

Electric utilities push back on proposal to remove Eklutna River hydropower dam

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The Alaska Native village of Eklutna and Anchorage Assembly leaders are calling for the removal of the Eklutna River hydropower dam that provides cheap power in Southcentral Alaska, as electric utilities propose



ways to reduce the dam's environmental harms.

The supporters of removing the dam say it would fully restore the river, and would not happen until replacement sources of renewable energy can be created.

The idea comes as the owners of the nearly 70-year-old dam—the Chugach and Matanuska electric associations and the Anchorage Hydropower Utility—undertake a historic, legally required effort to mitigate its impacts.

But a representative for the utilities' effort says that a free-flowing Eklutna River could damage <u>critical infrastructure</u>, including the buried water pipe that delivers most of Anchorage's drinking water. It runs near and sometimes beneath much of the riverbed.

"This is stuff that we haven't really looked into in much detail yet, but with our current knowledge of that infrastructure and what it was designed for, this is raising red flags on our end," said Samantha Owen, who is managing the effort for the utilities through her employment with engineering firm McMillen Inc.

The utilities have released a different proposal to replenish most of the river with water. But it would not fully restore the river or the salmon that could inhabit the river's higher reaches.

The tribal government and Native village corporation for Eklutna, about 20 miles northeast of downtown Anchorage, say the removal would allow the river to flow freely for the first time in generations, providing salmon habitat along the entire waterway.

Assembly Vice Chair Meg Zaletel and Chair Chris Constant said in a recent editorial that they endorse the village's plan. Since replacement



renewable energy would be built first, they say it would not affect taxpayers or ratepayers for at least a decade.

The idea would also address the cultural and environmental neglect that affected the village when the river largely dried up, affecting a source of fish for the village, said Aaron Leggett, tribal president.

The Eklutna organizations don't think a free-flowing river will put infrastructure at risk, he said.

"We've looked into that and we don't believe that that will be an issue," Leggett said. "But again, that's why if it takes 10 years, we can get all that sorted out right now. You know, in other words, let's not stop the process on this unrealized fear."

A 'very expensive' bill

The Eklutna Hydroelectric Project, consisting of the earthen dam at Eklutna Lake and other power-generating infrastructure, was built by the federal government in 1955, drying up most of the river. The project was later sold to the utilities under an agreement requiring the current mitigation effort.

The utilities have proposed a \$57 million plan to restore water to 11 miles of the river, as early as 2027. The proposal would leave 1 mile of the river dry, downstream of the dam at Eklutna Lake. The plan calls for installing a valve at the municipal water pipe to replenish the river, without diminishing Anchorage's drinking water supply.

The proposal could bring four species of salmon into miles of river habitat—but it would likely do little to bring back sockeye salmon, a species that typically rears in lakes. The village also wants sockeye to thrive in the river.



The utilities say their plan balances a variety of interests. It would allow the hydropower plant to keep operating in perpetuity, providing what they say is the cheapest power in the region.

The utilities are currently seeking to increase their renewable power options as a looming shortage of locally produced natural gas threatens to reduce their main source of energy.

An initial review indicates the dam-removal idea could have catastrophic consequences, the utilities say.

Unbridled, the river could run with such force and volume that it could endanger bridges downstream and even scour and severely damage the Anchorage Water and Wastewater Utility pipe that carries the city's drinking water from the lake, Owen said.

Bridges downstream could also be damaged during normal flow, and face more serious consequences in extreme flood events that might follow heavy rains, she said.

"The problem is that we now have a bunch of infrastructure below the riverbed and downstream of the lake outlet that wasn't designed to withstand (a naturally flowing river), including the railroad bridges, the highway bridges, and Anchorage's public water supply pipeline," she said.

Finding replacement power would not be easy, she said. Wind and solar power do not provide energy as consistently as the hydropower project, she said.

"If you want to replace it with another firm, renewable energy source, that would be another storage hydro project somewhere," she said. "We would need to go identify a new project, study it, license it, design it and



construct it. And I will tell you that that bill could be very expensive."

The Anchorage Water and Wastewater Utility in 2021 expressed concern that a reestablished Eklutna River could damage the 54-inch water main providing most of Anchorage's drinking water, according to a letter to Owen. The pipe runs along the river canyon, crossing underneath the channel or closely paralleling it at several locations, the letter says.

A water utility spokeswoman this past week referred a reporter to that letter.

Owen said the electric utilities' draft program will release water at levels that satisfy the water utility. "We've addressed AWWU's concerns to their satisfaction," she said. "We wouldn't have put out the draft program if AWWU hadn't signed off on what we're proposing."

Eklutna in recent months formally proposed removing the dam, and the electric utilities have just begun to look closely at that idea, Owen said.

The electric utilities plan to study the idea before proposing a final mitigation plan that will go to Gov. Mike Dunleavy in April, Owen said. She said the water utility is also taking a close look at the village's proposal, and should soon provide its analysis to the <u>electric utilities</u>.

Assembly support for dam removal

The Anchorage Assembly in December passed an ordinance setting municipal policy that calls for continuous flow of the river and fish restoration even at the lake, to the greatest extent possible.

"The Assembly over and over has endorsed restoration of the river, and has consistently demonstrated close alignment the Native Village of



Eklutna," Constant said in an interview Thursday.

He said solutions can be engineered to protect the water pipe and bridges.

There's no way the Assembly would ever agree to a plan that would threaten the city's water system, he said.

"That's not rational," he said. "And so, to me, the question itself is like a red herring to distract us from where we're going. We're not going to do one thing in place of another, we have to figure out a solution that incorporates the needs of all of the systems."

It's likely the Assembly will pass a resolution soon that will provide formal comment on the utilities' draft plan, he said.

Zaletel said the Assembly has hired an expert who once worked for the Eklutna hydropower project to analyze the utilities' proposed draft program to ensure it will not threaten the city's drinking water, among other concerns.

"I don't want this to be a half-measure," she said. "I want to make sure it takes care of three things, power, our <u>water</u> supply and restoring wildlife. Right now it feels like it falls short."

The Conservation Fund and Trout Unlimited support the village's proposal to remove the dam, and will help secure funding to remove it, Leggett said.

About five years ago, the Conservation Fund teamed up with the village to raise \$7.5 million and remove an even older, unused concrete hydropower dam on the lower river.



Brad Meiklejohn, a senior Alaska representative for The Conservation Fund, said he believes the pipeline is buried deep enough that it should be safe from damage. Additional protections can be created, if needed, he said. The bridges can also withstand strong river flows, but can be strengthened, too, he said.

The village has remained steadfast in wanting full restoration of the Eklutna River, Leggett said. Eklutna has long provided land that has helped Anchorage grow, such as school and power plant sites and utility easements.

Those concessions benefited the city, he said.

"Can it finally be our turn?" he asked.

The utilities' draft plan receives public comment through Feb. 19. The governor is expected to decide the matter late this year, based on the process in the 1991 agreement.

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