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**Subject:** A better alternative for Eklutna Hydro  
**Date:** Monday, February 12, 2024 5:13:43 PM

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Greetings,

I am Chris Nyman, a lifelong Chugach and MLP customer.

I have recently stuck my nose into the Eklutna Fish and Wildlife mitigation project. When I read that various parties were asking for the dam to be removed I was astonished.

That got my curiosity going so I dug into this a little bit. I am a retired civil engineer . I don't think many people realize that removing the dam is about the same as removing the entire Eklutna Hydropower Project.

It seems antithetical that one would contemplate removing the most economical and "greenest" energy source we have.

I realize also that there has been an environmental price to pay and so the notion of restoring a minimum flow to the riverbed is laudable.

Therefore I believe that the proposed mitigation should concentrate on releasing water from the dam at the most practical times.

A perfect solution will not be found due to the continued operation of Eklutna Lake as a clean energy reservoir.

This operation seasonally lowers the lake level 25' below the spillway drain which makes the idea of supplementing the river flow difficult to accomplish.

Attached is a concept I developed in an attempt to maximize the improvement to base flow without sacrificing the capacity and operation of the Hydropower project.

Also attached is a recent 1 year look at the water level in Eklutna Lake and how it relates to the dam. Notably the lake level is high enough in mid-July through December to continually drain water through the spillway drain. My proposal, if feasible would supplement the upper reach river flow through drainage improvements when lake levels are too low.

Its a lot to present on a couple sheets of hand scratches but I think it is a good compromise that achieves some of the restoration goals of those that are calling for the abandonment of the Eklutna Hydropower Project. AND still maintaining the efficient energy supply we enjoy from our "greenest" energy source.

Truly yours....Chris Nyman

**SHEET NOTES:**

- ELEVATIONS SHOWN ARE IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- POND BATHYMETRIC PROFILE IS UNKNOWN, TOPOGRAPHY ESTIMATED BASED ON AS BUILT DRAWINGS OF DAM AND FIELD DATA.

**SHEET KEY NOTES:**

- EXCAVATE NEW CHANNEL THROUGH REMAINS OF PREVIOUS STORAGE DAM. L = 625-FT.

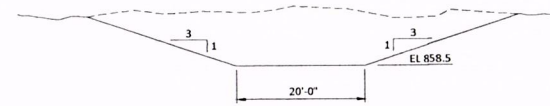
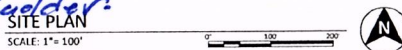
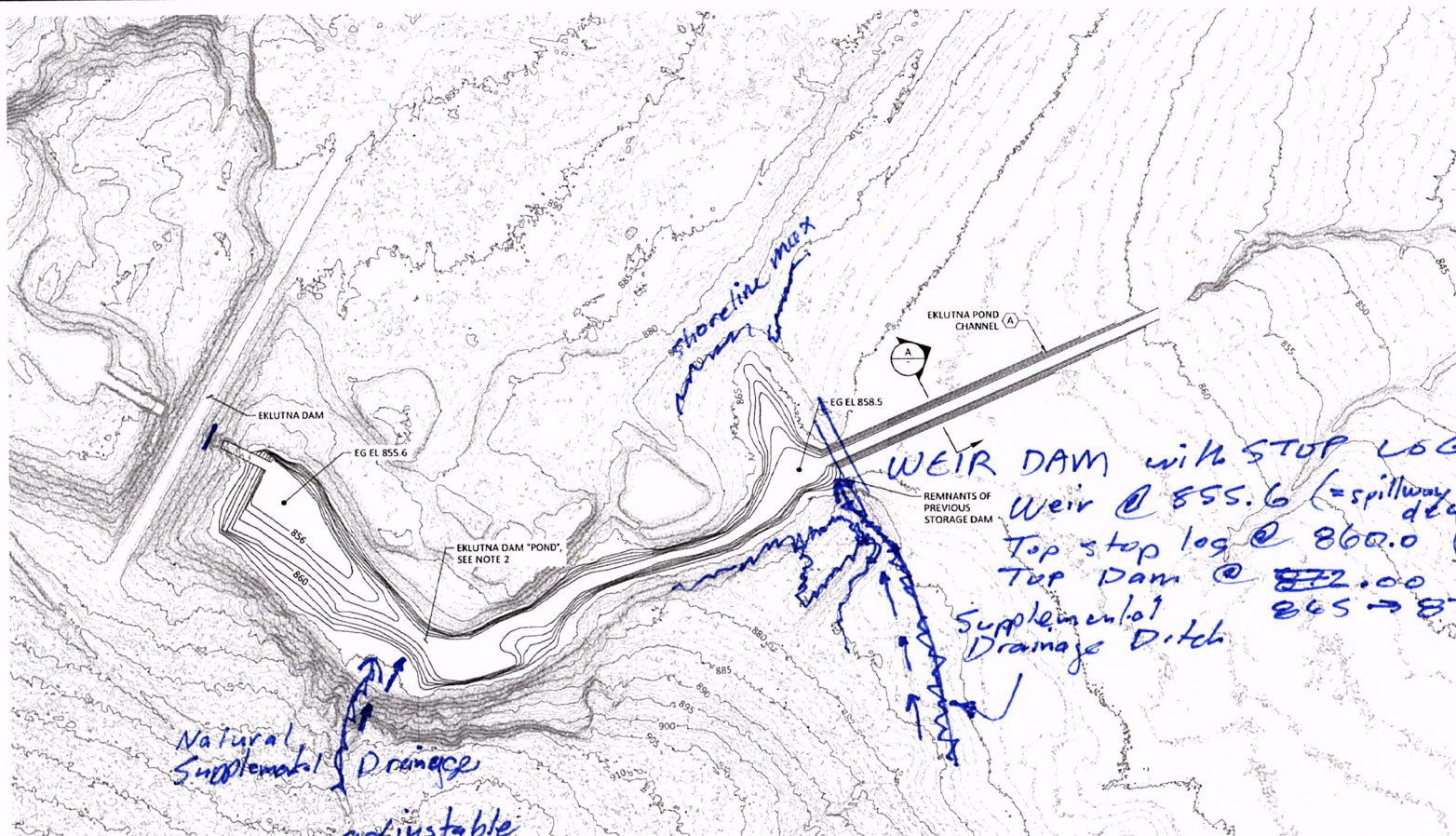
*2m shoreline minimum @ 830.0*

*WEIR DAM with STOP LOGS (prevent pond outflow)  
 Weir @ 855.6 (= spillway deck)  
 Top stop log @ 860.0 (example)  
 Top Dam @ ~~872.00~~  
 865 → 872 (design decision)  
 Supplemental Drainage Ditch*

*Natural Supplemental Drainage*

*adjustable*

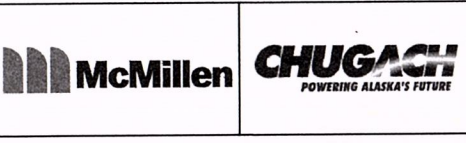
- Replace spillway with adjustable gate/fish ladder.
- Excavate existing pond to deepen.
- Use bentonite to seal pond bottom.
- Use excavated material to build weir dam embankment.



TYPICAL CHANNEL SECTION  
 SCALE: 1" = 10'

REV	DATE	BY	DESCRIPTION
B	05/12/23	SPE	ADDED FISH PASSAGE ALTERNATIVE
A	05/12/23	SPE	CONCEPTUAL DESIGN

**WARNING**  
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE




EKLUTNA FISH & WILDLIFE PROJECT  
 ENGINEERING FEASIBILITY STUDY  
 PME ALTERNATIVES ANALYSIS - INSTREAM FLOW CHANNEL EXCAVATION  
 SITE PLAN

DESIGNED: S. ELLENSON  
 DRAWN: R. GUERRERO  
 CHECKED: J. BOAG  
 PROJECT DATE: 05/12/23

DRAWING  
**F-1**

*POND ENHANCEMENT PLAN  
 "holding pond Dec 15 to July 15 on avg."  
 "provides a source for minimum stream flow."  
 Submitted By Chris F. Nyman  
 haikuguy2003@yahoo.com*



IMPORTANT [Legacy real-time page](#) 

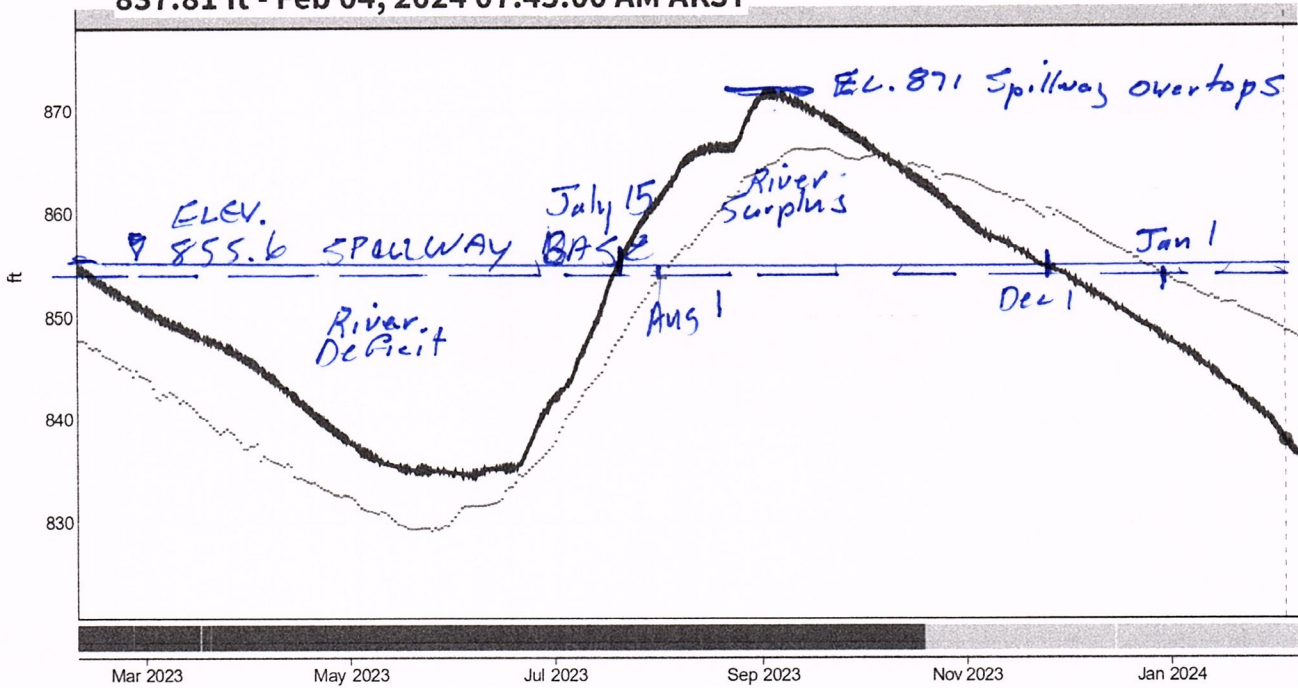


7 days  30 days  1 year

# Eklutna LK NR Palmer AK - 15278000




February 8, 2023 - February 8, 2024  
Gage height, feet

837.81 ft - Feb 04, 2024 07:45:00 AM AKST



IMPORTANT Data may be [provisional](#)

Show legend 

	Value	Status	Time
 Latest value	836.42 ft	Provisional	Feb 08, 2024 16:00:00 PM AKST
 Selected	837.81 ft	Provisional	Feb 04, 2024 07:45:00 AM AKST
 Compare			Add last year's data to graph

*Submitted By:  
Chris F. Nyman  
harkuguy2003@yahoo.com*

