
THE
CONSERVATION FUND

Brad Meiklejohn
Alaska Senior Representative
2727 Hiland Road
Eagle River, Alaska 99577
(907) 694 - 9060
bmeiklejohn@conservationfund.org

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Samantha Owen
McMillen Jacobs

RE: Year 2 Study Plans - Eklutna Hydroelectric Project

Dear Ms. Owens,

Thank you for the opportunity to comment on the Year 2 Study Plans.

The Conservation Fund remains committed to the full restoration of the Eklutna River. Along with many residents of Southcentral Alaska, we were ecstatic to see the Eklutna River flowing again in September 2021. Those days were a vivid reminder that this process is about righting an historic wrong done to this river, to the Eklutna Dena'ina people, and to the salmon that all Alaskans love.

The fall 2021 flushing flow event was especially significant in building trust in the process that we are engaged in under the 1991 Fish and Wildlife Agreement. That trust has been slow to arrive because of a long history of bias exercised by the Project Owners. The Project Owners have rarely missed a chance to put a thumb on the scales for their benefit, whether it is overlooking the important role of the Native Village of Eklutna, disingenuous representations to the public and government officials, and transparently biasing and controlling the 1991 Agreement process. Giving credit where credit is due, we are grateful that the Project Owners acceded to the Technical Working Group and the public interest and delivered the flushing flows. We thought a corner had been turned.

By proposing to eliminate the 2022 fall flushing flow event, the Project Owners took a major step backward and significantly eroded trust in the process. This unilateral proposal contravenes the requests of a majority of the Technical Working Group, and goes against the expressed public interest. It is especially offensive that this proposal is dressed-up in scientific rationale when it is transparently a financial decision that benefits the Project Owners. While continued flushing flows may or may not be needed to calibrate a sediment transport model, there are other

National Office
1655 North Fort Myer Drive
Suite 1300
Arlington, Virginia 22209
(703) 525-6300
www.conservationfund.org

reasons why they would be beneficial, including additional sediment flushing and the need to re-establish the river channel in many reaches. By all measures the 2021 flushing flows were a smashing success, so why wouldn't we want to do it again? The proposal to withhold 2022 flushing flows reaffirms our suspicions that the Project Owners will do whatever it takes to avoid restoring the Eklutna River, and that, ultimately the 1991 Agreement process is a farce.

The argumentation that "release of a flow high enough to directly access channel migration is not recommended due to the very large magnitude of flow required," doesn't hold water, so to speak. As we see in Table 2-2, there have been events up to 8x the 150 cfs of the 2021 flushing flow without consequence to the infrastructure and the Existing Infrastructure Report indicates that all the structures can handle foreseeable flows. In Section 3.1.1.1 you admit that goal 3 (flow that disrupts the armor layer) was not achieved in the 2021 flushing flow and that you will have to extrapolate to model the needed flow. Better than extrapolating would be executing the higher flows, which the infrastructure can handle and from which the river will benefit.

We (which in this case includes the Native Village of Eklutna) reject the proposal to skip fall 2022 flushing flows. The infrastructure can handle the flows, the Technical Working Group has requested them, they will benefit the river by further mobilizing stranded sediment and re-establishing the channel, and they will allow for more precise calibration of the river models. If not now, when will the Eklutna River get to be a river again? According to the 1991 Agreement schedule, the river won't flow again for at least another 5 years, which is unacceptable. If the Project Owners are reluctant to release what amounts to less than 1% of the total water used annually by Eklutna Hydro (100 cfs/640 cfs capacity X 3 weeks/52 weeks) it does not bode well for the restoration for year-round flows required by salmon.

The proposal to skip the fall 2022 flushing flows exposes the extent to which the Project Owners continue to manipulate the 1991 Agreement process. Plainly, the Project Owners are given first crack at draft documents and allowed to alter them to suit their ends. As a remedy, we request that all future reports prepared by McMillen Jacobs and the associated consultants be provided in draft form to all participants in the 1991 Agreement simultaneously. To enhance trust in this process, McMillen Jacobs should be a neutral party without bias or preference, and beyond control or manipulation by the Project Owners.

What follows here are comments on individual sections of the Year 2 Study Plans:

Section 2.0 Project Facilities and Operations.

There is some confusion between the text at 2.1.1 and the labeling of Figure 2-6 in regards the elevation of the Eklutna River downstream of the spillway. Based on the text ("spillway crest is 871' ...spillway crest to streambed is 21'[i.e. 850']") it appears that the streambed elevation is 850', not the 828' elevation shown on Figure 2-6. It is worth noting that the elevation difference

between the 30X30 gate and the streambed is apparently only two feet, but you have to work to figure that out. Why is that not made more explicit? It seems an important consideration for retrofitting this structure for fish passage. It is also worth noting that the streambed elevation and the natural lake elevation are the same (850'), at least according to the text. It seems likely there is some error here. How is it possible that the streambed elevation downstream of the spillway and the natural lake elevation are the same? Clearly there is a gradient or the water would not flow. I think the confusion arises from the fact that the natural lake elevation is the same as the height of the gap (not the "crest") in the glacial moraine (860'). [Note that there is actually a gap in the crest of the moraine by which water exits the lake into the river]. The natural lake elevation should be that height at which the lake would naturally maintain itself, and that elevation is controlled by the gap (not the "crest") of the glacial moraine. It also would be useful to know the elevation of the water surface downstream of the spillway. In any event, the vertical distance that fish would need to climb from the Eklutna River to get into Eklutna Lake appears to be quite small (~<5") but should be determined more precisely.

The simplest solution to the spillway is to remove it entirely. Currently, its only function is increased lake storage, which benefits only hydropower production at a cost to other public resources. The increased storage capacity provided by the spillway causes lakeside erosion of the popular Chugach Park trails, and facilitates massive lake level fluctuations that are detrimental to shoreside spawning of sockeye and kokanee salmon. Removing the spillway and embankment would be fast, cheap and easy, and The Conservation Fund hereby pledges the full cost for its removal.

The inset graph on Figure 2-6 lacks units.

Section 2.2.1 Reservoir Operations. This would seem to be the relevant place for discussion of the arrangement whereby AWWU's obligation to pay for water is waived in the event of spills into the Eklutna River.

It is not clear why reference is made here to the lake being below the crest of the glacial moraine for nine months when the controlling feature is the natural lake outlet at 850.' If the lake is at 850' [or is it 860'? See discussion above] it flows out into the river (currently the pond) regardless of the height of the crest of the moraine. Again, all of this needs clarification. The natural lake elevation should be the elevation at which the unmanipulated lake would maintain itself, and that should be controlled by the elevation of the gap (not the crest) in the glacial moraine through which water exits the lake.

2.2.2 This section reads like an advertisement for the Project Owners. How about if this section included discussion of the fraction that Eklutna hydropower represents of the Project Owners' currently installed generation capacity? That number would be substantially lower than 6%, and would serve as a reminder that the major rationale for the recent merger of MLP/CEA was the

existence of excess generation capacity. And whatever happened to the “merger efficiencies” we were supposed to see? Shouldn’t those offset any increased costs at Eklutna? How about if this section included discussion of the amount of money that the Project Owners have made because of Eklutna, a project that was built and paid for by all federal taxpayers and sold to the Project Owners for a bargain price of <\$7 million.

There is the strong suggestion here that we should give special deference to cheap Eklutna power. Eklutna hydropower is cheap because massive costs to salmon, Native people, and the public have been externalized for 70 years. If the Project Owners proposed to build this project now, or anytime in the last 30 years, they would not be allowed to cause the impacts that we live with today. Taking all the water out of a salmon river is unheard of anywhere in the United States. That is the true cost of Eklutna hydropower.

I am certainly concerned about climate change, but why the special emphasis here and elsewhere in the document on carbon? It feels very disingenuous, as if suddenly we are being forced to choose between climate and salmon. It is entirely possible to produce climate-friendly power without impacting salmon (see Allison Creek near Valdez, Blue Lake near Sitka, Black Bear Lake on Prince of Wales Island, Falling Water Creek and South Fork Eagle River in Eagle River, and Cordova’s Power Creek for examples of hydropower projects that do not impact salmon). You can’t really call Eklutna hydropower a renewable resource if you are killing off Alaska’s ultimate renewable resource, salmon.

At 3.12 Fish Straying Assessment, the rationale for avoiding this study is weak. Surely there is a way to design a novel study for this problem, perhaps through the use of genetic analysis of the fish that return to the tailrace and those that enter the Eklutna River. Just because this situation has not been documented before doesn’t mean we shouldn’t document it now. Science has to start somewhere; if we contented ourselves with the current state of knowledge, science would never advance.

At 3.8 Hydropower Valuation Study (3.8.2 and 3.8.4) we again see the issue of greenhouse gas emissions raised. Why is this included under the section titled Hydropower Valuation Study? What is the connection between hydropower valuation and greenhouse gases? The 1991 Agreement makes no mention of carbon or greenhouse gases, yet somehow this variable has been elevated above other considerations. If there are legitimate issues surrounding climate, carbon, and greenhouse gases, why are these not taken up in their own comprehensive stand-alone section? It strikes me that the Project Owners are attempting to create a false choice in the minds of ratepayers between salmon, climate, and cheap power.

At 3.9 Wetland and Wildlife Habitat Study it is good to see mention of the need to ascertain temporal losses (“impacts over time”) of wetland habitat and wetlands function. The U.S. Army Corps has extensive guidance on the significance of temporal losses when calculating

appropriate mitigation. In general, the Corps does not allow for temporal losses, and typically requires that mitigation take place before any proposed impacts to wetlands occur. Obviously the Eklutna Project is an extreme case, where the impacts have gone unmitigated for 70 years. We would like to see a rigorous analysis of all the long-duration impacts to fish, wildlife, hydrology, wetlands services and function, public recreation and to the Eklutna Dena'ina that have resulted from the Eklutna Project.

The Nature Conservancy, a globally-recognized leader in conservation, offered the following guidance for the development of hydropower projects in Alaska in an op-ed to the Anchorage Dispatch News on May 5, 2016:

- Development of hydropower cannot come at the expense of salmon.
- Hydropower projects should avoid salmon streams whenever possible.
- Hydropower projects must allow fish to migrate freely, both upstream and downstream.
- River flows must not be altered beyond minimum and maximum thresholds that allow fish populations to thrive.
- Development of hydropower must allow for the downstream transport of the river's natural sediment and wood.
- A dam must be designed and operated in a way that doesn't alter downstream water temperatures.

The Eklutna Project meets none of the above criteria.

Sincerely,



Brad Meiklejohn
Alaska State Director

Cc: Curtis McQueen
Chief Aaron Leggett, NVE