

2 April 2020

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Dear Ms. Owen:

I have reviewed and am commenting on the Eklutna Hydroelectric Project's draft 1991 Fish and Wildlife Agreement Implementation: Initial Information Package (IIP) prepared by McMillen Jacobs Associates.

I have a great deal of experience with Eklutna Lake and Eklutna Valley. I was the wildlife biologist who managed the area for the Alaska Department of Fish and Game from 1994 to 2010. Before that I worked in the department's Habitat Division, where I became familiar with the negotiations for the 1991 Fish and Wildlife Agreement. Since my retirement in 2010 I have researched and written extensively about the human and natural history of the valley, including the old and new Eklutna hydroelectric projects.

In general, I think the draft IIP is well researched and well written. There are a few places, however, where the draft IIP seems to present the Producer's perspective without adequately explaining the other side of the issue. I recognize that it is your goal to provide an unbiased document with necessary background information for all interested parties and stakeholders; thus, I am hoping you will consider a few specific comments and corrections and a more general conclusion.

p.13, para 4 - "the USFWS stated that '...inasmuch as no salmon or game fish are involved, we can see no possibility of your proposal being harmful to wildlife interests' (USBR, 1948)."

This statement is misleading for several reasons. It appears to provide a reason – from an expert source (the USFWS) no less – for claiming that hydropower development had little to no effect on fish and wildlife resources in Eklutna Valley. But the incomplete USFWS quote shouldn't be allowed to stand alone.

First, so-called "game" fish have long inhabited the lake and river. Local Dena'ina claim that their ancestors used to fish in the lake during their annual fall hunting/gathering excursions into the valley. Pilot Russ Merrill began flying fishing parties to Eklutna Lake in 1927 (Anchorage Daily Times, 10 Aug. 1927, p. 4) and as soon as a passable road was built in the mid-1930s anglers began flocking to the lake (e.g., Anchorage Daily Times, 19 July 1937, p. 8). Rainbow trout still inhabit the lower reaches of the river (above the former location of the diversion dam), which receive water from several small tributaries.

Second, the quote fails to acknowledge the possibility that the lower dam, built two decades earlier, blocked an historic run of salmon from entering most of the river and the lake. There is no record that the Dena'ina living in Eklutna Village or other local residents, who would have remembered salmon spawning in the lake and upper stretches of the river prior to 1928, were consulted at the time.

In fact, in its 1992 environmental assessment for the submittal of a legislative proposal to Congress for the sale of the Eklutna project, the Alaska Power Administration concluded that "complete loss of the anadromous salmon run (Sockeye) undoubtedly occurred with the construction of the 1929 dam." (p. 11) That conclusion was based on anecdotal information supplied by fisheries biologists and the local Dena'ina residents of the valley.

Third, fish are not wildlife and the presumed absence of "game" fish (a term that references the value of a fish to humans) doesn't preclude the valley's importance to wildlife. In fact, the USFWS letter quoted above emphasized the incomparable wildlife resources in the valley and recommended maintaining an existing hunting closure in perpetuity. In the letter, the Alaska director of the USFWS wrote "That particular area affords some of the most beautiful scenery and natural game habitat to be found anywhere in Alaska."

Dewatering Eklutna River would surely have had a significant impact on the distribution and abundance of fish and wildlife in the valley. It's possible that the USFWS was not aware that the new development would be unlike the hydropower development in operation at the time, that all of the water that would have normally flowed out of the lake was going to be shunted into a tunnel. In fact, based on his full statement (which was not included in the draft IIP), Director Clarence Rhode was referring to the USBR's proposal to raise the lake level two feet, not to cut off all flow to the river.

The same incomplete quote was cited on page 33 (para 2) without providing any of the aforementioned context. That context should be added to the draft IIP.

p. 14, para 6 - "Specific fish and wildlife measures were not contemplated in the earlier divestiture studies and reports or in negotiations for the Purchase Agreements because the projects were generally viewed as not involving fish and wildlife problems."

This statement follows naturally from the assertions made on page 13 of the draft IIP. It seems to be accurate; however, once again, it is taken out of context. The "earlier" divestiture studies, reports and negotiations assessed the technical and financial feasibility of the transfer. Politicians, engineers and accountants are not known for their fisheries or wildlife expertise. To the best of my knowledge, the primary landowner – Eklutna, Inc. – and the Native Village of Eklutna were not consulted about fish or wildlife. Neither were the federal and state agencies responsible for fish and wildlife management. Substantive fish and wildlife concerns were raised as soon as the agencies and local people found out about the plan to transfer the project.

The draft IIP acknowledges this, as follows:

"The APA developed a legislative proposal to authorize sale of the projects in accordance with the Purchase Agreements. Upon review of the legislative proposal, the loss of a sockeye salmon run that may have spawned in Eklutna Lake was identified by the National Marine Fisheries Service (NMFS)." (p. 14)

The draft IIP should make it abundantly clear that fisheries experts and local residents were not initially apprised of the negotiations for the Purchase Agreement; however, as

soon as the divestiture plan reached a broader audience the fisheries concerns were raised, initially by the NMFS, then others.

p. 14, last para - "The alleged loss [of the sockeye run] would have been caused by AL&P's development of the previous hydropower project in 1929. It was not identified in pre-authorization studies for the Federal project, and the Federal project did not include mitigation. **This specific problem and the desires of the fish and wildlife agencies to provide appropriate consideration to fish and wildlife resources over the long run led to negotiation of a formal agreement** between the Purchasers, the State of Alaska, NMFS, and USFWS regarding protection, mitigation of damages to, and enhancement of fish and wildlife resources affected by hydroelectric development of the Federal Eklutna and Snettisham projects." [emphasis added]

In other words, the construction of the original dams in 1928-29, which took place without consulting the local people or federal fish and wildlife managers, eventually led to the 1991 fish and wildlife agreement. Thus, the 1991 agreement was intended to protect, mitigate damage to, and enhance fish and wildlife resources affected by *all of the hydroelectric development* in Eklutna Valley, past and present, not just the federal project.

p. 14, para 1 - "With no flow from Eklutna Lake into Eklutna River, the old hydropower project was rendered useless and shutdown. USBR paid the city \$1,841,760 for the old project facilities."

This statement (which is repeated on page 33) isn't completely accurate, and it has bearing on the arguments I've raised in the previous comments. The USBR bought the existing facility, which was still operational, because the City of Anchorage owned the facility and the right to the lake's water, and the facility could be a potential competitor. This presented a legal hurdle as well.

The USBR planned to increase the storage capacity of the lake by building a higher dam, while the City of Anchorage owned the water rights. Alternatively, the USBR recognized that operating their proposed facility would put the existing facility out of business, which could lead to a legal challenge. In *Eklutna Project ... to Serve 25% of All Alaskans* the USBR observed that

"Except for spills, which would be utilized at the existing plant, no water would be released from the lake to Eklutna Creek. This plan would greatly reduce the generation capability of the existing plant, and in many months of the year, when there is a very little inflow below the lake, the present plant would not be able to generate any power." (p. 33)

Of course, this conundrum was solved when Anchorage chose to sell their facility (and water rights) to support and encourage the new project, which promised a much larger capacity.

It is inconceivable that today's hydropower facility would exist without the purchase of the original facilities built in 1928 and 1929. The 1953 contractual agreement between the City of Anchorage and the Bureau of Reclamation (No. 14-06-906) transferred the original power plant "and associated facilities and properties" to the federal government.

According to the document, this agreement “removed the last remaining legal hurdle to construction of the Eklutna project.”

What is misleading about the statements in the draft IIP is the existing facility was not “rendered useless and shut down” by the lack of water, it was deliberately purchased and decommissioned because otherwise it would have presented several insurmountable hurdles to the new project.

p. 17, para 5 – “By developing a binding and protective agreement, and putting off implementation dates, financing became an achievable goal (APA, 1992b).”

In its 1992 environmental assessment for the submittal of a legislative proposal to Congress for the sale of the Eklutna project, the Alaska Power Administration explained just how the agreement helped finance the project. In its informal consultation with local offices of the USFWS, NMFS, and Alaska Department of Fish and Game, the APA addressed the fisheries experts’ concerns that the dates for implementing the 1991 fish and wildlife agreement were too far in the future and that loss of the salmon run would not be adequately mitigated. According to the APA,

“It was expected that financial institutions would not provide financing if issues were outstanding and lacked resolution. By developing a binding and protective agreement, and putting off implementation dates, financing is an achievable goal.” (p. 10)

Thus, it seems as though the 1991 fish and wildlife agreement was instrumental in achieving financing for the proposed development, which suggests that any reasonable costs to be incurred pursuant to the 1991 agreement are baked into the deal.

p. 35, para 1 – “Thachkatnu Creek”

The U.S. Board on Geographic Names has changed the name of this creek to Łach Q’atnu Creek. Thachkatnu Creek is also used on page 136 (para 4) and should be changed there as well.

I appreciate that you found and shared the reference to the rerouting of Łach Q’atnu Creek into Eklutna Lake. Neither that creek nor a small, unnamed creek entering the south side of the small dam pond are natural sources for the lake. Water from the small, unnamed creek was captured in the 1950s when the storage dam was moved downstream to its present location.

The Eklutna Project Act of July 31, 1950 (as amended) reserved only “the water of Eklutna Lake and its tributaries which are required for the operation of the Eklutna project...” Łach Q’atnu Creek and the small, unnamed creek were not tributaries of Eklutna Lake when the Act was passed by Congress.

p. 38, para 2 – “The range at the Eklutna Glacier Training Site has never been used for training involving military munitions (live-fire or non-live-fire) (U.S. Army, 2008).”

This is indeed what the Army claims. However, this assertion seems to be contradicted by Public Land Order 3162 from 1963 in which the Secretary of the Interior withdrew 68.88 acres of land located about 10 miles south of Eklutna Lake (presumably on or

near the glacier) for use by the Department of the Army because those “lands have been used as an impact area for mortar fire, and may be contaminated from unexploded ordnance.” The Army should be asked to clarify this discrepancy.

p. 65, para 2 – This seems to be the only place in the draft IIP where freezing is mentioned. However, no data is presented on when the lake freezes. This would be useful information if it exists. My anecdotal observations for the past nine years indicate that the lake is typically ice-free beginning in late April or May and typically freezes completely between late November and late December. The actual dates (possibly plus or minus several days) are as follows:

	thaw	freeze
2011		29 Nov
2012	19 May	26 Nov
2013	1 Jun	2 Dec
2014	10 May	24 Dec
2015	23 Apr	23 Dec
2016	21 Apr	11 Dec
2017	13 May	26 Dec
2018	11 May	25 Dec
2019	27 Apr	4 Jan 2020

p. 66, para 4 – “The owners are therefore committed to ensuring continued compliance with the requirements of the 1991 Fish and Wildlife Agreement and balancing renewable energy against alternative uses for Eklutna Lake water.”

This statement follows a discussion of the Anchorage Climate Action Plan, noting that the Eklutna hydroelectric project “is a valuable renewable energy resource that offsets approximately 86,000 tons of carbon each year.”

Hydropower is a relatively clean and cheap source of electricity, and the 1991 agreement requires that a variety of factors unrelated to fish and wildlife be included in the final decision. Nonetheless, restoring fish habitat lost through hydroelectric development in Eklutna Valley is not simply one of many “alternative uses” of Eklutna Lake water, it is one of the primary uses. Humans can live with a little more carbon in the atmosphere and we can afford to pay a little more for electricity, but fish can’t live in Eklutna River without an adequate flow of water.

p. 68, last para – “In 2011 the USACE stated that removing the lower dam and releasing this accumulated sediment into the river without adequate flushing flows could do more physical and biological harm than good by degrading the existing fish habitat downstream even further (USACE, 2011).”

This is another quote from an expert agency that should be put in context. Yes, there were and are serious concerns about flushing the accumulated sediment downstream. But if the goal is to restore fish habitat in the river, the lower dam had to be removed. In the short term, accumulated sediment is likely to degrade downstream fish habitat. But that concern doesn’t acknowledge the long-term benefit to fish habitat of removing the dam. The U.S. Corps of Engineers (USACE) concurred with the dam’s removal after reviewing the details describing how and when it was to be accomplished.

With regard to flushing flows, it should be noted that the Producers seem to be dragging their feet on releasing water from the lake to flush sediments. Pursuant to the 1991 agreement, agencies have requested the release of several flushing flows to better assess potential habitat in the river canyon. This information would be used to design the study plans that the agencies are tasked with. The 1991 agreement requires cooperation from the producers in conducting necessary fieldwork. Yet, in their February 2020 presentation to the Anchorage Assembly, the Producers insisted that flow releases were “not allowed” because “major change affecting water usage or fish and wildlife [was] expressly prohibited prior to following process prescribed in 1991 Agreement.” This is a disingenuous and egregious interpretation of the provisions of the 1991 agreement, which was a contractual agreement to cooperate on protection, mitigation and enhancement of fish and wildlife in Eklutna Valley.

p. 117, Figure 5-26 – I took this photo and noted the lake level relative to the dam spillway on September 27. The authors of the draft IIP couldn’t have known that, but they can give me credit now.

p. 120, para 2 – “At least half of the 12 people injured or killed by bears in Chugach State Park since its establishment were within 100 yards of salmon spawning streams.”

The draft IIP provides no information on the value of wildlife to the people living in Eklutna Village or visiting Eklutna Valley or Chugach State Park; however, it describes “negative wildlife-human interactions” as a public safety concern. The source of the data cited above should be included.

According to a paper published in 2015 (J.A. Coltrane and R. Sinnott. 2015. Brown bear and human recreational use of trails in Anchorage, Alaska. *Human-Wildlife Interactions* 9:132-147), brown bears alone have injured 19 people and killed 2 people in the Anchorage area since 1991. The exact locations of three brown bear attacks that occurred before 1991 are unclear, but about half of the attacks since 1991 have occurred in Chugach State Park. The fact that half of the brown bear attacks in the municipality (not, as the draft IIP reported, in Chugach State Park) occurred within 100 meters of a salmon spawning stream was reported by Coltrane and Sinnott. No brown bear attacks are known to have taken place in Eklutna Valley.

Black bears have injured additional people and killed one person in the park. Only two people are known to have received minor injuries from black bears in Eklutna Valley. One of these incidents occurred before the park was established.

The fact that people are more likely to be attacked by brown bears (not black bears) when they are near salmon spawning streams (particularly if they are running or biking) may be relevant to the discussion; however, the information provided in the quote above should be confirmed and a reference provided. It would also be useful to provide information to help the draft IIP’s intended audience understand the value of the park’s fish and wildlife resources to people using Chugach State Park and specifically Eklutna Valley.

Conclusion

The EklutnaHydro website reinforces (and may be the inspiration for) several of the erroneous and misleading claims presented in the draft IIP.

For example, on the EklutnaHydro website's Frequently Asked Questions, in response to the question "Can water be released from Eklutna Lake into Eklutna River now?" the Producers claim that "Water could not be released without significant research of these implications" and "The best course of action is awaiting the completion of the Study Plan and Program as guided by the Agreement."

As discussed above in the comments regarding p. 68 (last para), this is a disingenuous and egregious misinterpretation of the 1991 fish and wildlife agreement. The authors of the draft IIP are not at fault here, as they are undoubtedly reporting the opinions of the Producers. The authors of the draft IIP should ask the Producers to identify the source of this opinion and, in all fairness, cite the reasons why the Producer's opinion appears to be self-serving.

In another example from the FAQs page, in response to the question "How is the Eklutna Hydroelectric Project related to the lower Eklutna River dam?" the Producers claim that "The Eklutna Hydroelectric Project is unrelated to the historic diversion dam constructed in 1929 on the lower Eklutna River and removed in 2017-2018."

This statement is incorrect. Anchorage Light & Power sold all of its physical assets, including the diversion dam, to the City of Anchorage in 1944. In the Eklutna Project Act of July 31, 1950, Congress authorized the Secretary of the Interior to "perform any and all acts and enter into such agreements as may be appropriate for the purpose of carrying out the provisions of this Act [authorizing construction of the Eklutna hydro project] into full force and effect, including the acquisition of rights and property."

A contractual agreement (no. 14-06-906) between the City of Anchorage and the U.S. Bureau of Reclamation was signed in 1953. This agreement transferred the old power plant "and associated facilities and properties" (e.g., the diversion dam) to the USBR. According to the contractual agreement, this "removed the last remaining legal hurdle to construction of the Eklutna project."

The old power plant and diversion dam were still operational in 1953; however, the USBR chose to decommission the hydroelectric facility so that it wouldn't compete with the federal hydro development. In the 1989 Purchase Agreement (as amended) the federal government sold and transferred to the Producers "the power production, transmission, associated real property **and all other facilities and assets provided or otherwise acquired for Eklutna under the Eklutna Project Act of July 31, 1950** (64 Stat. 382, as amended) including but not limited to ..." [emphasis added]. Only one dam is included in the list because the diversion dam was no longer in use. However, it had been in use in 1950 when the act was passed and certainly falls under the "but not limited to" clause.

This is further clarified by the definition of Eklutna in the Purchase Agreement, wherein Eklutna "**means any and all property and facilities acquired or used in connection with Eklutna**" [emphasis added]. As explained above, the federal government had acquired the existing hydro facilities built in 1928 and 1929 to eliminate competition for the lake's water and to remove "the last remaining legal hurdle to construction of the Eklutna project." You cannot deny that the decommissioned diversion dam was not part of the Eklutna project.

That the draft IIP reflects the perspective of the Producers is not surprising; however, it belies the draft IIP's assurance that

“The owners have no pre-conception as to any particular outcome or to what will be included in the Proposed Fish and Wildlife Program.”

Thank you for the opportunity to comment on the draft IIP.

Sincerely,

A handwritten signature in black ink that reads "Rick Sinnott". The signature is written in a cursive style with a horizontal line underneath the name.

Rick Sinnott
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