



March 14, 2022

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RE: Comments on Draft Year 2 Study Plans for the 1991 Fish & Wildlife Agreement Implementation, Eklutna Hydroelectric Project

Dear Ms. Owen,

Please accept the following comments on the Draft Year 2 Study Plans for mitigation of the Eklutna Hydroelectric Project. Trout Unlimited (TU) is grateful to be involved in this process as a member of the Aquatic and Recreation Technical Working Groups (TWG). We are eager for the implementation of mitigation measures under the 1991 Fish & Wildlife Agreement and appreciate the opportunity to provide comment on the Draft Year 2 Study Plans. The Final Year 1 Study Plans were developed in close coordination with stakeholders and TWG members. We view the Year 1 Studies as a success. I hope our comments and suggestions here help strengthen the Draft Year 2 Study Plans.

During development of the Year 1 Study Plans, the TWG agreed to conduct controlled flow releases as part of the instream flow study because we recognized the importance in understanding how flow affects potential fish habitat, how flow affects sediment transport and stream geomorphology, and ultimately how flow affects our ability to restore the Eklutna River and mitigate for the significant impacts from the Eklutna Hydropower Project. Many members and stakeholders, however, expressed concern that the volume released, and its duration, were too low and too far below historic natural flow levels. These concerns remain and unfortunately are not addressed in the Draft Year 2 Study Plans. The Year 2 Study Plans should be modified to include a controlled water release of sufficient volume and duration to model flows of at least 1,000 cubic feet per second (cfs), which is around the volume of water that would have naturally flowed down the Eklutna River during summer months. If the model is not fully calibrated to historic average flows, the model will have severely limited utility.

Another key component to the studies and eventual mitigation plan will be to provide adequate migration for fishes upstream and downstream throughout the system at all water levels and at all times of the year. Salmon are highly migratory and must be able to migrate up and downstream when rearing, when they smolt, and when they return to spawn. Adequate stream flow is essential to migration, but the study plans should also consider structural, design, or management changes to the Eklutna Hydroelectric Project to facilitate migration.

One of the main purposes of the field studies is to ensure the parties to the agreement have an accurate understanding of the Eklutna River's condition prior to development of the project. Another main purpose is to ensure the parties to the agreement have an accurate understanding of the impacts

of the project to fish and wildlife and their habitat. If we don't understand the pre-project conditions or its impact, it will be impossible to develop or implement an appropriate mitigation plan.

Data collected during the field studies must be sufficient to inform modeling that mimics the Eklutna River's natural hydrograph, and not just some fraction of historic flow. For these reasons, TU remains concerned about the adequacies of the study plans and once again encourages the Utilities to expand the instream flow studies, conduct a second year of controlled flow releases, and ensure those releases are of sufficient volume to model historic flows. In section 1.2.9 "Year 1 Study Plan Development" it is stated that:

The Aquatics TWG generally agreed on an approach for the Instream Flow Study that includes conducting controlled flow releases in 2021, then using that information to determine if a larger spillway flow is warranted and if so, then define that larger spillway flow so that the Project Owners can evaluate the feasibility of conducting such a flow in 2022 as part of the study.

For all the reasons outlined above and in prior TWG meetings, a larger spillway flow is warranted and necessary. Yet, based on statements by McMillen Jacobs Associates staff, and the omission of any water releases from the Draft Year 2 Study Plans, it appears the Utilities have determined an additional release is not necessary without consulting the TWG members or other parties to the 1991 agreement.

Ratepayers along with Alaskans from across the state celebrated the temporary water releases during the 2021 field study. Tribal members of the Native Village of Eklutna (NVE), only the eldest of which could recall water regularly flowing down the river, were especially moved and rejuvenated seeing water in the typically dry stream channel. Likewise, the Anchorage Assembly has clearly expressed its interest in restoring the Eklutna River. With this in mind, TU recommends that senior staff and board for each of the Utilities meet with NVE leadership and the Anchorage Assembly prior to finalizing the Year 2 Study Plans to ensure the studies are adequate. While staff for McMillen Jacobs Associates briefly presented to the Assembly on February 17th, senior staff for the Utilities need to engage in these discussions directly. Doing so will help ensure the Utilities make good on their commitment to NVE that they will act in good faith, as indicated in section 1.2.11.

In addition to the broad comments discussed above, TU has the following additional specific comment:

1.1.1 Procedural Requirements: "The 1991 Fish and Wildlife Agreement requires the Project Owners to fund and conduct studies to examine, and quantify if possible, the impacts to fish and wildlife from the hydroelectric development of the Project." There is no way for the Utilities to satisfy this requirement if study plans fail to adequately model historic stream flows. Additionally, studies must address fish passage, both upstream and downstream, at the remaining dam at the lake outlet. Without an accurate understanding of the habitat lost by a lack of water and barriers to migration, we cannot know the extent of the impact to fish and wildlife or develop an adequate mitigation plan.

1.2.10 Year 2 Study Plan Development: Trout Unlimited was omitted from the list of Recreation TWG members in Table 1-4. Please include TU.

1.2.12 Ongoing Study Efforts By others: The East & West Fork Eklutna River are incorrectly referred to as “East and West Forks of Eklutna Creek” in several locations. This, along with other similar past references to “Eklutna Creek” improperly diminish the importance and size of the Eklutna River. Please ensure all documents accurately refer to the Eklutna and its forks as rivers.

3.1.1.1 Need for a High Calibration flow in 2022: As discussed above, the Year 2 Study Plan needs to include an adequate controlled release to model flows of at least 1,000 cfs, which is the historic summer base flow. By failing to conduct studies that document historic flow, it is impossible to design and implement an appropriate mitigation plan. While releasing a larger volume of water will have its challenges, those challenges need to be documented with specificity and then overcome.

- “Release of a flow high enough to directly access channel migration is not recommended due to the very large magnitude of flow required.” The Eklutna River naturally flowed at 1,000 cfs or more each year, and occasionally flooded to much higher volumes. Modeling these high flows to determine their effect on the channel geomorphology, on sediment transport, on fish and wildlife, and on the watershed as a whole is one of the main purposes of the study plans.
- “Based on the results of the 2021 study flow releases and monitoring data, a high calibration flow is not needed to calibrate the 1-D HEC-RAS sediment transport model.” How was this determination made?

3.2.4.1 PHABSIM Data Analysis and Modeling: The model has limited utility. The Study Plan should allow for modeling across the range of flows known to have occurred before development of the Eklutna Hydropower Project. Understanding these past conditions is necessary for understanding how present and future conditions affect fish and wildlife, and for understanding which mitigation measures may (or may not) account for those impacts.

3.3.1 Background: “Adult salmon surveys could not be completed during the 150 cfs and 75 cfs study flow releases in late September. Therefore, a second year of adult salmon surveys are proposed for 2022.” Trout Unlimited supports a second year of adult salmon surveys, and encourages the studies to expand to include juvenile salmon and smolts. Adult and juvenile studies should extend farther upstream to the maximum upstream distances where salmon have been observed.

3.3.4.3 Task 3: Passage Barrier Analysis: Estimating the period of greatest flows during 2022 for the purpose of fish passage barrier analysis is inadequate. Trout Unlimited encourages studies designed to inform how fish passage can be accommodated upstream and downstream at all points throughout the watershed, including at the lake outlet and at any other suspected fish barriers, at all anticipated flow levels at all times of the year. Proposed mitigation outcomes for the fish and wildlife program should focus on providing adequate flow and facilities to allow fish passage throughout the system throughout the year. A full range of alternatives should be considered up to and including removing the remaining dam.

3.4 Lake Aquatic Habitat and Fish Utilization Study: The primary tributaries to Eklutna Lake are the East Fork Eklutna River and West Fork Eklutna River.

3.4.2 Goals and Objectives: The East Fork Eklutna River and West Fork Eklutna River provide significant potential habitat for various fish and other anadromous species beyond Sockeye. The Lake Aquatic Habitat and Fish Utilization Study should include all potentially affected species when evaluating habitat suitability, including but not limited to coho and Chinook salmon.

3.4.3 Lake Aquatic Habitat and Fish Utilization Study: This study should include a complete habitat survey for Tributary 4, including downstream and upstream of culverts.

3.10.4.2 Opportunistic Observations and Camera Trap Deployment: Biologists for NVE are also walking the river corridor frequently for the purposes of the adult survey and could contribute to data collection for this study by systematically recording wildlife sightings and significant signs of use in their outings.

3.11.2 Goals and Objectives: Ice skating on Eklutna Lake is popular when conditions allow. We recommend adding this to your list as a recreational use of interest.

3.13 Cultural Resources Study: Salmon are an important cultural resource for NVE and its members and appears to be omitted from the Cultural Resource Study plan. Eklutna River salmon have been eliminated from most of the Eklutna River due to a lack of water and migration barriers, and therefore access to subsistence fishing has been all but lost. Continued hydroelectric operations perpetuate the cultural impacts from the loss of subsistence fishing, and should be studied as an impact of the project.

3.13.1.4 Military Use and Facilities: Please correctly label the East Fork Eklutna River and West Fork Eklutna River.

Thank you for considering TU's comments on the Draft Year 2 Study Plans. A healthy and productive future is possible for the Eklutna River, and Trout Unlimited looks forward to continued collaboration with the Utilities and other stakeholders to make this vision a reality.

Sincerely,



Austin Williams