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February 19, 2024

Eklutna River Hydroelectric Project Owners:  
Municipality of Anchorage (MOA)  
Chugach Electric Association (CEA)  
Matanuska Electric Association (MEA)

VIA EMAIL: [info@eklutnahydro.com](mailto:info@eklutnahydro.com)

Re: Draft Fish and Wildlife Program

Dear MOA, CEA, and MEA:

Established in 1947, Defenders of Wildlife is a national nonprofit conservation organization dedicated to the protection of flora and fauna in its native habitat. Defenders has nearly 2.2 million members and supporters nationwide, including over 6000 in Alaska. We appreciate this opportunity to comment on the draft Fish and Wildlife Program.

The Eklutna Project Fish and Wildlife Program represents a generational opportunity to finally mitigate the extensive damages inflicted by the Eklutna Hydroelectric Project for over seven decades. The Project has extensively degraded an entire watershed, decimating its fish and wildlife habitat. The Eklutna people depended on those resources and were not consulted on the radical idea to divert all outflows from Eklutna Lake to another watershed, out of the river adjacent to which their village is located. 75 years since the Project was authorized, and 25 years since you bought it from the federal government at a remarkably low cost, it is finally time to assess and mitigate the damages done.

The draft Program fails to seize this opportunity. It completely misses the goal of the 1991 Fish and Wildlife Agreement to quantify, protect, mitigate and enhance fish and wildlife resources damaged by the project, specifically including a former sockeye salmon run. Instead, it uses an analytical framework that by design works only in the margins and could not possibly produce measures that would provide meaningful mitigation. The existing project record is inadequate to support a reasoned choice because all alternatives were analyzed using inappropriate metrics.

The resource agencies, especially the U.S. Fish and Wildlife Service, consistently pointed out the fatal shortcomings of the owners' analyses, and none of them recommend the draft Program. It

underestimates Project damages, fails to put sufficient water into the river to support fish, and leaves the river disconnected from the lake. It is a non-starter by every important measure.

It is also inconsistent with municipal law. Although MOA is a majority owner of the project and its logo appears on the cover, the draft Program is inconsistent with municipal ordinances and resolutions that seek continuous water flow that supports fish through the entire length of the river, connecting it with the lake. There appears to have been insufficient coordination between the administrative and legislative branches of municipal government as the study process unfolded and the draft Program was selected. This must be resolved before a plan can move forward.

Additionally, many stakeholders believe that the easiest, cheapest and most ecologically beneficial way to mitigate the Project's extensive damages is to remove the dam at a future date, after additional renewable energy capacity has been added to compensate. This alternative was suggested during the study process but was not evaluated.

As proposed, the draft Program is a \$57 million fool's errand that we think will prove unsatisfactory to all stakeholders, including the owners. We urge you to reconsider available options using appropriate metrics and propose a meaningful Program around which much better community consensus can be built and of which we can all be proud.

Our detailed comments are attached.

Sincerely,

/s/

Patrick Lavin  
Alaska Policy Advisor  
plavin@defenders.org

Cc:

Jennifer Spegon, Carol Mahara, U.S. Fish and Wildlife Service  
Sean McDermott, National Marine Fisheries Service  
Ron Benkert, Alaska Department of Fish and Game  
Mark Corsentino, Anchorage Wastewater Utility



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## COMMENTS ON EKLUTNA PROJECT OWNERS' DRAFT FISH AND WILDLIFE PROGRAM

February 19, 2024

### Introduction

The process leading to the draft Fish and Wildlife Program was fundamentally flawed because it allowed for, and indeed was *designed to produce*, alternatives that performed well per the evaluative metrics employed despite the fact that they failed to mitigate damages to fish and wildlife. This was accomplished by failing to identify the Project's damages to fish and wildlife and habitat in the first place, and then failing to evaluate alternatives in terms of the degree to which they would mitigate those damages.

The state and federal resource agencies identified these shortcomings throughout the stages of the process. The project owners did not incorporate the substance of the concerns raised; i.e., did not correct the fundamental flaws they were baking into the cake. Not surprisingly, the outcome – the draft Program – is also fundamentally flawed. The project owners propose to spend \$57 million of ratepayer and taxpayer money to put a trickle of water into the Eklutna River that cannot reasonably be expected to meaningfully mitigate anything. Approval of this feeble proposal would be feckless, arbitrary, and not in accordance with law.

Because the study flaws and inappropriate metrics were not corrected, it is not possible for a decision-maker to make a reasoned decision among alternatives. Accordingly, we urge the parties to the 1991 Fish and Wildlife Agreement to amend that agreement to allow additional time to assess appropriate alternatives using appropriate metrics. Taking additional time to arrive at a decision that meaningfully mitigates Project damages and enjoys much greater consensus among stakeholders is vastly preferable to proceeding apace on the inadequate record developed during the study process.

Finally, developments since the draft program was published cast grave doubts on its reliability and credibility. An engineering report, for example, concluded that the draft plan cannot provide continuous year-round water to the Eklutna River as contended because the AWWU infrastructure that would be used to deliver the water needs to be closed for both periodic and emergency maintenance situations. That report concluded that the draft program poses a substantial risk to AWWU infrastructure and the Anchorage drinking water supply. Additionally, news broke in early February that CEA and MEA had secretly signed a contract with AWWU related to the draft program, with the required review process still on-going. This news

undermines transparency and public trust in the good faith of the electric utilities in this process. The contract has not been released to the public.

At minimum, the final Program must quantify and mitigate Project damages. It must connect the river to the lake; restore year-round flows adequate to support salmon and other aquatic life and achieve sediment transport necessary to sustain that condition over time; include periodic flushing flows sufficient to restore side channels, wetlands, and riparian area function. It must provide for monitoring tied to these key goals and management flexibility to alter flow regimes and take other actions to respond to information gained.

### Summary

As explained in section I, the Fish and Wildlife Program (Program) was a key component of the owners' purchase of the Eklutna Hydroelectric Project (Project). It was intended to quantify and mitigate Project damages in a manner comparable to a Federal Energy Regulatory Commission (FERC) process. As part of a very attractive deal, the purchasers were given 25 years before being required to develop the Program. Efforts to date have not complied with the agreed process to do so. The draft Program proposes to use infrastructure that is not capable of providing some of the necessary water flows, and is inadequate for many additional reasons.

Section II details how the draft Program failed to quantify extensive Project damages despite having the means and information to do so. Instead of assessing the degree to which alternatives would mitigate those damages as required, the owners assessed the cost-effectiveness of improvements to the status quo. The modeled "maximum potential habitat gains" were tiny in comparison to Project damages, leading to misleading depictions of "significant" gains that would purportedly result from the minimal flows of water the draft Program would provide to the river. The proposed mitigation is entirely inadequate.

Section III explains that the draft Program should consider the Project's indirect impacts to endangered Cook Inlet beluga whales, due to significantly reducing the availability of Pacific salmon, belugas' primary prey. Section IV suggests that the owners take the time necessary to remedy the analytical flaws undermining the Program, study a dam removal alternative proposed by many stakeholders and the public, and to allow MOA time to align its project position with its own municipal code.

## I. Background

### A. The Source and Purpose of the Fish and Wildlife Program

Congress directed the sale of the Eklutna hydroelectric project in 1995 from the federal Alaska Power Administration (APA) to the "Eklutna Purchasers" pursuant to the terms of a 1989 Eklutna Purchase Agreement.<sup>1</sup> The same legislation also sold the Snettisham hydroelectric

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<sup>1</sup> Alaska Power Administration Asset Sale and Termination Act ("APA Termination Act"), Public Law 104-58, Section 103(a), November 28, 1995. The Eklutna Purchasers were the Municipality of Anchorage, doing business as Municipal Light & Power, Chugach Electric Association, Inc., and Matanuska Electric Association, Inc. Id., § 102(3).

project in southeast Alaska to the Alaska Energy Authority and terminated the APA, which had been organized within the U.S. Department of Energy.

The background and rationale for selling these projects and terminating the APA are explained in a report prepared by the APA to accompany the legislation.<sup>2</sup> Regarding the Fish and Wildlife Program, the report stated:

During reviews of the legislative proposal, loss of a sockeye salmon run that once spawned in Eklutna Lake was identified. The loss was caused by a small private power project constructed in the 1920's. The loss was not identified in pre-authorization studies for the Federal Eklutna Project and the Federal project does 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 the August 7, 1991 Agreement.<sup>3</sup>

The APA Termination Act exempted the Eklutna Project from the Federal Power Act while specifying that this exemption shall not affect the 1991 Agreement which “remains in full force and effect.”<sup>4</sup> Exempting the project from the Federal Power Act meant exempting it from the otherwise-applicable FERC licensing procedures. Those procedures require the identification and mitigation of damages to fish and wildlife resources and empower FWS and NMFS to condition permits to protect them.<sup>5</sup>

The 1991 Agreement was between the Eklutna Purchasers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, Alaska Energy Authority, and State of Alaska. It requires “measures to address, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)” that the parties agreed would “obviate the need . . . to obtain FERC licenses.”<sup>6</sup>

The role of the Fish and Wildlife Program in providing protection for fish and wildlife analogous to that available via FERC licensing also underlaid the rationale for an Environmental Assessment (EA)/Finding of No Significant Environmental Impact (FONSI) prepared under the National Environmental Policy Act (NEPA) and signed by the Department of Energy in 1992.<sup>7</sup> The EA provided that

the Fish and Wildlife Agreement encompasses assessment of damages to resource, and provides for future resource enhancement and mitigation procedures. APA was involved in the negotiations: however, the participants in the agreement are the Federal fisheries agencies, the Purchasers, and the State of Alaska. Under the

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<sup>2</sup> Alaska Power Administration, Divestiture Summary Report, Sale of Eklutna and Snettisham Hydroelectric Projects, April 1992 (“APA Divestiture Report”).

<sup>3</sup> Id at 19 (emphasis added).

<sup>4</sup> APA Termination Act at § 104(a)(1), (2)

<sup>5</sup> 16 U.S.C. § 803(j).

<sup>6</sup> 1991 Agreement at 2.

<sup>7</sup> U.S. Department of Energy, Environmental Assessment and Finding of No Significant Impact in the Sale, March 27, 1992 (included in 1992 APA Divestiture Report, Appendix E).

agreement, the Purchasers are responsible at their cost for developing and implementing plans in a fashion similar to that for Federal Energy Regulatory commission (FERC) licensed projects.<sup>8</sup>

In concluding that the sales of the hydroelectric projects would not affect environmental resources, the FONSI stated that the sales agreements were “specifically designed to assure protection of the environment.”<sup>9</sup> And the APA Divestiture Report provided that “[t]he process is quite similar to that under the Federal Energy Regulatory Commission (FERC) licensing of hydroelectric projects with the Governor of Alaska assigned a role similar to FERC's in decisions on fish and wildlife measures.”<sup>10</sup>

Thus, the purpose of the Fish and Wildlife Program, by its own terms and as understood in the context of the federal legislation authorizing the sale and underlying NEPA review, is to quantify and mitigate the damages to fish and wildlife caused by the Eklutna Hydroelectric project, specifically including the loss of a sockeye salmon run that once spawned in Eklutna Lake. The Program is intended to protect the environment in a manner similar to the protection that would result from a FERC licensing process.

#### B. A Screaming Deal with a Significant “Catch”

Instead of being required as part of the purchase agreement for the Eklutna Project, the critical role assigned to the Fish and Wildlife Program to mitigate the significant damages to the river and its salmon already identified prior to the 1991 Agreement was to be deferred for 25 more years.

The 1992 APA Divestiture Report stated that the reason for this was to “reduce uncertainties in financing and repayment of new debt,” – i.e., to spare the Eklutna Purchasers from having to finance additional capital expenditures to mitigate substantial damages to fish and wildlife while also repaying the funds borrowed to purchase the Eklutna Project from APA. The appropriateness of that deferral aside, it is clear that the Eklutna Purchasers took title to this valuable asset fully aware that it came with a sizable “balloon payment” comprised of substantial mitigation measures.

The Eklutna Project constituted quite a bargain for the Purchasers: they assumed just the few remaining years of principal and interest payments owed on the project, with a five-year grace period wherein the interest could be avoided by paying only on the principal.<sup>11</sup> They paid around \$6.7 million for an asset generating an estimated \$2.790-3.497 million in annual power sale revenue, with actual annual operating expenses of \$1.189 million.<sup>12</sup> Net revenues in 1989 and 1990 were \$1.448 million and \$1.762 million, respectively.<sup>13</sup> This meant that annual profits

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<sup>8</sup> DOE EA at 5.

<sup>9</sup> DOE FONSI at 3.

<sup>10</sup> Divestiture Report at 18.

<sup>11</sup> Eklutna Purchase Agreement, August 2, 1989 at 5.

<sup>12</sup> APA Divestiture Report, p.147, 160 (unnumbered); DOE EA at 3.

<sup>13</sup> Id.

could likely repay the loan interest-free within the five-year grace period. After that, twenty or so years would remain to use a portion of the new substantial Project annual profits to save for the hefty mitigation expense, comparable to what they could have expected with a FERC process, the Purchasers knew was coming.

That 25-year mitigation-free ride has run its course. The project has provided a modest amount of electricity<sup>14</sup> at a bargain price to ratepayers – a price paid instead by the Eklutna Lake and River ecosystem, its fish and wildlife and species that depend on them, the Eklutna people, and other Alaskans who would have benefitted from those resources as well.

### C. The Process to Establish the Fish and Wildlife Program

The 1991 Agreement described the process by which the parties would develop a Fish and Wildlife Program that would identify and mitigate the damages done to fish and wildlife resources. First, the Eklutna Purchasers were required to fund studies to quantify the impacts to fish and wildlife from the Eklutna Project and examine and develop proposals for the protection, mitigation and enhancement (“PME”) of affected fish and wildlife.<sup>15</sup> The study plans were required to be developed in consultation with state and federal resource management agencies.<sup>16</sup>

After comments on study plans and reports from the parties, the 1991 Agreement required the Purchasers to prepare a draft Fish and Wildlife program for comment from the parties and hold at least one public meeting, providing an opportunity for public comments and testimony.<sup>17</sup> They must seek to resolve differences expressed in those comments and ultimately present a final draft Fish and Wildlife Program (and alternative measures if proposed by one or more parties) to the Governor of Alaska, who must consider several listed factors<sup>18</sup> and approve a final Fish and Wildlife Program.

The owners have deviated from the prescribed process in fundamental ways. First, as detailed in the next section, they failed to quantify, or even attempt to quantify, project impacts. In turn, they failed to examine and develop proposals that would mitigate those quantified impacts.

Second, although they held several public meetings, those meetings did not invite and were not designed as an opportunity for public testimony. The public notice provided for the meetings stated only that written comments would be accepted. The meetings used an “Open House” format where the owners’ consultant gave a short presentation and experts were available to answer specific questions from members of the public. There was no meaningful opportunity for public testimony, wherein speakers are provided time to address the audience present at the time,

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<sup>14</sup> The Project produces less than 6% of the total produced by CEA and MEA. Draft Program at 14.

<sup>15</sup> 1991 Agreement at 2 (emphasis added).

<sup>16</sup> Id. These were the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), Alaska Departments of Fish and Game (ADFG) and Natural Resources.

<sup>17</sup> 1991 Agreement at 3 (emphasis added). (Following the public meetings, the owners “shall compile all comments and testimony received” and provide all “comments, testimony, summary and analysis materials and the Proposed Final Fish and Wildlife Program” to the Governor.)

<sup>18</sup> 1991 Agreement at 4.

and that full audience has an opportunity to hear what fellow members of the interested public have to say.

Finally, the owners put themselves in the position of Governor and attempted to balance the factors that the Governor must consider under the 1991 Agreement. Claiming that the 1991 Agreement requires it, the draft Program “gives equal consideration to the purposes of:

1. Efficient and economical power production
2. Energy conservation
3. The protection mitigation of damage to, and enhancement of fish and wildlife (including related spawning grounds and habitat)
4. The protection of recreation opportunities
5. Municipal water supplies
6. The preservation of other aspects of environmental quality
7. Other beneficial public uses
8. Requirements of State law”<sup>19</sup>

But the 1991 Agreement tasks the Governor, not the owners, with giving equal consideration to those factors, some of which are patently outside the owners’ expertise as power companies. Moreover, the owners omit the next sentence from the 1991 Agreement: “Based on his/her review and consideration, the Governor shall establish a final Fish and Wildlife Program that adequately and equitably protects, mitigates damage to, and enhances fish and wildlife resources (including affected spawning grounds and habitat) affected by the Eklutna Project.”<sup>20</sup>

While the assessment of appropriate PME measures for the Fish and Wildlife Program could entail consideration of some of the listed factors, it is not for the owners to try to equally consider them in preparing the draft Program. And in any event, the Agreement states that the Governor shall establish a final Program as defined above. At the end of the day, no consideration of factors can avoid adoption of a final Program that adequately mitigates Project damages. But it was error for the owners to base the draft Program on their own equal consideration of the factors reserved for the Governor.

#### D. The Draft Fish and Wildlife Program

The draft Program consists of the owners’ recommended PME measures and how they would be implemented. They owners propose providing year-round water and periodic maintenance flows into the lower 11 miles of the Eklutna river, meaning that water would enter the river over a mile below the lake.<sup>21</sup> The reason for that entry point is that there is an existing AWWU pipeline and portal valve there that bring drinking water to the AWWU water treatment plant about six miles

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<sup>19</sup> Draft Program at 44.

<sup>20</sup> 1991 Agreement at 4.

<sup>21</sup> Draft Program at 5, Figure 1-1; 20.



further downstream.<sup>22</sup> Water sent to the river would be released from a new structure built adjacent to the AWWU portal valve.<sup>23</sup>

In terms of water quantity, the draft Program would provide seasonal instream flows of 27-40 cubic feet per second (cfs) and channel maintenance flows three of every ten years that ramp up to 220 cfs for 36 hours.<sup>24</sup> These flows are well below what the resource agencies have identified as necessary to support productive salmon habitat. The mitigation of project damages that the Program would achieve amounts to a small amount of in-river salmon habitat.<sup>25</sup>

As detailed below, there are two immediate problems with opting for the convenience of tapping into existing drinking water infrastructure to mitigate damages from a hydroelectric project: First, the infrastructure is located over a mile from the lake, so the plan leaves the river and lake separated. Second, the infrastructure cannot provide the water needed for channel maintenance flows. The AWWU Portal option should have been dismissed for these reasons.<sup>26</sup> In any event, the proposed instream flows and overall mitigation achieved by the draft Program are inadequate to mitigate Project damages.

## II. The Draft Program Fails to Meet the Purpose of the 1991 Agreement.

### A. The Draft Program Fails to Quantify the Damages Caused by the Project.

The first step of the Program development process was for the Purchasers to “fund studies to examine, and quantify if possible, the impacts to fish and wildlife” from the Eklutna Project.<sup>27</sup>

The draft Program briefly qualitatively describes impacts from the Project, acknowledging that it diverted all outflows from Eklutna Lake to a powerhouse on Knik Arm – in a different watershed – resulting in “reduced flows” to the Eklutna River and impacting fish habitat.<sup>28</sup> It also acknowledges that the Project impacted riparian and estuarine wetlands in the upper and lower river, in turn impacting wildlife depending on the salmon and using the wetlands.<sup>29</sup> But it fails to quantify these Project impacts, citing the difficulty in doing so without pre-construction studies with which to compare to present conditions.<sup>30</sup>

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<sup>22</sup> Id.

<sup>23</sup> Id.

<sup>24</sup> Draft Program at 39-40.

<sup>25</sup> Draft Program at 42.

<sup>26</sup> As noted below, additional concerns have since been raised regarding risks to the Anchorage drinking water supply infrastructure and operations.

<sup>27</sup> 1991 Agreement at 2.

<sup>28</sup> Draft Program at 45. There were no flows reserved for the Eklutna River, and water only entered the river if the spillway was breached. The Project completely dewatered the upper Eklutna River, severing it from the lake.

<sup>29</sup> Draft Program at 45.

<sup>30</sup> Draft Program at 45.

FWS provided a qualitative description more illustrative of Project damages:

Fish and wildlife habitats, including those upstream, downstream in and around Eklutna Lake, Eklutna River, connected wetlands, off-channel habitat and nearby uplands have been impacted by the Eklutna Hydropower Project. Drastic changes to water and sediment balances stemming from the disconnected lake have created ripple effects of impacts throughout historically connected habitats both up and downstream from Eklutna Dam (Magilligan and Nislow 2005). Changes to drainage hydrology, including extreme lake fluctuations and discontinuity of instream flows below the dam have disrupted littoral lake and sockeye spawning habitats, ground water dynamics and sediment transport processes. These changes have severed the connection between floodplains and the active river channels and cut off the lower river from its headwaters. Loss of floodplain connectivity is directly related to wetland and riparian corridor degradation.<sup>31</sup>

FWS concurred with a 2004 U.S. Army Corps of Engineers assessment that salmon populations are severely impacted by the removal of all Eklutna Lake water from the Eklutna River. It noted that not only were the lake and river channel impacted, but the entire watershed. With water diverted to another watershed for hydropower and a fish hatchery, the richness of salmon as food and nutrients was diverted away as well.<sup>32</sup>

As FWS pointed out, moreover, better quantification of Project damages is both entirely possible and necessary to provide context to the proposed PME measures. Avenues to quantify Project damages include employing higher test flow releases; giving credence to Indigenous Knowledge regarding pre-dam conditions provided by NVE; empirical inferences of pre-dam hydrology and habitat conditions based on cross section morphology; and an analog comparison of similar river systems through reference stream case studies or literature review.<sup>33</sup>

FWS also referenced information from project and other studies to at least partially quantify direct and indirect Project impacts to fish and wildlife habitat. Completely dewatering the Eklutna River directly impacted the river itself, which at 12 miles long and an average of 100 feet wide totals 145.5 acres of direct loss. The Eklutna River drainage covers 10,880 acres, which was also impacted by the Project dewatering the river, and the draft Program should consider those acres. It should also consider the acres of habitat impacted by fluctuations in the 76,160-acre Eklutna Lake, areas of upstream tributaries, downstream river, wetlands, and coastal habitats in the watershed. Functional loss should include temporal loss and modifications of habitat.<sup>34</sup>

Comparing the Wetlands and Wildlife Study and the National Wetlands Inventory historic information demonstrates a significant conversion of wetland habitat due to the Project, with

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<sup>31</sup> FWS Letter to Samantha Owen re Draft Fish and Wildlife Program, December 6, 2023, Enclosure (“FWS Enclosure”) at 3.

<sup>32</sup> FWS Enclosure at 4.

<sup>33</sup> FWS Enclosure at 3.

<sup>34</sup> FWS Enclosure at 4.

losses totaling over 522 acres in just four wetland categories. Available aerial imagery indicates a loss of about 104 acres of seasonally flooded Alder-Willow Shrub Scrub “almost certainly due” to the Project. And suitable spawning habitat upstream of Eklutna Lake include an additional 3.61 acres in the East and West forks of Eklutna Creek, in addition to other tributaries observed with spawning salmon.<sup>35</sup>

During the study process, the aquatic Technical Working Group agreed on a wetland functional assessment, but according to the Wetland and Wildlife Study results that assessment did not occur and functional loss was based on the project consultant’s best judgment.<sup>36</sup> No mitigation for loss of wetlands is proposed in the draft Program.

In addition to these means of quantifying Project damages, there was a golden opportunity during the study process to release a flushing flow similar to historic river conditions. Stakeholders requested a much more robust Fall 2022 test release that would help quantify project damages and identify potential habitat enhancement achievable by higher flows. As TU explained in its comment regarding the proposed Year 2 Study Plans, the owners should “include a controlled water release of sufficient volume and duration to model flows of at least 1,000 cfs,” to approximate the river’s natural flow in the summer months.<sup>37</sup> This is necessary to help understand pre-project conditions and quantify Project impacts, and “if the model is not fully calibrated to historic average flows, the model will have severely limited utility.”<sup>38</sup>

But the owners responded that such a release was not necessary for modeling purposes. The result was that the model only generated, and the analysis only considered, small potential habitat gains entirely within the main river channel to be made from the Program. Habitat gains of 1.5-30 acres are considered the art of the possible, depending on the species of salmon and type of habitat being measured (spawning or rearing).<sup>39</sup> These “maximum” potential habitat gains are absurdly Lilliputian considering the tens of thousands of acres of damage the Project has inflicted across the watershed, as discussed above.

The owners’ failure to quantify Project impacts is not defensible. The excuse that there are no studies dating back 75-100 years to document pre-construction wildlife and habitat conditions is unavailing because such studies are not needed to quantify Project impacts. The Project Owners decision not to employ the requested higher test flow releases and to ignore ample available information to quantify Project damages was arbitrary and debilitating to the study process.

The draft Program’s failure to quantify project damages constitutes an initial foundational flaw that infects the ensuing analyses and the entire Program. It was the required first step needed to define and assess the universe of potential PME measures to mitigate them.

As further discussed below, this missing piece was replaced by using existing conditions as the baseline against which alternative measures were evaluated. Doing so contravenes the 1991

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<sup>35</sup> FWS Enclosure at 5-6.

<sup>36</sup> FWS Enclosure at 6-7.

<sup>37</sup> Trout Unlimited, Comments on Draft Year 2 Study Plans, March 14, 2022 at 1.

<sup>38</sup> Id.

<sup>39</sup> Draft Program at 42.

Agreement, which directed owners to quantify and mitigate Project damages, not simply explore potential improvements to Project-caused heavily degraded baseline conditions. Using baseline conditions instead of quantifying Project damages as the starting point undermined the alternatives analysis from the outset.

## B. The Alternatives Analysis is Misleading and Arbitrary.

The draft Program's alternatives analysis is arbitrary and misleading for at least three reasons. First, it ignores to what extent the alternatives would mitigate the Project's actual damages to habitat, which as explained above remain inexplicably unquantified in the analysis. Instead, it assesses the cost-effectiveness of potential habitat gains compared to current conditions. In doing so, it limits the "maximum available habitat gains" to in-river salmon spawning and rearing habitat, excluding the watershed-wide wetland and estuarine impacts and habitat conversion noted above from total "potential gains." Finally, even within the limited in-river spawning and rearing habitat category, it fails to estimate the potential rearing habitat gain.

### 1. The Identified "Maximum Habitat Gain" is Arbitrary.

The alternatives analysis only considered potential spawning and rearing habitat gains.<sup>40</sup> The gains considered achievable were those made possible within a restricted flow regime based on test releases of water at 150 cubic feet per second (cfs) – one tenth of historical bank-full flows of 1527-1682 cfs. This limited test flow level allowed for model extrapolation up to 375 cfs, which still only generates potential habitat within the historic low flow channel, where the water never tops the stream banks or accesses the floodplain.<sup>41</sup> This isn't explained anywhere in the draft Program or Powerpoint slides on the project website but was brought up repeatedly by FWS and others during the study process.

This extremely narrow conception of "maximum habitat gain" drives the analysis and leads to the misleading charts presented to in the draft Program. For example, the owners claim that 99.6% of maximum coho spawning habitat and 96.5% of maximum chinook habitat can be achieved by putting just 40 cfs of water into the river.<sup>42</sup> Notably, the draft Program states that percentages of maximum rearing habitat cannot be shown because the owners failed to model flows high enough to determine maximum rearing habitat.<sup>43</sup>

That is a fatal analytical flaw. FWS explained that "the rearing habitat analyses did not capture the range of flows necessary to model floodplain habitats critical to understanding Eklutna River rearing habitat potential and losses." Coho and chinook spawning habitat is often found in side channels and areas adjacent to the main river flow. At the low flow conditions modeled, water

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<sup>40</sup> Draft Program at 42, Table 2-6.

<sup>41</sup> FWS Enclosure at 7; see also FWS Comment letter regarding the Draft Technical Memorandum Eklutna River Geomorphology and Sediment Transport Considerations for Flow Augmentation, and Potential Dam Spillway Release Options for Year-round Flows, October 13, 2022 at 3, available at [https://eklutnahydro.com/wp-content/uploads/2022/12/2022-0074477\\_EklutnaInstreamFlowBarrierAnalysis\\_TechMemo\\_USFWS-comments-002.pdf](https://eklutnahydro.com/wp-content/uploads/2022/12/2022-0074477_EklutnaInstreamFlowBarrierAnalysis_TechMemo_USFWS-comments-002.pdf).

<sup>42</sup> Draft Program at 52, Figure 3-3; 51, Table 3-2.

<sup>43</sup> Draft Program at 51, Table 3-2.

never reaches bank full or accesses the floodplain, so those adjacent habitats are not created in the model. In reality, putting more water into the river would create more fish habitat, including spawning and rearing habitat. The draft Program's conclusion to the contrary is unsupported.

Finally, the exclusive focus on in-river salmon habitat gains to measure the "ecological lift" underestimates the functional importance of mitigating the damages caused by separating the river from its lake headwaters. The real ecological lift lies not just in the number of acres comprising the upper 1.1 river miles above the proposed AWWU Portal, but in enhancing the ecological integrity of the watershed by reestablishing this connectivity.

Ultimately, the indefensible definition of "maximum habitat gain" as a few dozen acres of in-river fish habitat drives the draft Program's key, indefensible conclusion – that providing a small fraction of historic flows to the river and leaving it severed from the lake will magically achieve the vast majority of the maximum gain possible.<sup>44</sup>

## 2. The Cost-Effectiveness Metric is Arbitrary.

The arbitrary "maximum habitat gain" figure renders the "cost-effectiveness" metric arbitrary as well.

To assess alternatives, the draft Program used a "Cost Effectiveness/Incremental Cost Analysis model" to assess the relative benefits and costs of potential habitat improvements.<sup>45</sup> The model compares the annual cost of a proposed alternative with the "ecological lift" it provides to help identify the least cost alternatives for a given level of environmental benefits. The ecological lift used as the basis for comparison was increased in-river salmon spawning and rearing habitat compared to current conditions, and without regard to the damages to habitat caused by the Project.<sup>46</sup> Those extensive damages, not marginal additions to in-river salmon habitat, outline the actual potential ecological lift.

The draft Program asserts that the proposed AWWU Portal Valve option "is the most cost-effective alternative analyzed" with "significant gains in spawning and rearing habitat within the river and simultaneously has the least impact to Chugach and MEA ratepayers and MOA property taxpayers."<sup>47</sup> This conclusion is a smokescreen obscuring the feckless nature of the draft Program.

"Cost-effectiveness" is defined as the per-acre cost of habitat improvements. The touted "[s]ignificant gains" of in-river salmon habitat amount to a small number of acres of coho and chinook spawning and rearing habitat that putting a trickle of water in the river would create.<sup>48</sup> The true "significant gains" that are possible here, that would meaningfully mitigate the

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<sup>44</sup> Draft Program at 51, Table 3-2; see also, e.g., Alternatives Analysis Presentation #1, Slides 15-16, available at [https://eklutnahydro.com/wp-content/uploads/2023/04/Alternatives-Analysis-Presentation\\_1\\_TWIG\\_040523.pdf](https://eklutnahydro.com/wp-content/uploads/2023/04/Alternatives-Analysis-Presentation_1_TWIG_040523.pdf).

<sup>45</sup> Draft Program at 32.

<sup>46</sup> Id.; see also FWS Enclosure at 7.

<sup>47</sup> Draft Program at 46. The phrase "within the river" sounds innocuous but is telling, as described below.

<sup>48</sup> E.g., draft Program at 42, Table 2-6 (indicating gains of 1.5-9.9 acres of salmon spawning or rearing habitat (depending on species) gained via owners' AWWU Portal option.

extensive Project damages described above, are not accounted for in terms of acreage. The incremental costs associated with the various alternatives are debilitatingly high because any additional expenditure (beyond the least expensive one considered, the AWWU Portal) would only enhance a small number of acres – because that was the “ecological lift” considered by the Cost Effectiveness model.<sup>49</sup> Had the owners considered greater instream and channel maintenance flows as many stakeholders repeatedly suggested, the acres of habitat to be gained would have been far greater. They would include the tens of thousands of acres described above. Accordingly, the incremental cost per acre of alternatives that enhanced that habitat would have been much less.

The Cost-Effectiveness metric, as employed by the owners, ignored the real question: what were Project damages and how can they be mitigated? It effectively substituted instead: how can we define “significant habitat gain” such that putting a minimal amount of water into the river would achieve it? The analysis boils down to a tautology: Adding a small amount of water to a river will create a very large percentage of the amount of fish habitat you could expect to create by putting a small amount of water into a river.

### C. The Draft Program Provides Inadequate Mitigation.

As discussed above, a meaningful Fish and Wildlife Program was a key component of the sale of the Eklutna hydroelectric project and the justification for exempting the project from the Federal Power Act and its FERC licensing procedures. The need for PME measures for fish and wildlife damages, specifically including a sockeye salmon run that was destroyed when the river was dewatered and severed from the lake, were identified as the reason for the Fish and Wildlife Program described in the 1991 Agreement.

Many of the damages, including to the sockeye salmon run, cannot be mitigated without providing adequate instream and channel maintenance flows to the river and providing for fish passage to and from the lake. The draft Program does none of these things. None of the resource management agencies recommended the AWWU Portal option as proposed.

Instream Flows: The draft Program claims to contain a flow release prescription “that is focused on restoring habitat for Pacific salmon in the Eklutna River to productive levels,”<sup>50</sup> but there is no evidence to suggest that the proposed flows will accomplish this. Flows would vary seasonally, from 27 cfs in winter and 40 cfs in summer.<sup>51</sup>

The draft Program immediately narrows the beneficiaries of the flows to “Chinook, coho, pink and chum salmon,” excluding the sockeye salmon that, in particular, formed the impetus for the 1991 Agreement.<sup>52</sup> The owners also concede that the flow regime “was selected to achieve a significant amount of the potentially available habitat in the Eklutna River within prudent capital, O&M, and replacement energy costs, and within the capacity of existing AWWU infrastructure

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<sup>49</sup> Draft Program at 43, Table 2-7 (showing incremental cost/acre in the multi-millions of dollars).

<sup>50</sup> Draft Program at 47.

<sup>51</sup> Draft Program at 49.

<sup>52</sup> Draft Program at 47.

to release the water.” Again the caveats speak volumes, with “in the Eklutna River” and “within the capacity of existing AWWU infrastructure” placing a heavy thumb on the scale.

In any event, the 27-40 cfs instream flow regime cannot be expected to make any meaningful difference for the other salmon species in terms of overall productivity. The draft Program doesn’t even claim that it would, stating only that this regime would create the (exceedingly modest) in-river habitat gains discussed above.<sup>53</sup>

Instream flows of 27-40 cfs are not sufficient for salmon. FWS and NMFS recommended year-round instream flows of 160 cfs June-October and 75 cfs January to May, with an adaptive management strategy that allows for adjusting that regime based on new information and monitoring results.<sup>54</sup> These are the “flow levels which produce stream depths suitable for salmon spawning and rearing, respectively.”<sup>55</sup> FWS specifically disagreed that the meager proposed flow “restores habitat to productive levels or that the proposed flow regime would achieve a significant amount of the potentially available habitat.”<sup>56</sup>

Channel Maintenance Flows: The draft Program proposes a channel maintenance flow regime consisting of flows reaching 220 cfs for 36 hours, three out of every 10 years.<sup>57</sup> It doesn’t address the function of channel maintenance flows, why this particular regime was chosen, or whether it is sufficient to achieve the goal of channel maintenance.

This flow regime provides the least water of any considered during the study process, and “does not provide adequate flows to restore natural watershed hydrologic dynamics.”<sup>58</sup> Routine peak flows should target a water quantity seven times the mean annual flow, mimicking the rainfall peak in similar Alaskan rivers.<sup>59</sup> Notably, the proposed AWWU Portal option is only capable of providing a maximum flow of 270 cfs, well below the channel maintenance flows needed.<sup>60</sup> So it appears that the proposed channel maintenance regime simply reflects the limitations of the owners’ desired infrastructure and not the flows considered necessary to maintain the river channel.

FWS proposed an initial release of 880 cfs to reorganize the downstream channel and route aggraded sediment, followed by triannual peak flows of 700 cfs, several orders of magnitude greater flows than the owners propose.<sup>61</sup> NMFS proposed the same triannual 700 cfs flows, and

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<sup>53</sup> Draft Program at 50.

<sup>54</sup> Draft Program at 49, Table 2-2; FWS Enclosure at 7.

<sup>55</sup> Id.

<sup>56</sup> Id.

<sup>57</sup> Draft Program at 55. It states that natural spill events could achieve the desired channel maintenance, and if not then the proposed flows will be released. There have been only ten natural spill events since 1965, and three of those involved peak flows well below the 220 cfs proposed. Draft Program at 15. Based on this history, it is highly unlikely that natural spill events will provide adequate channel maintenance flows over the life of the Program.

<sup>58</sup> FWS Enclosure at 8.

<sup>59</sup> Id.

<sup>60</sup> Id. at 9; Draft Program at 54 (maximum cfs from AWWU Portal would be 80 cfs, and from spillway 190 cfs, for a system maximum of 270 cfs).

<sup>61</sup> FWS Enclosure at 7;

all parties proposed much greater flows than the owners did.<sup>62</sup> There is nothing in the record to indicate that the minimal proposed channel maintenance flows will achieve their purpose, and the proposed regime is not defensible.

### Lake and River Connectivity

FWS stated that:

Rivers are the lifeblood of a watershed. They connect headwaters to wetlands, estuaries, and oceans, moving objects as large as boulders and whole cottonwood trees along the way. They clear debris, transfer sediment, shape channels and create new ones that provide habitat for countless aquatic species which, in turn, support a myriad of other fish and wildlife through interconnected food webs.<sup>63</sup>

The Eklutna River used to provide this function in the ecosystem, but it was severed from its headwaters and could no longer do so. This was an obvious and devastating impact of the Project.

The draft Program would leave over a mile of dry riverbed, leaving the river disconnected from the lake, providing no fish passage and preventing the substantial “ecological lift” that would flow from connecting them. In addition to the functions the FWS describes above, that lift would include mitigating the damage to sockeye salmon, which as noted above was a specific harm that prompted the need for the Program in the first place. Leaving the river disconnected prevents sockeye from reaching the extensive spawning habitat that they need at the lake, and prevents the next generation from migrating back out to the marine environment. And in addition to the lake habitat, additional stream spawning habitat above the lake remains inaccessible as well.<sup>64</sup>

Not connecting the river to the lake – and not defensibly assessing the benefits of doing so in terms of mitigating Project damages in the alternatives analysis - is perhaps the most obviously fatal flaw in the program analysis. It is the height of arbitrariness to accord virtually no weight to whether the various alternatives would mitigate the one harm specifically called out in the 1991 Agreement.

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<sup>62</sup> Draft Program at 40, Table 2-3.

<sup>63</sup> FWS Enclosure at 2.

<sup>64</sup> See, e.g., Native Village of Eklutna, Eklutna Lake and Tributaries Salmon Habitat (2022) <https://static1.squarespace.com/static/5f52cd19995bf84b22653379/t/630683349fc05e329044d6bf/1661371211807/Lake+%26+Tributaries+Habitat.pdf>; see also e.g., McMillian Jacobs Associates, Eklutna Lake Aquatic Habitat and Fish Utilization, Year 2 Study Report Draft (2023) <https://eklutnahydro.com/wp-content/uploads/2023/04/Draft-Eklutna-Lake-Habitat-and-Fish-Y2-Report.pdf>; Native Village of Eklutna, TWG 2021-2022 Final Report (Jul. 23, 2023).



#### D. The Analysis of Other Mitigation Measures is Inadequate

The 1991 Agreement does require the owners to consider the impact of fish and wildlife PME measures on ratepayers, municipal water utilities, recreational users and adjacent land use, and ways to minimize those impacts. The draft Program addresses the public water supply and recreational use in section 3.3, but not impacts to ratepayers – presumably because impacts to ratepayers were already heavily embedded in the analysis via the “cost effectiveness” tool. Its conclusions as to “other mitigation” are not supported.

##### Public Water Supply

The owners state that the AWWU Portal option will not restrict the ability of AWWU to withdraw water from the lake. The only mitigation identified is the need to construct eight bridges over the Eklutna River channel to allow continued access to the AWWU pipeline for maintenance purposes. No bridges exist now because the channel is completely dry.

Harboring concern about the potential impacts of the draft Program to AWWU infrastructure and the public water supply, the Anchorage Assembly commissioned a report to assess them. Prepared by an engineer intimately familiar with AWWU’s Eklutna Water Project (EWP), that report noted that the current system is designed for a flow of 35 million gallons per day (mgd) and configured to allow easy expansion to 70 mgd.<sup>65</sup> According to the report, implementing the AWWU Portal Option would forego the future ability to expand the EWP system to provide additional drinking water should the need arise to do so. To compromise the ability to expand future drinking water flows to the design capacity of the EWP system represents a significant opportunity cost of using the municipality’s drinking water infrastructure to mitigate Project damages, and is an important decision not mentioned during the study process or in the draft Program.

##### Recreational use and facilities

Eklutna Lake and its lakeside trail system is a popular recreational destination.<sup>66</sup> Significant erosion of the lakeside trail was identified as a Project impact due to the fluctuating lake levels caused by Project operations.<sup>67</sup> Lake elevation fluctuation may also cause erosion at public use cabins and can inundate portions of the Bold airstrip along the lake shoreline.<sup>68</sup>

The draft Program ignores the latter two problems and concedes only that continuing reservoir operations as proposed “could cause some continuing erosion” of the Eklutna lakeside trail.<sup>69</sup> But there appears to be no indication that continued operations wouldn’t continue to cause erosion problems.

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<sup>65</sup> GV Jones & Associates, Inc., Executive Summary, Eklutna River Restoration Project, Project Issues Paper, February 14, 2024, at 3.

<sup>66</sup> E.g., Eklutna Hydroelectric Project Lakeside Trail Erosion Study Report (draft), February 2022 at 1.

<sup>67</sup> Id.

<sup>68</sup> Id.

<sup>69</sup> Draft Program at 57.

In any event, the owners don't plan to mitigate the significant trail erosion issue around Eklutna Lake because Chugach State Park has secured funding to address trail erosion.<sup>70</sup> The amount, duration, and sufficiency of the funding to mitigate the lakeside trail erosion issues is not addressed. Since this issue will not be revisited for another 30 years or so, however, we find it unlikely that Chugach State Park has secured all the funding for trail erosion that will be needed during the relevant time period. Since the Project's continual lake level fluctuations cause the trailside erosion and pose risk to other recreational use and facilities, the final Program should quantify the erosion damages already caused and include funds to mitigate for projected erosion damages impacting the use of the trail and other facilities for the life of the Program.

Second, the owners note that the land under and surrounding Eklutna River is largely owned by Eklutna Inc., so access to the river cannot be ensured.<sup>71</sup> But the owners' non-ownership of other lands and assets didn't prevent them from pursuing agreements deemed necessary. For example, the electric utilities apparently signed a secret agreement with AWWU related to the Portal Option that they contend was necessary to have in hand before presenting it to the public.<sup>72</sup> Had they so desired, the owners could have sought terms with Eklutna Inc. regarding public access to the river associated with the various PME alternatives, but there is no record of that occurring. That is, the owners sought resolution of issues if deemed relevant to their preferred option, but not otherwise.

The owners also characterize the decision to send water into the river over a mile away from the lake as a mitigation measure intended to reduce the increased human-bear interactions at the Eklutna campground that could result from providing the proposed 10% trickle flow. Rather than a bug, they argue here, failing to connect the river and lake and thereby missing the key enhancement measure to address the sockeye salmon damage that precipitated this entire effort, is a safety feature. Dewatering the river for over a mile is not a rational strategy to reduce human-bear interactions at the campground.

#### E. The Proposed Monitoring and Adaptive Management Components are Inadequate.

In addition to monitoring flow releases themselves, the draft Program proposes monitoring fish returns, winter egg incubation and juvenile rearing habitat, spawning habitat, and hatchery fish straying.<sup>73</sup> But because the PME measures are so inadequate, the monitoring and adaptive management components are lacking as well. Monitoring tiny amounts of fish habitat and the small numbers of fish that could possibly be expected to use it would just throw good money after bad, perpetuating the farcical premise that the draft Program is accomplishing something meaningful.

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<sup>70</sup> Draft Program at 57.

<sup>71</sup> Draft Program at 57.

<sup>72</sup> Anchorage Daily News, "Anchorage Assembly calls for a 2-year halt in Eklutna River restoration plans," available at <https://www.adn.com/alaska-news/anchorage/2024/02/03/anchorage-assembly-calls-for-a-2-year-halt-in-eklutna-river-restoration-plans/>.

<sup>73</sup> Draft Program at 60-62.

Only after Project damages and meaningful PME measures are identified can the parties develop a meaningful monitoring and adaptive management program. We note that the proposed adaptive management program does not appear to allow the owners to increase flows into the river;<sup>74</sup> whatever Program is adopted must provide for more flexibility in terms of altering the amount or timing of flows based on monitoring and other information gained.

It is unclear why the owners propose to provide up to \$270,000 to a Governor's designee to fund the monitoring efforts.<sup>75</sup> There is no explanation for that amount (less than \$10,000 annually) or for why a Governor's designee would manage the monitoring. The final monitoring plan should include monitoring efforts tied to Program PME measures with a budget and staffing agreed to by the parties sufficient to cover those efforts, and a related adaptive management program with sufficient flexibility to adjust project components in response to information learned. The parties should manage the monitoring program, not the Governor's office.

In sum, the draft Program fails to meet the purpose of the 1991 Agreement because it fails to quantify and mitigate Project damages. The owners should continue to work with the parties and other stakeholders to develop and assess alternatives that would do so.

### III. The Draft Program Should Consider Project and PME Impacts to Endangered Cook Inlet Beluga Whales.

Project impacts to fish and wildlife include indirect impacts to endangered Cook Inlet beluga whales. Cook Inlet beluga whales were listed as endangered under the Endangered Species Act in 2008, and the NMFS 2016 Recovery Plan for Cook Inlet belugas listed the availability of prey as one of the nine threats to the recovery of the species.<sup>76</sup> The Recovery Plan would be considered a relevant "comprehensive plan" included for analysis in a FERC licensing process.<sup>77</sup>

These whales live in Cook Inlet year-round, spending most of their time in upper and middle Cook Inlet. The Knik Arm, which includes the mouth of the Eklutna River, is designated critical habitat for Cook Inlet beluga whales. The 2011 critical habitat designation for Cook Inlet belugas identified shallow intertidal and subtidal waters of Cook Inlet near medium to high flow anadromous fish streams along with four species of Pacific Salmon (Chinook, sockeye, chum and coho) as essential to beluga conservation.<sup>78</sup> Sightings of belugas from local residents and citizen science monitoring efforts have also indicated the Eklutna River as an important feeding area for belugas in the fall months.

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<sup>74</sup> Draft Program at 58 (adjustments to flows cannot exceed the annual water budget, which is based on the proposed flows); see also FWS Enclosure at 8 (noting the water budget is inadequate because it is based on the proposed flows, and the proposed adaptive management is lacks flexibility to increase flows).

<sup>75</sup> Draft Program at 60.

<sup>76</sup>National Marine Fisheries Service. 2016. Recovery Plan for the Cook Inlet Beluga Whale (*Delphinapterus leucas*). National Marine Fisheries Service, Alaska Region, Protected Resources Division, Juneau, AK.

<sup>77</sup> NMFS, Comment on draft Program, December 6, 2023 at 6.

<sup>78</sup>76 Fed. Reg. 20,203, 20,214 (Apr. 11, 2011).

NMFS’s “Species in the Spotlight” program is an agency-wide effort launched in 2015 to spotlight and save the most highly at-risk marine species in the country.<sup>79</sup> Cook Inlet belugas are one of the featured species. The 2021-2025 program report states that “[s]urvival and recovery of Cook Inlet beluga whales depends on an adequate quantity, quality, and accessibility of prey resources.<sup>80</sup> Knik Arm is an important beluga foraging area, making Eklutna River salmon restoration a tremendous opportunity to help recover belugas. Pacific salmon are one of the key prey items for Cook Inlet belugas, providing more fat richness that is important to their energetics.<sup>81</sup> Pacific salmon represent the highest percent frequency of occurrence of prey species in Cook Inlet beluga stomachs.<sup>82</sup>

Cook Inlet belugas’ reproductive success is tied to salmon abundance. One study indicates that if Chinook salmon availability increased by 20% or more then the current decline of belugas would likely be reversed, and that doubling the salmon abundance would allow the beluga population to recover regardless of all other threat impacts.<sup>83</sup> A more recent study found that if there is enough prey abundance for Cook Inlet belugas, the population could withstand other intermittent stressors.<sup>84</sup> These studies show the importance of an increase in prey availability to strengthening belugas’ resiliency to the cumulative threats to recovery that they face.

Mitigating Project damages by reconnecting Eklutna River with its headwaters at Eklutna Lake and providing adequate water flow to the river could substantially increase salmon abundance in upper Cook Inlet. As NMFS pointed out, this is beneficial in its own right and would also support the recovery of endangered Cook Inlet belugas, another species that the Project has indirectly impacted.<sup>85</sup>

#### IV. Further Analysis is Required to Support the Governor’s Decision.

The draft Program is woefully deficient for the above reasons and cannot quickly be remedied. Indeed, a decision based on the fundamentally flawed analysis undertaken to date would be arbitrary and not in accordance with law, as detailed above. The Project Owners must assess damages, evaluate alternatives using metrics reflecting the degree to which those damages would be mitigated, and compare those alternatives anew, providing opportunity for input on those damages, metrics and alternatives to the parties to the 1991 Agreement. It must provide a revised draft Program to the public for review and opportunity for meaningful comment.

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<sup>79</sup> NMFS, “Beluga Whale in the Spotlight,” available at <https://www.fisheries.noaa.gov/species/beluga-whale/spotlight>.

<sup>80</sup> NOAA Fisheries, Species in the Spotlight, Priority Actions 2021-2025 at 14 (Apr. 21, 2021).

<sup>81</sup> E.g., 88 Fed. Reg. 76,576, 76,588 (November 6, 2023).

<sup>82</sup> *Id.*

<sup>83</sup> Norman, S. et al., Relationship between per capita births of Cook Inlet belugas and summer salmon runs: age structured population modeling, 11 Ecosphere 1 (2020).

<sup>84</sup> McHuron, Elizabeth A. et al, Modeling the impacts of a changing and disturbed environment on an endangered beluga whale population, 483 Ecological Modeling 110417 (Sept. 2023).

<sup>85</sup> NMFS, Comment on draft Program, December 6, 2023 at 6.

As part of that revised assessment, the owners should include a full evaluation of future dam removal in lieu of near-term PME measures.<sup>86</sup> The ecological and economic benefits of this option could outweigh those of the foregone PME measures.

The draft Program would also violate municipal law and policy. It will be unable to move forward until the disconnect between MOA's administrative recommendation for the draft program and its legislative directive that the river be connected to the lake (and supporting evaluation of the dam removal alternative to accomplish this) is resolved.

To accommodate the necessary analyses and allow time for reconciliation of MOA's differing current positions, the parties should extend the timeline for analysis.

#### A. The Project Owners Should Evaluate Future Dam Removal.

The Native Village of Eklutna has proposed that the owners consider removing the dam in the future as a way of improving ecological benefits and minimizing costs by avoiding the ineffectual and expensive PME measures proposed in the draft Program. NVE stated that the benefits of removing the Eklutna Lake dam include:

1. Collectively addressing a century of cultural and environmental neglect;
2. Restoring the Eklutna River to flow naturally out of Eklutna Lake;
3. Re-connecting the river to the lake, allowing for the recovery of sockeye, Chinook, and coho salmon, opening up 65% of their available habitat in Eklutna Lake and its upstream tributaries;
4. Sparing CEA and MEA ratepayers and MOA taxpayers from rate and property tax hikes to pay \$57 million to implement the utilities' proposed plan;
5. Avoiding lost generation capacity at the Eklutna hydroelectric facility for the immediate future;
6. Securing the AWWU drinking water system; and,
7. Protecting popular lakeside trails from erosion caused by fluctuating lake levels.<sup>87</sup>

The Conservation Fund suggested this alternative during the study process as well.<sup>88</sup> The Project Owners now claim to be assessing this alternative after the fact, but as both common sense and a recent letter from AWWU make clear, a defensible assessment would require substantial additional study.<sup>89</sup>

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<sup>86</sup> The Conservation Fund, Letter to Samantha Owen re Year 2 Study Plans, March 11, 2022 at 3 (suggesting and pledging to cover the cost of dam removal). The Project Owners claim to be assessing that alternative now, but as both common sense and a recent letter from AWWU make clear, a defensible assessment would require substantial additional study. *See* Owners Letter to Municipal Assembly, February 12, 2024, and Attachment B, AWWU Response re NVE's Dam Removal Alternative.

<sup>87</sup> Letter from NVE to Samantha Owen re Eklutna Hydroelectric Project Draft Fish and Wildlife Program, December 4, 2024, at 4.

<sup>88</sup> The Conservation Fund, Letter to Samantha Owen re Year 2 Study Plans, March 11, 2022 at 3 (suggesting and pledging to cover the cost of dam removal).

<sup>89</sup> *See* Owners Letter to Municipal Assembly, February 12, 2024, and Attachment B, AWWU Response re NVE's Dam Removal Alternative.

Project owners should include future dam removal among the alternatives, as this could prove to be the most economically and ecologically beneficial of all. Also, the modeled habitat gains from this alternative would better approximate Project damages to fish and wildlife habitat and provide a baseline against which other PME measures could be assessed.

Because they did not consider dam removal during the study process as requested, the Project owners should include this alternative in a corrected alternatives analysis process involving the parties to the 1991 Agreement and employing appropriate metrics.

#### B. MOA Must Reconcile Its Legislative and Administrative Positions.

In proposing the draft program, the municipality has signaled support from the executive branch for the draft Program. But the legislative policy of the MOA is to “restore the continuous water flow of the Eklutna River and the fish populations of the River and Eklutna Lake, to the greatest extent possible, subject to all provisions of the 1991 Fish and Wildlife Agreement.”<sup>90</sup>

Complementary city policy established via resolution specifically opposes the draft Program or any alternative that doesn’t restore the full length of the Eklutna River, and the MOA “does not intend to issue authorizations or provide funds or any other form of support” for those options.<sup>91</sup> Since the draft Program would be funded in part through the MOA budget, the support of the legislative branch, which sets the budget, will be necessary.

Additionally, the draft Program makes a general reference to several additional “preconditions to the Project Owners’ ability to implement the Fish and Wildlife Program,” including unspecified state and local permits, rights-of-way, and easements associated with the proposed Eklutna River Release Facility.<sup>92</sup> Should any of these be denied, the owners “will not be able to execute on the Fish and Wildlife Program.”<sup>93</sup>

The Project owners should be much more specific about the permits and land rights that will be needed to implement the Program, especially since an inability to obtain even one of them will apparently prohibit execution of the Program. The Municipality of Anchorage would presumably be the entity issuing local permits and potentially other necessary authorizations. Given the municipal ordinance and resolutions mentioned above and others, it appears that the draft Program is highly unlikely to receive necessary authorizations or funding from the municipality.

The MOA has also flagged concerns about the impacts of the draft Program on the city’s water supply, considering forthcoming changes in drinking water regulations with uncertain repercussions.<sup>94</sup> And as discussed above it commissioned an expert opinion from the engineer with extensive experience with the Eklutna Water Project system to review the AWWU Portal option. That report found that 1) that the Portal Valve option 1) cannot provide adequate and

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<sup>90</sup> AMC 26.30.025.

<sup>91</sup> AR 2024-40, Section 2.

<sup>92</sup> Draft Program at 80.

<sup>93</sup> Id.

<sup>94</sup> AR 2024-40, Section 1.B.

continuous Eklutna River restoration flows; 2) would prevent future expansion of the Eklutna Water Project if additional drinking water is needed; and 3) is “fatally flawed.”<sup>95</sup>

Given these municipal ordinances and resolutions expressing policy concerns, the owners are very unlikely to obtain any permits or other authorizations from the MOA for the draft Program or other alternatives that fail to provide continuous water flow and enhance the fish populations of Eklutna River and Eklutna Lake. It is entirely foreseeable that should the owners propose and the Governor approve a final Program that also fails to do these things, that Program will not be able to secure the necessary permitting. The owners should acknowledge that the draft Program fails to comply with municipal law and is unlikely to be permitted or funded by the MOA. They should strive to find an alternative that complies with applicable laws.

#### C. The Parties to the 1991 Agreement Should Extend the Timeline for Analysis.

As noted above, the 1991 Agreement envisions a project timeline leading to the Governor approving a final Fish and Wildlife Program. Given the fatal analytical shortcomings described herein and the need for clarity regarding the Project majority owner’s (MOA) position, it appears that additional time will be needed to present a defensible proposed final Program with supporting materials from all the parties for the Governor to review.

A recent letter from the Project owners claims that the 1991 Agreement cannot legally be amended to provide any additional time, citing no authority for this proposition.<sup>96</sup> They state that the Agreement contains no provision for such extensions. But no such provision is necessary because the parties to a contract can agree to amend that contract. Given the ineffectual nature of the draft Program and fatal analytical flaws underlying it, taking some additional time would effectuate the Congressional intent that Project damages be mitigated much more than would proceeding apace.

#### V. Judicial review is not limited to the parties.

The Draft Program asserts that the parties to the agreement can challenge the Governor’s decision in federal court. The APA Termination Act, however, provides federal jurisdiction and does not limit the persons who may seek review to the parties to the agreement:

(1) The United States District Court for the District of Alaska shall have jurisdiction to review decisions made under the Memorandum of Agreement and to enforce the provisions of the Memorandum of Agreement, including the remedy of specific performance.

(2) An action seeking review of a Fish and Wildlife Program (“Program”) of the Governor of Alaska under the Memorandum of Agreement or challenging actions of any of the parties to the Memorandum of Agreement prior to the adoption of the Program shall be brought not later than 90 days after the date on which the Program is adopted by the Governor of Alaska, or be barred.

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<sup>95</sup> G.V. Jones & Associates, Inc., *infra*.

<sup>96</sup> Eklutna Project owners’ letter to Municipal Assembly, February 12, 2024 at 7.

(3) An action seeking review of implementation of the Program shall be brought not later than 90 days after the challenged act implementing the Program, or be barred.

The text of the statute indicates that anyone affected by the Governor's decision adopting the Program, or by actions of the parties in establishing or implementing it, may bring a challenge. It doesn't limit judicial review to the parties to the 1991 Agreement, and those parties can't privately agree to preclude a right to review conferred by Congress. Additionally, the provision of judicial review to impacted stakeholders, not just parties to the 1991 Agreement, is consistent with Congress's and the parties' intent that this process be similar to, and at least as effective as, FERC licensing. Any interested stakeholder who participates in a FERC licensing proceeding, not just the entities requesting or deciding on a license, can seek judicial review of a FERC licensing decision.<sup>97</sup> The final Program should clarify that judicial review is available to those impacted by the Program decision or subsequent implementing actions, subject to the 90-day statute of limitation.

### Conclusion

In sum, the draft Agreement fails to meet the purpose of the 1991 Agreement because it fails to quantify and adequately mitigate Project damages. Its underlying analyses are fatally flawed and require revision. The draft Program is inconsistent with municipal law and needs to be revised for this reason as well. The position of the Project's majority owner, MOA, requires clarification before the draft Program can be finalized. Additional time is required to address these issues, and the parties should agree to take the time necessary to do so.

### Attachments:

Alaska Power Administration, Divestiture Summary Report, Sale of Eklutna and Snettisham Hydroelectric Projects, April 1992. (This includes the 1989 Eklutna Purchase Agreement, Appendix A; the 1991 Fish and Wildlife Agreement, Appendix B; and the Department of Energy's Environmental Assessment and Finding of No Significant Impact regarding the sale of the Eklutna and Snettisham projects to the respective purchasers, Appendix E.)

Eklutna Project owners letter to Municipal Assembly w/ attachments, February 12, 2024.

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<sup>97</sup> See 18 C.F.R. §§ 385.2010, 385.713; 16 U.S.C. § 825l(a).



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