



# Explanatory Statement

The Proposed Final Fish and Wildlife Program (Proposed Final Program) for the Eklutna Hydroelectric Project (Project) that has been presented to Governor for approval represents the product of over five years of participation and effort to meet the requirements of the 1991 Fish and Wildlife Agreement (1991 Agreement) by the Project Owners, federal and state agencies, native tribal members, environmental advocates, and many members of the public.

The U.S. federal government constructed, owned, and operated the Project from 1955 until it sold the Project to Chugach Electric Association, Inc. (CEA), Matanuska Electric Association, Inc. (MEA), and the Municipality of Anchorage (MOA), collectively the “Project Owners”, in October 1997. The sale was subject to an agreement that the Project Owners entered into in 1991 with the National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), the Alaska Energy Authority (AEA), and the State of Alaska (collectively with the Project Owners, the “Parties”) regarding protection, mitigation of damages to, and enhancement of fish and wildlife affected by the Project (1991 Agreement).

As a substitute for federal licensing, the 1991 Agreement sets out a specific set of requirements to be followed by the Project Owners every 35 years to develop and submit to the Governor a Proposed Final Program to address impacts of the Project on fish and wildlife resources through protection, mitigation, and enhancement (PME) measures.

The Project Owners submit this Proposed Final Program in compliance with all requirements of the 1991 Agreement. While the Proposed Final Program does not include everything that all process participants wanted, the Project Owners and other Parties to the 1991 Agreement believe that this represents a balanced approach that meets the process requirements and approval criteria set forth in 1991 Agreement. As regulated electric utilities with responsibilities to their member-ratepayers, the Project Owners also believe that the Proposed Final Program preserves the Project’s operational values as a low cost resource for power in Southcentral Alaska that produces firm energy and capacity, increases grid reliability, provides approximately 44% of MEA’s renewable generation portfolio and approximately 25% of CEA’s renewable generation portfolio, and offsets approximately 72,500 metric tons of CO<sub>2</sub> equivalent each year.

## Process

The 1991 Agreement is primarily a process document designed to lead the Project Owners through a study and consultation process to create a set of PME measures related to the

environment affected by the Project and generate the necessary information to support an informed decision by the Governor. The 1991 Agreement prescribes specific procedural, schedule, consultation, study, and public involvement requirements during the development of the Proposed Final Program.

While the process required in the 1991 Agreement is based on the federal licensing process established by the Federal Power Act and implementing regulations, it was adapted, has different decision-making criteria, and leads to a result made in Alaska for Alaskans. The decision by the Governor is neither a federal action that triggers the requirements of the National Environmental Policy Act (NEPA) nor an action under the Federal Power Act with its prescriptive authorities for federal fisheries agencies and licensing regulations for applicants for a federal license. Rather, the 1991 Agreement contains explicit directions in lieu of any federal process that the Project Owners have followed or exceeded.

The Project Owners were required to initiate the consultation and study process outlined in the 1991 Agreement by 2022. In order to provide ample time for meaningful consultation and a comprehensive study program, the Project Owners started three years early in 2019. In addition, the 1991 Agreement required the Project Owners to consult with only specific agencies; however, the Project Owners felt it was important to invite all interested stakeholders to participate in the 1991 Agreement process.

To begin, the Project Owners compiled and summarized all relevant existing information in the Initial Information Package (IIP), identified information gaps, and developed study plans in consultation with resource agencies, the Native Village of Eklutna (NVE), and other interested entities. The Project Owners then implemented a 2-year study program in consultation with Technical Work Groups to assist in study design, execution and reporting, completed 16 environmental and engineering studies, sought Traditional Ecological Knowledge (TEK) relevant to the Eklutna River, and developed study reports. Through this process, the Project Owners identified and discussed the need for and the means to establish instream flows in the Eklutna River as the centerpiece of their fish and wildlife program. The Project Owners then conducted a comprehensive alternatives analysis, not required by the 1991 Agreement, in which they investigated, developed, and examined all known proposals for the protection, mitigation, and enhancement of fish and wildlife affected by the Project, and presented to, engaged with, and sought input from the consulted entities.

Based on the study results, consultations, and alternatives analysis, the Project Owners then developed a Draft Fish and Wildlife Program (Draft Program) publicly released in October 2023. In the Draft Program, the Project Owners proposed to utilize the existing Anchorage Water and Wastewater Utility (AWWU) water supply infrastructure to provide a robust year-round base instream flow regime to 11 out of 12 miles of the Eklutna River and benefit all four

species of salmon that are currently observed spawning in the lower river, while implementing measures to protect the public water supply and minimizing impacts to ratepayers, taxpayers, carbon emissions, and recreation. The proposed flows were determined based on modeling results and were designed to optimize habitat gains while minimizing the costs of replacement energy. The Draft Program also proposed periodic peak flows to maintain downstream fish habitat, construction of eight new bridges for the AWWU water supply access road, a funding commitment for monitoring studies, and an adaptive management framework. Due to the significant costs, impacts, and uncertainty regarding the viability of introducing anadromous species above the Project dam, no fish passage related facilities or changes in operations were proposed at that time.

The Parties to the 1991 Agreement and NVE had 30 days to review the Draft Program and provide comments to the Project Owners. The Project Owners then met with each of the Parties and NVE in December 2023 to attempt to resolve any differences giving due weight to their recommendations, expertise, and statutory responsibilities. In January 2024, the Project Owners held a series of six public meetings in Palmer, Anchorage, and Eagle River. The public meetings were held in an open house style, and members of the public had an opportunity to submit comments to the Project Owners.

Since then, the Project Owners continued to meet and negotiate with the Parties and NVE and have made substantial improvements to the program based on their input. These changes include adding new measures to protect existing recreational use and facilities, revising the framework for the Monitoring and Adaptive Management Committee, increasing the funding commitment for habitat monitoring efforts, combining the base flow and peak flow water budgets, increasing water banking capabilities, increasing the flexibility for requesting modifications to the flow regime, adding procedures for allocating additional inflows in the future, adding a funding commitment for physical habitat enhancement, and adding two limited reopeners for a fixed wheel gate and fish passage measures during the 35 year period should certain criteria be met. These changes are reflected in the Proposed Final Program now being submitted for the Governor's approval.

## Proposed Final Program

The Proposed Final Program consists of the following inter-related measures deemed necessary to protect, mitigate, and enhance fish and wildlife resources affected by the Project and reflects negotiations of the Parties to the 1991 Agreement:

- Section 2.1 – Year-Round Instream Flows in the Eklutna River
  - 2.1.1 – Construction of an Eklutna River Release Facility near the AWWU Portal Valve to allow such flows
  - 2.1.2 – Establishment of a Default Flow Regime for Year-Round Instream Flows

- Section 2.2 – Periodic Channel Maintenance Flows in the Eklutna River
  - 2.2.1 – Automation of the Existing Outlet Gate at the Dam to allow such flows
  - 2.2.2 – Establishment of a Default Flow Regime for Periodic Channel Maintenance Flows
- Section 2.3 – Commitment for Monitor Future Flow Releases
- Section 2.4 – Construction of Eight New AWWU Bridges across the Eklutna River
- Section 2.5 – Recreation Enhancements
  - 2.5.1 – Funding Commitment for Lakeside Trail Repairs
  - 2.5.2 – Commitment to Avoid Peak Fishing Times when Scheduling Annual Project Maintenance to Avoid Impacts to the Eklutna Tailrace Fishery
  - 2.5.3 – Request for Free, Non-permitted Public Access to the Eklutna River
- Section 3.1 – Establishment of a Monitoring and Adaptive Management Committee
- Section 3.2 – Funding Commitment for Monitoring Efforts
- Section 3.3 – Adaptive Management Plan
  - 3.3.1 – Establishment of a Water Budget
  - 3.3.2 – Procedures for Banking Water in the Reservoir
  - 3.3.3 – Procedures for Allocating Any Additional Future Inflows
  - 3.3.4 – Commitment to Prepare an Annual Water Accounting Report
  - 3.3.5 – Procedures for Requesting Modifications to the Flow Regime
  - 3.3.6 – Funding Commitment for Physical Habitat Enhancement
- Section 4.1 – Limited Reopener for Potential Replacement of the Existing Overflow Spillway with a Fixed Wheel Gate
- Section 4.2 – Limited Reopener for Potential Fish Passage Facilities

## Criteria

In order to ensure that the Project is “best adapted for power generation and other beneficial public uses,” Section 5 of the 1991 Agreement requires the Governor to give *equal* consideration to the following criteria when reviewing the Proposed Final Program for his public interest determination:

1. Efficient and economical power production,
2. Energy conservation,
3. The protection, mitigation of damages to, and enhancement of fish and wildlife (including related spawning grounds and habitat),
4. The protection of recreational opportunities,
5. Municipal water supplies,
6. The preservation of other aspects of environmental quality,
7. Other beneficial public uses, and
8. Requirements of State law.

The Project Owners believe the Proposed Final Program fully meets the process requirements and these criteria outlined in the 1991 Agreement. The Proposed Final Program strikes a new balance among fish and wildlife habitat, public water supply, renewable energy production, and recreation.

- The central PME measure (providing instream flows in Eklutna River) will provide significant improvement in fish and wildlife habitat affected by the Project without losing fundamental benefits of the Project's efficient and economical power production of dispatchable renewable energy and capacity;
- Adaptive management provisions acknowledge and address uncertainties in how the river will react to the new instream flow regime, with funding for physical habitat enhancement;
- A Monitoring and Adaptive Management Committee comprised of the federal and state agencies and NVE is established to direct the habitat related efforts going forward, with funding for monitoring efforts;
- A protocol is established for sharing in any increased inflows to Eklutna Lake between fish habitat and energy generation;
- Municipal water supply (AWWU water source and infrastructure) as well as other downstream infrastructure remain protected; and
- Recreational opportunities at Eklutna Lake, in the Eklutna River, and in the Project tailrace are preserved and enhanced.

Additionally, while at this time the Project Owners do not believe that a fixed wheel gate is necessary or fish passage into/out of Eklutna Lake is warranted due to high cost, low productivity to support new fish populations, fish passage technological uncertainties, and major impacts to project operations, the Project Owners acknowledge that the situation could change before the next study and consultation process begins in 2057. Accordingly, the Project Owners have provided written criteria, conditions, and triggers upon which they will install a fixed wheel gate and cooperate with the Committee to install fish passage facilities ten years after instream flows are established. These limited reopeners specifically address the requests of agencies and NVE for greater flows and fish passage without compromising the criteria of efficient and economical power production and municipal water supply.

## Costs

As set forth in Section 4.5.1 of the Supporting Information Document (SID), the Project Owners estimate that the capital costs of building the infrastructure in the Proposed Final Program (e.g., Eklutna River Release Facility, AWWU bridges, and other financial commitments) will total \$16.5 million (or \$20.5 million if they also install the fixed wheel gate). The Project Owners estimate that the O&M costs will total \$316,000 per year, while annual energy replacement costs will amount to \$1.3 million per year. The total annualized cost is estimated at \$3.7 million (or \$4.0 million if they also install the fixed wheel gate).

The costs for implementing the Proposed Final Program will be distributed among the Project Owners based on their ownership percentages and long-term power purchase agreements that modify allocations of costs related to the 1991 Agreement. The resulting allocations are as follows:

- CEA is responsible for 64.29% of all costs, including Capital Costs, O&M Costs, and Replacement Energy Costs.
- MEA is responsible for 16.67% of the Capital Costs and O&M Costs, and 35.71% of Replacement Energy Costs.
- MOA is responsible for 19.04% of the Capital Costs and O&M Costs but does not incur any Replacement Energy Costs.

Given these allocations, CEA will bear approximately 66.7% of the total annualized cost, MEA – 24.5%, and the MOA – 8.8% of the total costs.

### Considerations Related to Other Requests

The Project Owners understand that the Proposed Final Program does not contain some measures requested by participants in the consultation process. When evaluating the Proposed Final Program, the Project Owners believe the following considerations are important:

- The environment today is much different from pre-Project conditions; therefore, use of existing conditions as baseline is the only logical and legally defensible way to approach analysis of river habitat conditions, reservoir productivity conditions, and alternative PME measures. The Eklutna River was subject to hydropower development beginning in the 1920s long before the Project was built. Downstream railroad and highway bridges were built creating important public infrastructure that adversely affected the fish habitat in the river. In the 1980s, the Municipality of Anchorage developed important infrastructure that depends on the Project to provide 90% of the Municipality's water supply needs but limits the consideration of certain alternative PME measures. The area around Eklutna Lake has become a popular area within Chugach State Park providing a variety of recreational opportunities, and the recreational fishery in the tailrace is popular as well. The Project Owners accepted all these conditions and sought to optimize what could be done given such constraints, rather than ignoring them or assuming that someone else will bear such costs of remediation.
- The alternative analysis conducted by the Project Owners followed a U.S. Army Corps of Engineers (USACE) methodology that looked at a wide range of comprehensive PME measures on an apples-to-apples comparison based on habitat gains, total cost

(CAPEX, O&M, replacement power), and cost per habitat unit gained. This approach was important to the Project Owners because they must consider all costs and risks of their actions as prudent utility operators with public service obligations to their member-ratepayers and the communities they serve. (See SID – Section 4.5.1.)

- Full “restoration” of the Eklutna River is not required by the 1991 Agreement; rather the goal of the 1991 Agreement is to “protect, mitigate and enhance” fish and wildlife habitat affected by the Project within the construct of eight specific criteria as detailed above.
- Similarly, dam removal is not contemplated by or required under the 1991 Agreement. After the Draft Program was released, NVE first presented dam removal as its preferred alternative. While the Project Owners did not have the modeling capability to evaluate potential effects on fish habitat from dam removal, they commissioned an experienced engineering team to prepare a technical memorandum addressing project removal elements, risks, and costs (See SID – Attachment F). That team identified significant risks to downstream infrastructure (AWWU pipeline, railroad, and highway bridges) due to inundation during high river flows in an unregulated river, identified potential mitigation measures, and estimated the total known costs of dam removal, Project replacement, and mitigation measures to exceed \$500 million in 2034 dollars.
- The Project Owners are dealing with the current energy supply situation in Southcentral Alaska, which is very dynamic and challenging given the declining natural gas fuel supplies and other considerable unknowns such as how renewable generation resources and the necessary new transmission lines for such resources can be contracted, permitted, financed, constructed, interconnected, and integrated with the existing Railbelt electric system. Based on the engineering analysis and the current energy situation, as prudent utility operators the Project Owners cannot agree to remove the Project in ten years and take on such considerable costs and liabilities.

## Summary

The Project Owners respectfully request approval of the Proposed Final Program no later than October 2024 so that they can start to implement its numerous protection, mitigation, and enhancement measures including substantial year-round instream flows in the Eklutna River. The Project Owners look forward to working with the Governor and the other Parties through the final steps of the 1991 Agreement process and stand ready to support these efforts.