR

AEA Proposal to Eliminate Chulitna Corridor from Further Study (September 17, 2014)

AEA is proposing to eliminate the Chulitna Corridor from further detailed study.

- This AEA proposal is based primarily on a desire by AEA to avoid the need to cross Indian River and Portage Creek subwatersheds.
- In addition, the Chulitna corridor would require the road and transmission line routes to be located at higher elevations along more avalanche prone slopes than the other corridors and thus would not provide as reliable access and transmission operations as the other corridors.

Steps to Complete Study 9.13 (ISR Study 9.13, Part C – Section 7.1)

To complete this study, AEA will implement the methods in the Study Plan, except as described in Section 7.1.2. These activities consist of field data collection at proposed crossing sites in streams along the potential access and transmission corridors and within the vicinity of construction areas and potential airport locations. Specific methods include:

1. Characterize aquatic habitat and fish assemblages in the vicinity of each potential crossing site (RSP Section 9.13.4.2.1 and 9.13.4.2.2).
2. Two habitat and fish sampling events in 2015.
 - a) Event 1 will occur early in the field season (June to July) and surveys will be attempted at each potential crossing site.
 - b) Event 2 will occur if during Event 1: 1) unsurveyable conditions were found (dry, or excessive flow), 2) data gaps occurred, or 3) no fish were detected at a crossing site. Event 2 will be conducted late in the open-water period (September to October).
3. Data analysis and reporting in USR, including incorporating data into the Project's geospatial database (RSP Section 9.13.4.2.3)

Licensing Participants Proposed Modifications to Study 9.13?

- Agencies
- CIRWG members and Ahtna
- Public