

Eklutna Hydroelectric Project

1991 Fish and Wildlife Agreement Update



Welcome

Thank you for continuing to follow the progress of the Eklutna Hydroelectric Project and compliance with the 1991 Fish & Wildlife Agreement. This project began two-and-a-half years ago, and we continue to be pleased with the incredible amount of work done and the cooperation and input from the many agencies and stakeholders involved in this effort.

In this issue of the project newsletter, you will read about the completion of the first season of field work, our public safety plan, the flow releases, and our ongoing community outreach.

This newsletter is published quarterly to provide information and updates regarding this long-term project. Thank you for taking the time to read it. If you would like to subscribe or unsubscribe, please use the Contact Us box at www.eklutnahydro.com.



Update from the field

We had a busy summer and early fall getting ready for and then executing the flow releases and completing the first season of field work. After replacing the drainage outlet gate at the spillway, consulting with the downstream landowners, and obtaining all of the necessary permits and authorizations, the project owners released a series of controlled flows into the Eklutna River this fall. These controlled flow releases were conducted for ongoing instream flow and geomorphology studies. The purpose of the instream flow study is to determine what flows would be needed to create quality fish habitat in the river, and the purpose of the geomorphology/sediment transport study is to determine how all of the sediment that has accumulated in the river would move under various flows and the impact that might have on salmon spawning.

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Update from the field

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The flow releases were initiated on Monday, September 13. Because the instream flow study required a stable channel, the project owners initially released approximately 150 cubic feet per second (cfs) of water for seven days to help stabilize the channel. We then continued to release 150 cfs for four more days decreasing flows to 75 cfs on September 24 and then 25 cfs on September 29. Field crews collected data at established transects throughout the Eklutna River during each flow. The controlled flow releases ended on October 6. Additional transects in the river were surveyed before and after the flow releases to examine how sediment entering the river would move under various flows.

Other studies

The technical team has completed the first season of field work. This included:

- Weekly adult salmon surveys in the lower Eklutna River
- Sampling for macroinvertebrates in both the lower and upper Eklutna River
- Sampling for fish in both the Eklutna River and Eklutna Lake
- Surveying Eklutna Lake and its tributaries for potential fish habitat
- Maintaining stream gages in the Eklutna River
- Collecting other water quality data in both the Eklutna River and Eklutna Lake
- Surveying the lakeside trail for evidence of erosion
- Conducting a condition assessment of all the existing infrastructure in the Eklutna River
- Developing a hydro operations model



Flow releases at Alaska Railroad bridge

Flow studies progress

- ✓ Address any safety concerns
- ✓ Define flow releases and develop study plans
- ✓ Conduct condition assessment of the drainage outlet gate
- ✓ Evaluate potential impacts to existing fish habitat
- ✓ Evaluate potential impacts to downstream infrastructure
- ✓ Evaluate potential impacts to lakeside trail
- ✓ Obtain all necessary permits and authorizations
- ✓ Calculate cost of providing flows and assess feasibility
- ✓ Address legal concerns
- ✓ Flow studies completed safely in September 2021
- Analyze collected data and develop draft study reports
- Distribute draft reports to aquatics technical work group for review and comment

Start study planning process for 2022

Community outreach

The flow releases offered an excellent opportunity to bring some of the project's stakeholders together for a better understanding of the studies. Utility board members and representatives from the Eklutna owners hosted a tour to view the water releases on September 14. Representatives from Anchorage Water and Wastewater Utility (AWWU) and the Native Village of Eklutna (NVE) joined board members and CEOs from Chugach and MEA at the Eklutna Canyon campground to learn more about the project and understand the necessary preparation and expected outcomes of this part of the study program.

The sunny fall day allowed the opportunity to view the Eklutna River from various vantage points and witness the introduction of naturally occurring sediment deposits and how they impact the river and potential salmon habitat. The group then viewed the dam and water release mechanism and learned about the work required for the gate to achieve the flow releases.

The project team appreciates the discussion with participants on the dynamic effects of the flow releases for the various stakeholders, including the historic and subsistence value for NVE, the potential influence on the Eklutna and Knik River fisheries, the adjustment to power generation required to build required lake levels, and the potential impact to AWWU infrastructure.

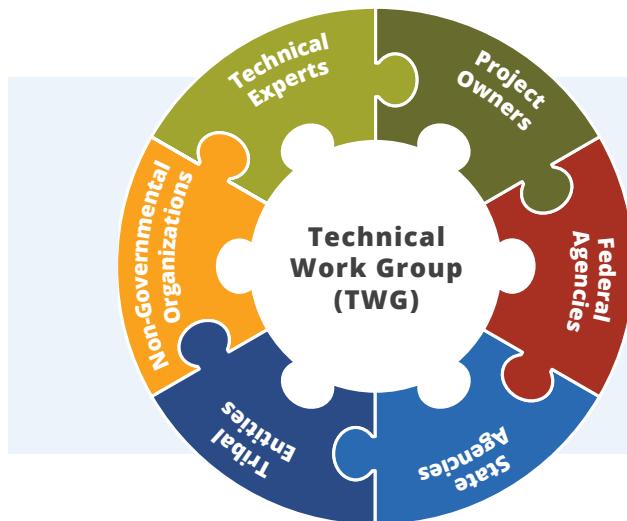
Outreach continues with our many other interested groups who are following this project. An update was given to the Anchorage Assembly's Enterprise & Utility Oversight Committee on October 21, and the larger stakeholder group met on October 20.



Watching flow releases at Eklutna



Stakeholder group update



Project partnership requires a multitude of stakeholder involvement.

The TWG meets regularly and is comprised of technical experts and representatives.

Public Safety Plan

During the study planning process, concerns were raised that the controlled flow releases, especially the 150 cfs flow release, would result in unusually high flow conditions in the river resulting in potentially hazardous conditions. Although there is no official public access to the Eklutna River, the river is still open for fishing, and trespassing to access the river does occur. With that in mind, the project team developed and implemented a public safety plan in coordination with the Native Village of Eklutna, Eklutna, Inc., Chugach State Park, and the Anchorage Water and Wastewater Utility. The plan included placing warning signs at all known access points to the Eklutna River and a formal notification of the flow release schedule to all of the project stakeholders, downstream landowners, and Native Village of Eklutna.

The controlled flow releases were also likely to mobilize and transport a large portion of the accumulated sediment from behind the lower dam site. Both the Alaska Department of Transportation and Public Facilities and the Alaska Railroad Corporation expressed concern that the sediment would deposit downstream near their respective bridges and potentially cause negative impacts. The project owners reviewed all relevant available data and

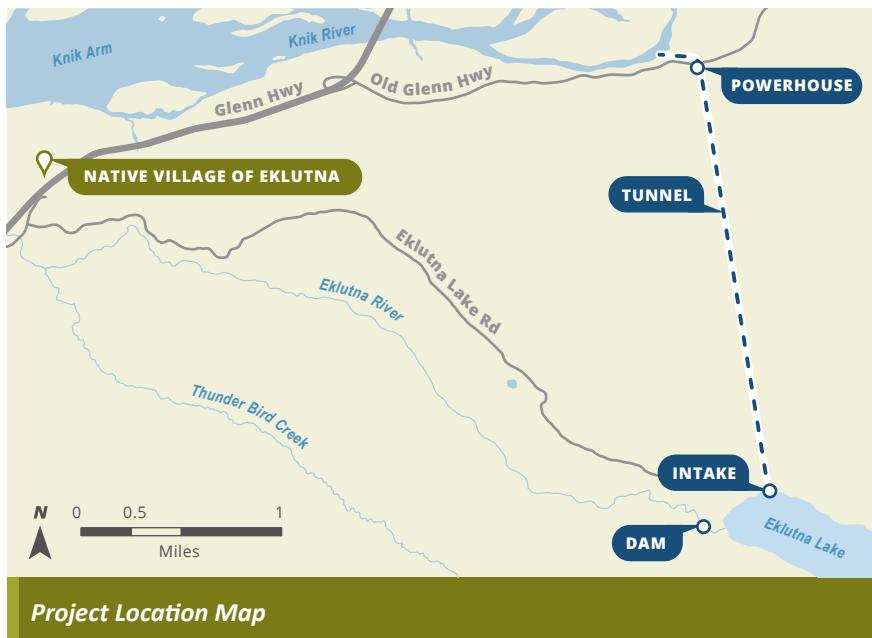
did not anticipate any negative impacts to downstream infrastructure. However, out of an abundance of caution, the project owners monitored the streambed near the highway and railroad bridges daily during the flow releases for any unanticipated sediment deposition or scour that would be cause for concern.

In addition to the potentially hazardous conditions in the Eklutna River itself, there were also safety concerns associated with the pond upstream of the dam. There was concern that the flow releases through the drainage gate at the base of the spillway may create potentially dangerous undercurrents for any recreational users in the pond at that time. Therefore, the public safety plan included placing warning signs around the pond and notifying both Chugach State Park and the kayak rental vendor at Eklutna Lake of the flow release schedule.

The planning and preparation paid off as there were no public safety incidents reported, and there was no significant sediment deposition or scour near the downstream bridges. The owners appreciate the cooperation of several agencies and the public in keeping safety a priority.



Access point warning signs



Next steps

The project owners are currently working to analyze the data that was collected this year and develop draft study reports. These draft reports will be distributed to the aquatics technical work group for review and comment in early 2022.

At the same time, the project owners have started the study planning process for next year, which will include new focus areas such as recreation, cultural resources, wetlands, wildlife, engineering feasibility and the associated costs. As part of this phase, new technical work groups will be established for these new focus areas as appropriate, and efforts are underway to reach out to the broader stakeholder group to identify individuals with relevant technical expertise who are interested in participating.

The project owners are committed to working collaboratively with all technical work groups to develop study plans for next year.

TWG Members

Native Village of Eklutna (NVE)

Alaska Department of Fish and Game (ADFG)

U.S. Fish and Wildlife Service (USFWS)

National Marine Fisheries Service (NMFS)

Trout Unlimited (TU)

Alaska Pacific University (APU)

Alaska Institute for Climate and Energy (ALICE)

Project Owners



Observing the flow releases

Project timeline - at a glance



2019

Initiate consultation process, develop a website, gather existing information, conduct site reconnaissance, and develop a long-term plan.

2020

Retain technical experts, develop study plans in consultation with state and federal agencies and any interested parties, and submit study plan schedule to the Governor for approval.

2021-2022

Conduct studies as described in the study plans (assuming 2 years of studies), develop a draft Summary of Results, and distribute to stakeholders for review and comment.

2023-2024

Develop a draft F&W Program, distribute to stakeholders for review and comment, conduct public meetings, resolve any disagreements, and submit proposal to the Governor.

Project team

Chugach's Mike Brodie is leading the project on behalf of the owners. In addition, the owners have contracted McMillen Jacobs Associates (MJA) to assist with meeting the requirements of the 1991 Agreement. Samantha Owen with MJA is the Project Manager and main point of contact for the Project. MJA is also providing study program management, water quality expertise, engineering services, and GIS support. Subcontractors to MJA include Hydro Regulatory Services providing senior advisory services, R2 Consultants providing instream flow and fisheries expertise, Watershed GeoDynamics

providing geomorphology and sediment transport expertise, and Information Insights providing neutral meeting facilitation. Additional technical experts in recreation, cultural resources, wetlands, and wildlife will be added to the Project Team as the process progresses. The Project Owners have also contracted Joy Huntington with Uqaqti Consulting to provide support regarding stakeholder outreach and communication.



Before flow release



During flow release



Field studies



Top of Eklutna dam

For more information:

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Road to completion

