

Alaska Dispatch News

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Main Image:

[Eklutna Lake: LH-20130614-7850](#) ^[2]

Main Image Caption:

The water of Eklutna Lake is pretty much all spoken for -- never mind the fish.

Last of two parts. Read part one [here](#) ^[3].

The federal government once owned two hydroelectric facilities in Alaska. Eklutna was transferred to a consortium of municipal and private electric utilities in 1997. Snettisham was transferred to state ownership a year later. A 1991 agreement among the various parties allowed the purchasers to postpone fixing adverse impacts to fish and wildlife for up to 30 years.

The Snettisham project didn't create many serious problems with fish and wildlife. However, hydroelectric development in the Eklutna Valley, beginning in 1929, destroyed several salmon runs and significantly affected other fish and wildlife.

'Novel' agreement

The Alaska Power Administration (APA) called the 1991 agreement "novel" because purchasers were usually required to address fish-and-wildlife concerns before a federal license or permit was issued to operate a hydroelectric facility. The provision that riled fish-and-wildlife agencies most was the 30-year delay. Agency officials believed the time frames for assessing damages to fish resources were too distant and unrealistic.

The Alaska Department of Fish and Game requested that the time frame be shortened to allow studies to begin in three years. While acknowledging concerns of the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Alaska Department of Fish and Game – particularly with regard to restoring salmon runs in the river and lake – the APA argued that the 1991 agreement was a blessing in disguise.

According to the divestiture report, existing legislation and regulations didn't require the APA to do anything to restore fish and wildlife populations damaged by the initial project in 1929 ^[4]. Selling the hydroelectric projects triggered a re-examination of previous impacts.

Even the 30-year delay was justified, the APA argued, because "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."

Attempting to assuage the concerns of state and federal biologists, the APA noted that the agreement "provides for an earlier start [for mitigation] if the parties find that to be desirable." And it concluded that the 1991 agreement "affords fish and wildlife interests a stronger voice in project

management than would be available under continued Federal ownership."

Water is fuel

Hydropower has trumped all negotiations to date. According to the purchasers' water rights certificate, "any and all" of the water flowing into the lake is legally reserved for hydropower. In practical terms, this means 78 feet of water -- the difference between the lake's maximum surface elevation and the drainpipe, or 230,521 acre feet -- belongs to the purchasers.

Yet another demand for Eklutna Lake's pristine waters developed in the mid-1980s. In addition to providing hydropower and recreation, Eklutna Lake became Anchorage's water supply. The water reservation for hydropower was amended in 1986 to allow the municipality to drain an average 41 million gallons per day -- not to exceed 72 million gallons per day -- in the opposite direction, into the city's water distribution system. However, according to Gary Prokosch, chief of the water resources section in the Alaska Department of Natural Resources, the municipality must compensate the purchasers for any loss of power.

Approximately 15 percent of the lake's water is used for public water supply and 85 percent is used to generate electricity. With such high demand, water seldom spills out of the lake, over the upper dam constructed in 1966.

In 2002, Mike Dillon, supervisor of the Eklutna Power Plant said, "We don't like to spill water. For us, water is fuel." Consequently, very little water flows in the portion of the Eklutna River between the upper dam and its confluence with Thunder Bird Creek. Most of the water in the upper river comes from several small tributaries.

Eklutna River Watershed Council

Families living in Eklutna Village weren't consulted about the hydroelectric projects built in their backyard in 1929 and 1955. They also haven't forgotten the once-abundant runs of salmon. In fact, they want them back.

In 2002 the Native Village of Eklutna created the Eklutna River Watershed Council [5]. The council included representatives from at least 11 state and federal resource and regulatory agencies, local communities, Alaska Railroad, University of Alaska Fairbanks Cooperative Extension, Trout Unlimited, Sierra Club, and Eklutna, Inc. Grants from the Environmental Protection Agency, Fish and Wildlife Service, Bureau of Indian Affairs, and other agencies were used to kick-start stream research and planning.

One of the council's first goals became removing an illegal dump in the river, just upstream from the diversion dam, where decades of numbskulls had pushed or driven vehicles and other items over a sheer, 250-foot cliff. A large crane lifted 45 vehicles, five bicycles, 10 barrels, five laundry machines, two refrigerators, two ovens, two computers, eight newspaper dispensers, and a golf club, among other paraphernalia, from the bottom of the gorge. At least one pickup truck has been launched into the gorge [6] since then. Due to the complexity of the issue and the number of organizations involved, the council spent too much time organizing, made little progress, and stopped meeting for several years.

The watershed council was reconstituted in 2009 as the U.S. Army Corps of Engineers began developing a plan to restore the lower river. In the first meeting, council members expressed a desire to create oxbows or tidal ponds in the river to make it more suitable for salmon spawning and rearing. They also discussed developing a fish hatchery using waste heat generated by a Matanuska Electric Association power plant to be built on the site of the old hydroelectric plant.

Eklutna, Inc., said it planned to create fish habitat following commercial gravel extraction along the lower river. [7] Nothing's come of these plans to date, and the watershed council hasn't met in a year.

Other solutions

The U.S. Army Corps of Engineers seems to have invested more time and money than most in trying to devise one or more solutions. In its Eklutna River Aquatic Ecosystem Restoration Technical Report, published in 2011, the Corps wrestled with a number of possible ways to renovate the river.

An obvious solution appears to be removing the lower dam. Some have even suggested blowing up the dam. But tons of sediment stored behind the dam could clog the river for years if released too quickly.

Simply removing the lower dam won't increase water flow. The costly removal of the lower dam would provide little benefit to fish unless an adequate amount of water is released from the upper dam. Neither the private electric utilities nor the Municipality of Anchorage want to share their water with fish. If some water can be released into the river, a fish ladder could be installed to allow salmon to bypass the upper dam into Eklutna Lake. But do we want a recreational fishery and rotting fish carcasses in the city's pristine water supply?

Because these knotty issues were outside its control, the Corps' technical report didn't address the recovery of fish in most of Eklutna River and the lake. Instead, it recommended ways to increase fish habitat in the lower river. Even in the lower river, below the diversion dam, opportunities are limited by development. Extensive gravel mining by the Alaska Railroad and others has shifted the mouth of the river several times. The Alaska Railroad and Glenn Highway have restricted flows, and subsequent dumps of tons of sediment have resulted in shallow, shifting channels that do not provide good fish habitat. The report recommended constructing a single defined channel between the highway and railroad bridges, installing large woody debris and boulders to create fish habitat, and deepening gravel pits in the floodplain to provide better wintering habitat for salmon fry.

You break it, you fix it

In the past decade the watershed council and such agencies as the U.S. Army Corps of Engineers have spent hundreds of thousands of dollars -- tax dollars -- without getting to the bottom of the problem. The Corps technical report concluded it didn't have enough money to fix the real problem -- restoring fish in the upper river and lake -- because the two dams and the use of all the water in the lake for power and municipal water supply were intractable hurdles for a single agency.

The Corps report didn't mention the 1991 fish and wildlife agreement. This is not surprising given the number of years since the contract was signed and the number of years before it is scheduled to take effect. Perusing the list of signatories, you get a sense of how long it's been. Signing for the State of Alaska: the late Gov. Wally Hickel. Signing for the Municipality of Anchorage: former Mayor Tom Fink.

To the best of my knowledge, only one person working for the Alaska Department of Fish and Game remembers the 1991 agreement. About 20 years ago, a retiring biologist handed Ed Weiss a file on Eklutna hydro. Weiss recalled the outgoing biologist telling him he might have to deal with this issue before he retired. Weiss isn't likely to last another 15 years. Marc Lamoreaux, the natural resources manager with Eklutna Village, also knows about the agreement. He said he's

reminded electric utility executives about the agreement. But Lamoreaux isn't likely to last another 15 years either.

What kind of a contract gives one side everything it wants right now, but makes the other side wait 30 years to find out if it's going to get anything at all?

Hey mister, can you spare a dime?

State and federal governments, universities, private non-profit organizations, and Eklutna Village shouldn't spend money trying to fix a problem that the purchasers have already agreed to deal with. The electric utilities were allowed to take up to 30 years to begin mitigating adverse impacts because that's how long it was anticipated they would need to pay off the loans. However, the agreement also stipulated that mitigation could begin earlier.

Thirty years is a long time to wait. But this problem has been percolating in the Eklutna watershed much longer – since the dams were built in 1929, drying up most of the water in the river and destroying several salmon runs. But if the electric utilities aren't willing to cooperate, nothing will be done to address the problem until 2027.

Alaska's fish and wildlife shouldn't have to wait a century for a dam day of reckoning.

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[4] <http://akenergyinventory.org/hyd/SSH-1992-0042.pdf>

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