From: Alex Gimarc

To: Sam Owen; "Julie Hasquet"
Cc: bettinac@chugachboard.com

Subject: Comments in opposition to removal of Eklutna Dam

Date: Tuesday, February 13, 2024 8:19:45 AM

Published the following on Must Read Alaska (MRAK) a couple months ago when this first came up. Short form: Strong opposition to removal of the dam.

- Dam produces perhaps 5-6% of Rail Belt electricity. No reliable replacement for the lost generation is available, planned or funded.
- Dam removal will negatively impact water availability for ANC. We get 90%+ of our water from Eklutna lake.
- Water level in Eklutna Lake is highly variable. No evidence it will support a constant flow downstream year round.
- No evidence of a stable historic population of reds ever existed in the lake. You are trying to restore a population that never existed.
- OTOH, water from Eklutna Lake DOES support 2 stocked runs of salmon at the tailrace (kings and silvers) that have actively supported sport fishermen for 30+ years.
- Removal of the dam will eliminate the possibility of using the Eklutna Lake system for pumped energy storage necessary to support large wind & solar being currently contemplated (Bob Seitz suggestion in MRAK).
- No small number of Eklutna tribe members want the dam removed so they can rebuild one on their land, which makes this little more than another tribal corporation money grab not unlike Fire Island wind.

This is a dumb idea. Don't do it. Cheers -

AG

Alex Gimarc Chugach Board Member 2007 – 2010 907-441-5343

https://mustreadalaska.com/alex-gimarc-removing-the-eklutna-dam/

Alex Gimarc: Removing the Eklutna Dam

By <u>SENIOR CONTRIBUTOR</u> - December 29, 2023



By ALEX GIMARC

Must Read Alaska reported a few weeks ago that the Anchorage Assembly asked the legislature to approve removal of the Eklutna dam, ostensibly to rebuild a salmon run gone for at least a century.

This is the same Assembly majority that has managed to turn the homeless problem in town into a festering sore on the body politic. That festering sore has been financially lucrative for one of their members (Meg Zaletel) who they have determined not to have a conflict of interest.

With the decision to support removal of the Eklutna dam, the Assembly manages to get themselves into the energy business, and into the ever-contentious Cook Inlet fish wars while they pander to the 70 or so members of the Eklutna Tribe, something that apparently makes them feel good. The rest of us, not so much.

Their request is so well thought out that I am reminded of PJ O'Rourke's observation:

"Giving money and power to government is like giving whiskey and car keys to teenage boys."

With this recommendation, the Assembly majority has finished the whisky and is inserting the car keys into the ignition.

A deeper dive into the three issues revolving around the removal of the Eklutna dam is probably worth our time. From here, the issues include the following. There are likely more, but this is a start:

- - Electrical generation
- Anchorage water
- How many fish?

The Eklutna hydro station has been operating since 1955. It was sold to the three electric utilities, Chugach, MEA and ML&P in 1991. That sales agreement set a 30-year clock on returning the river to its natural state. Chugach and MEA published a draft of their Fish and Wildlife Program in Oct. The fourth utility involved is AWWU, as Anchorage gets 90% of its water from the same infrastructure used to generate electricity.

Eklutna hydro generates 40 – 47 MW of clean, reliable, carbon free electricity, just over 5% of all electricity generated in the Railbelt. The Eklutna dam raised water level in the lake some 24' from its natural level. That natural level changes throughout the year based on snowmelt. The intake is at the bottom of the lake, 60' below the current surface. AWWU's water comes off a tap to that piping system.

Advocates for removing the dam believe there is enough water available to support rebuilding the salmon runs, generating electricity and supplying water for Anchorage if the dam is removed. The immediate question is how will this water be allocated? Whose needs are most important? Our experience in the endangered species world is that the needs of the fish ALWAYS override those of the humans (delta smelt in California and snail darter in Tennessee).

Today, 90% of the flow is used for electrical generation. 10% of that flow is used for drinking water. Cut that flow in half, and output from Eklutna hydro will necessarily drop by a similar percentage. The intake was blocked for some weeks to months following the 1964 quake by an underwater landslide. It can be blocked again.

Additionally, there are two stocked salmon runs below the <u>Eklutna hydro plant in its tailrace</u> that need continual waterflow.

Perhaps the best analysis of Eklutna lake for the presence of salmon was a <u>Sept 2017 paper by Loso, et al</u>. They found no direct evidence in cores taken from the lake bottom for a red salmon population, though Eklutna tribal elders promised them they were a fishing village before the first dam was built in 1929.

Total population estimated entirely on Eklutna oral tradition is in the vicinity of 1,000 reds/year. It is up to the reader to determine how valuable those 1,000 fish/year are, especially since very few of them will be caught.

Note that salmon here in Upper Cook Inlet are gregarious. Silvers exploit flooding, spawning in places far outside their normal creeks and streams. All five species of salmon go up Rabbit Creek, as they also do in Campbell Creek. Very few salmon go up Eagle River. There is a small red run up a closed creek on Joint Base Elmendorf-Richardson.

If the Powers That Be make the decision to remove the dam, they will base that decision on all the <u>"trust me" claims by the advocates</u> like the Eklutna Tribe and Trout Unlimited that there will be no noticeable impact if the dam is removed. Of course, <u>the advocates have no response</u> other than trust me to questions about replacing lost electrical generation and what happens when the water levels are too low to support current water use during a dry year(s).

I would suggest the following questions be answered before any discussion of dam removal:

- How do you plan to provide drinking water for Anchorage in the event of low water levels in the lake? Who or what makes the allocation decisions? And who or what has priority?
- How do you plan on replacing 5% of Railbelt electrical generation with something that is at least as clean and reliable as hydro? That generation needs to be online before the dam is removed. Nobody has it budgeted.
- What impact of reduced water flow has on the two stocked run at the Eklutna tailrace? Do the needs of the new Eklutna fish outweigh those of the stocked fish in the tailrace and their user group? If so, why?

I always get worried when all the Usual Suspects demand immediate action to right an environmental wrong, especially when their response to all questions are "trust me." I get more worried when the Rocket Scientists on the Anchorage Assembly are onboard.

We might get lucky. This might work out nicely. But the costs and pain level should it not will be substantial in terms of cratering electric reliability and drinking water availability. Are those costs and that risk worth the feel-goodism associated with removing yet another dam? Should be an interesting discussion.

Alex Gimarc lives in Anchorage since retiring from the military in 1997. His interests include science and technology, environment, energy, economics, military affairs, fishing and disabilities policies. His weekly column "Interesting Items" is a summary of news stories with substantive Alaska-themed topics. He was a small business owner and Information Technology professional.
