

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

**Study of Fish Passage Barriers in the Middle and
Upper Susitna River and Susitna Tributaries
Study Plan Section 9.12**

**Initial Study Report
Part B: Supplemental Information (and Errata) to
Part A (February 3, 2014 Draft Initial Study Report)**

Prepared for

Alaska Energy Authority



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

R2 Resource Consultants, Inc.

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**PART B: SUPPLEMENTAL INFORMATION (AND ERRATA) TO PART A
(FEBRUARY 3, 2014 DRAFT INITIAL STUDY REPORT)**

Part A Reference	Description
Section 4.1 Page 5 Second paragraph	<p>The fish species identification section was revised based upon input from licensing participants during a Technical Work Group meeting on March 19, 2014. Details of the consultation and suggested species to be added to the target species list are detailed in the following paragraph to replace the second paragraph of page 5:</p> <p>AEA sought input from the Instream Flow Technical Work Group to finalize target species and life stages. During a Technical Team meeting on March 19, 2014, team members, licensing participants, and AEA discussed species and lifestage use of off-channel habitats, seasonal movement into and out of off-channel habitats, and microhabitat (depth and velocity). Information shared during this discussion was used to refine the target species selection. AEA proposed a total of nine species, including five salmon species as well as four resident species, Arctic Grayling, burbot, Dolly Varden, and rainbow trout (Table 4.1-2). During the consultation meeting, licensing participants identified additional priority species, including Arctic lamprey, Bering cisco, eulachon, and humpback Whitefish. It was also suggested that AEA consider how project effects could prevent movement of invasive northern pike between tributaries. From these suggestions, AEA has created a preliminary target species list with the addition of Arctic lamprey, and humpback whitefish (Table 4.1-2). Bering cisco, eulachon and northern pike were not added as target species as their distribution is limited to the Lower River, which is outside of the study area for this study.</p>
Section 4.2 Page 6 First paragraph	<p>Depth barrier criteria have been discussed with licensing participants and final depth criteria for target species will be determined with consideration of literature values in 2014.</p>
Section 4.2.2 Page 6 Second paragraph	<p>Leaping criteria for anadromous salmon species as outlined in Table 4.2-1 were finalized with input from licensing participants.</p>
Section 4.2.3 Page 7 First paragraph	<p>Upstream velocity criteria have been discussed with licensing participants and final velocity criteria of will be determined with consideration of literature values in 2014.</p>
Section 4.2.4 Page 7 First paragraph	<p>Downstream velocity criteria have been discussed with licensing participants and final downstream passage criteria of will be determined with consideration of literature values in 2014.</p>

Section 6 Page 13 First paragraph	The target species list has been identified with input from licensing participants, leaping criteria have been finalized, and a final set of depth and velocity passage criteria will be determined with consideration of established literature values.
Table 4.1-2 Page 17	Table 4.1-2 added to summarize species list development.

Table 4.1-2. AEA proposed species list, additional species suggested by licensing participants, and preliminary species list following consultation during fisheries technical meeting on March 19, 2014.

AEA Proposed Species List	Additional Species Suggested by Licensing Participants	Species List Following Consultation
Chinook salmon	Arctic lamprey	Chinook salmon
Chum salmon	Bering cisco ¹	Chum salmon
Coho salmon	Eulachon ¹	Coho salmon
Pink salmon	Northern pike ¹	Pink salmon
Sockeye salmon	Humpback whitefish	Sockeye salmon
Arctic grayling		Arctic grayling
Burbot		Arctic lamprey
Dolly Varden		Burbot
Rainbow trout		Dolly Varden
		Humpback whitefish
		Rainbow trout

¹ Species not added due to absence from study area