U.S. Fish and Wildlife Service Comments on the

Eklutna Draft Year 2 Study Plans

March 11, 2022

The U.S. Fish and Wildlife Service (Service) submits the following comments on the Year 2 Study Plans Draft in accordance with the 1991 Fish and Wildlife Agreement.

Eklutna River Fish Species Composition and Distribution Study

3.3.4.3 Methodology (pp. 53-55). Passage Barrier Analysis

Please elaborate more on the literature-derived variables that are listed in Table 3-3. In the table itself, listing fish body length and depth as the top two variables would clarify that the remaining variables are based on a fish of that size.

For the four potential cascade barriers, more detail would helpful. Such as are these reaches bedrock dominated or near known grad-control features? Is it possible that these cascades could change under different flow scenarios?

Lake Aquatic Habitat and Fish Utilization Study

3.4.3 Study Area (p. 59). "The West Fork of Eklutna Creek will be surveyed until either gradient (>3%), potential fish passage barriers, or flow indicate a suitable termination for the survey"

Please make sure rationale for end-of-habitat call is well documented during spawning surveys on the West Fork of Eklutna Creek. When assessing potential barriers for finding the end of habitat, consider if the barrier is permanent (bedrock dominant) or temporary. Be cautious when using low flows as a justification for end of survey, especially if surveys occur during a dry period.

Wetland and Wildlife Habitat Study

3.9 Background

A correction needs to made in referencing other sections, starting in section 3.9 through section 3.10, the references to other sections are not in order. For example, section 3.9 second paragraph, "*Wildlife habitat mapping will provide the framework for the proposed wildlife habitat-use analysis for a set of key mammal and avian species (see Section 3.11.4.1)*". This should refer the reader to section 3.10.4.1.

Terrestrial Wildlife Studies

3.10.4.1 Methodology, Wildlife Habitat Evaluation

Please address how limited observed data would be considered in the evaluation. Section 3.10 describes the wildlife habitat evaluation methodology and how it would incorporate the habitats mapped in the 3.9 study. The quality of habitat would be assessed by species use as high,

moderate, low, or no use. The use would be based, it states, on "priority order" of (1) observed direct use, (2) literature search, and (3) information from studies in similar habitat. However, the information based on field data collected in Year 2 should be viewed with due consideration to the limited timing and number of visits for data collection. Perhaps this limited collection of data in field observations could be enhanced by incorporating Traditional and Ecological Knowledge to assess current (as well as historic) habitat quality and use.

Fish Straying Assessment (p. 94)
Even though a Year 2 literature review of relevant straying studies isn't possible because no previous studies mimic the situation at Eklutna (the same water source is distributed across two different basins), are there still plans to assess and monitor hatchery straying should flows be reestablished in the Eklutna River? Consider using Year 2 to develop strategies for assessing and monitoring hatchery strays given Eklutna's unique situation.

The Final Study Plans from May 2021 indicated that a Fish Hatchery/Tailrace Assessment study would be conducted in Year 2, and that it would aid in better understanding the current and potential future usage at the site, and what impacts, if any, could occur under alternative operational scenarios. This study was not discussed in the Year 2 Study Plan. Has it already been completed?

There are no comments for the other studies.