### **MATANUSKA-SUSITNA BOROUGH Fish & Wildlife Commission**

350 E Dahlia Ave., Palmer, Alaska 99645

#### CHAIRPERSON

Andy Couch

VICE CHAIR Peter Probasco

MSB STAFF Maija DiSalvo



**BOARD MEMBERS** 

Howard Delo Larry Engel Tim Hale Gabe Kitter Bill Gamble Kendra Zamzow *Ex officio*: Jim Sykes

# **Regular Meeting**

# January 11, 2024

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**Physical Location of Meeting:** Assembly Chambers, DSJ Bldg, 350 E. Dahlia Ave., Palmer **Remote Participation:** See attached agenda on p. 1

#### Planning and Land Use Department - Planning Division

Meeting Packet

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#### MATANUSKA-SUSITNA BOROUGH MSB Fish and Wildlife Commission <u>AGENDA</u>

Edna Devries, Mayor

Andy Couch – Chair Peter Probasco – Vice Chair Gabe Kitter Howard Delo Larry Engel Tim Hale Bill Gamble Kendra Zamzow Jim Sykes – Ex officio member

Maija DiSalvo – Staff



Michael Brown, Borough Manager

PLANNING & LAND USE DEPARTMENT Alex Strawn, Planning & Land Use Director Kim Sollien, Planning Services Manager Jason Ortiz, Development Services Manager Fred Wagner, Platting Officer

> Assembly Chambers Dorothy Swanda Jones Building 350 E. Dahlia Avenue, Palmer

#### January 11, 2023 REGULAR MEETING 4:00 p.m.

#### Ways to participate in MSB Fish and Wildlife Commission meetings:

IN-PERSON: Assembly Chambers, DSJ Building

**REMOTE PARTICIPATION VIA MICROSOFT TEAMS:** 

Join on your computer: <u>Click here to join the meeting</u> Meeting ID: 220 717 621 253 Passcode: rgEZf9 Or call in (audio only): 1-907-290-7880 Phone Conference ID: 351 203 80#

#### I. CALL TO ORDER

#### II. ROLL CALL – DETERMINATION OF QUORUM

III. LAND ACKNOWLEDGEMENT

"We acknowledge that we are meeting on traditional lands of the Dene people, and we are grateful for their continued stewardship of the land, fish, and wildlife throughout time immemorial."

- IV. APPROVAL OF AGENDA
- V. PLEDGE OF ALLEGIANCE
- VI. APPROVAL OF MINUTES

- A. November 16, 2023, Regular Meeting
- B. December 7, 2023, Special Meeting
- C. December 14, 2023, Regular Meeting
- VII. AUDIENCE PARTICIPATION (three minutes per person, for items not scheduled for public hearing)

#### VIII. STAFF/AGENCY REPORTS & PRESENTATIONS

- A. Staff Report
- B. Chair's Report
- C. Waterbody Setback Advisory Board

#### IX. UNFINISHED BUSINESS

- A. Board of Fisheries Planning
  - i. Outreach/Communications
  - ii. Partner Organizations
  - iii. Priority UCI Proposals
  - iv. Emergency Petition Stocks of Concern
- B. <u>Eklutna Hydro Project</u>
- C. NOAA Fisheries
  - i. Alaska Salmon Research Task Force Jan 25
  - ii. NPFMC: Science & Statistical Committee Cook Inlet Salmon SAFE Report – Jan 19
  - iii. NPFMC: Council Feb 8-12/Advisory Panel Feb 6-9
- D. Beaver Meadows Subdivision

#### X. NEW BUSINESS

- A. 2024 Elections Chair and Vice Chair
- B. ADF&G Game Season Summary Meeting Planning
- C. Susitna Basin Rec Rivers Management Plan

#### XI. MEMBER COMMENTS

#### XII. NEXT MEETING DATE:

- A. February 8, 2024 @ 4:00 pm Regular Meeting
- B. Consider Special Meeting for BOF Planning Feb 8<sup>th</sup> Comment deadline

#### XIII. ADJOURNMENT

Disabled persons needing reasonable accommodation in order to participate at a MSB Fish and Wildlife Commission Meeting should contact the borough ADA Coordinator at 861-8432 at least one week in advance of the meeting.

#### MATANUSKA-SUSITNA BOROUGH Fish and Wildlife Commission

Regular Meeting: November 16, 2023 DSJ Building, Lower Level Conference Room/TEAMS

#### **Meeting Minutes**

#### I. CALL TO ORDER Chair Andy Couch called the meeting to order at 4:04 p.m.

II. ROLL CALL – DETERMINATION OF QUORUM/LAND ACKNOWLEDGEMENT

<u>Present</u>: Andy Couch (AC) Howard Delo (HD) Larry Engel (LE) Peter Probasco (PP) Gabe Kitter (GK) Kendra Zamzow (KZ) Jim Sykes (JS)

<u>Absent</u>: Mokie Tew (MT) Tim Hale (TH)

Quorum Established.

AC read the land acknowledgement:

We acknowledge that we are meeting on traditional lands of the Ahtna and Dena'ina people, and we are grateful for their continued stewardship of the land, fish, and wildlife throughout time immemorial.

#### III. APPROVAL OF AGENDA

Moved by LE; seconded by HD. Motion passed unanimously.

- IV. PLEDGE OF ALLEGIANCE
- V. APPROVAL OF MINUTES
  - A. October 19, 2023, Regular Meeting Minutes

## Moved by LE; seconded by HD. Motion passed unanimously.

#### VI. AUDIENCE PARTICIPATION

John Wood, BOF Ted Eischeid, past staff Melissa Heuer, Susitna River Coalition Stephen Braund, Northern District Setnetters Samantha Oslund, ADFG Mike Wood, BOF

#### VII. STAFF/AGENCY REPORTS & PRESENTATIONS

- A. Staff Report Maija DiSalvo
- B. Chair's Report AC
  - i. Thanks to Mike Wood and others for presentations at Salmon Symposium; recognized presentations regarding MSB setback ordinance and regulations regarding ATV activity in Moose range; concerns about whether a bridge would solve issues, there is a lot of damage; impressed with Chickaloon's work on fish passage; weir funding possibly available (funding cut in other places)
- C. Waterbody Setback Advisory Board KZ
  - Had first meeting and elected chair (Bill Kendig) and vice chair (CJ Koan); Realtor/developer position is open; next meeting 12/14 - 6pm will talk about MSB code; KZ will reach out to Alex Strawn to determine how easy it is to get a variance

#### VIII. NOAA Fisheries

A. Work Group Update – PP, KZ, JS

Comments focus on the conservation corridor and the need to maintain it, especially during the critical period July 16-Aug 15; draft mirrors current protections in place in the drift management plan; there are concerns about ability to make adjustments in time; need to have more information to make decisions and data to back up; insufficiencies in using TAC; discussion about submitting the It Takes Fish To Make Fish booklet as a supplemental comment.

JS moved to make December Regular meeting a week earlier (December 14<sup>th</sup> at 2:00 pm); seconded by HD. Motion passed unanimously.

KZ will work with staff to write bullets and prepare maps for the website to help guide members of the public on the issue and how/where to comment.

#### IX. AKSRTF Report

Discussion about coho genetic study gaps and the potential for genetic studies on sockeye; consider request for test fishery; could use \$2.5M funding requests for this type of work, and mention of Bill Stoltz helping to secure those funds. Keep on agenda for future discussion.

X. ADF&G Season Summary Meeting

HD moved to approve the ADF&G Season Summary Meeting Agenda; seconded by LE.

Discussion: AC will be on zoom, PP will chair the meeting; send invite to ADFG Commissioner to discuss position on EEZ; add a future agenda item to discuss pike in UCI

Correction: add Federal Management in EEZ to Item B, update next meeting date according to earlier motion, and adjust times to correct total (90 minutes). **Motion passed unanimously as amended.** 

XI. BOF Planning

HD moved that the FWC adopt the statement on page 25 of the It Takes Fish To Make Fish booklet as a mission statement of the FWC; seconded by PP. Discussion: Hold off to give time for review AC tabled to the next meeting.

Discussion about how to identify priority proposals; consensus to put off until after the December meetings, working on important deadlines first; comments on booklet, goals and mission due by the end of the month.

HD mentioned the symposium speaker highlighted key points around Cook Inlet hatchery issues that differ from ADFG perspectives; could be worth a future conversation.

#### XII. Jonesville & Moose Range Management Plan

Commissioners commended KZ for her personal comments on the plan; PP attended the Chickaloon meeting with only five attendees, was not impressed with the presentation; encouraged FWC to read KZ's comments; KZ reiterated that without enforcement none of this matters, could ask for a trooper position with the millions that have been put into trail restoration; bigger trailheads make the problem worse.

#### JS moved to extend the meeting to 6:15; seconded by PP.

#### Motion passed unanimously.

- XIII. Eklutna Hydroelectric Project Keep on the agenda and choose a public meeting representative in December.
- XIV. Beaver Meadows Subdivision No news to report at this time.
- XV. Appreciation of Mike Wood
   FWC presented Mayoral Proclamation to Mike Wood for his years of service.

#### XVI. MEMBER COMMENTS

KZ: Could consider sending EEZ letter to Tyonek tribe; they are interested in seeing our letter as it impacts their fishery; irony of NOAA passing out fish passage funding - FWC or ADFG could ask for some of that
JS: Not able to do as much work on family trip, thanks to everyone for keeping things going; appreciate the work
LE: No comments
HD: Kudos to KZ for the Moose Range writeup
GK: Appreciate learning and learning quick
PP: GK took initiative to call and spent time discussing issues, appreciate that
AC: GK, feel free to call anyone

#### XVII. NEXT MEETING DATE:

December 7, 2023 @ 5:00 pm – ADF&G Season Summary Special Meeting December 14, 2023 @ 2:00 pm – Regular Meeting

#### XVIII. ADJOURNMENT

**Regular Meeting** 

LE moved to adjourn the meeting; seconded by PP. Motion passed unanimously.

#### Meeting stands adjourned at 6:07 PM

#### MATANUSKA-SUSITNA BOROUGH Fish and Wildlife Commission

ADF&G Special Meeting: December 7, 2023 DSJ Building, Assembly Chambers/TEAMS

#### **Meeting Minutes**

#### I. CALL TO ORDER

Vice Chair Peter Probasco called the meeting to order at 5:00 p.m.

Introductions were given by the Fish & Wildlife Commission members and ADF&G staff: Israel Payton – sport fish (on behalf of the Commissioner); Colton Lipka – comm fish; Sam Ivey – sport fish area management

#### II. ROLL CALL – DETERMINATION OF QUORUM

<u>Present</u>: Andy Couch (AC) - online Howard Delo (HD) Larry Engel (LE) Peter Probasco (PP) Gabe Kitter (GK) Kendra Zamzow (KZ) Jim Sykes (JS)

<u>Absent</u>: Mokie Tew (MT) Tim Hale (TH)

Quorum Established.

PP read the land acknowledgement:

We acknowledge that we are meeting on traditional lands of the Ahtna and Dena'ina people, and we are grateful for their continued stewardship of the land, fish, and wildlife throughout time immemorial.

#### III. APPROVAL OF AGENDA

Moved by LE; seconded by HD. Motion passed unanimously.

- IV. PLEDGE OF ALLEGIANCE
- V. INTRODUCTIONS

MSB Fish and Wildlife Commission Agenda December 7, 2023

- A. PP gave an opening statement on behalf of the FWC; Israel Payton gave an opening statement on behalf of ADF&G.
- B. Audience Participation

AJ Hoffman: 3 Rivers Fly & Tackle; expressed concern over declining salmon populations and resulting pressure on other species; looking to make change, willing to have closures, encouraging federal and state level government to work together; have seen numbers bounce back on Deshka

Ben Allen: fishing guide; passionate about fish, concerned about future of sport fishing here and has considered relocation, gets harder every year; wants to know what state is doing to improve marine environment and survival, river conditions should play a role in management, impacts of past droughts; take protections ahead of time in comm fishery

Shane Foord: Willow; emergency orders don't matter without enforcement, see people violating every day without being checked; troopers haven't had have follow through when trying to make reports

Corey Berg: fishing guide on the Little Su; people fishing for silvers despite closures, no enforcement; emergency orders are not effective

Brad Young: Constitution says fish are for benefit of residents; referenced management styles in Florida and politics of the issue

Dan Pase: guide in Mat-Su Valley; has seen a decline in salmon over past six years; escapement goals have moved; no enforcement and poaching is rampant in the valley; people want to come to AK to fish for kings; hard to make a living; pike have given guides something else to target; passionate about what we do and the resources are failing; would like to keep emergency orders in place for large lake trout

Colton Conner: born and raised in Willow, 21<sup>st</sup> season; keeping industry out of conversation, grew up on willow creek and his daughters will not experience what he did; travel to other parts of US to target salmon; need to be changes and they need to start now with proactive management, not reactive; important to have everyone in the room

Dan Suprek: AK Chinook Charters; sees a lot of poaching, has experienced retaliation for calling people out; past Bluff Pt, 2 king salmon and no annual limit – doesn't understand these regulations

Brian McKay: Kodiak to Talkeetna, sees mostly hatchery fish, few wild fish and

closures all over; issues with poaching and overfishing; concerned in 5-10 years there won't be fish to catch; wants proactive management; close it now, for everybody

Mike Beck: in the Valley for 11 years; vacationed here 20 years ago and there were fish everywhere; fewer opportunities every year; have to work together to fix things; would like to see less spending on stocking, and more investments in fixing issues; will be involved as much as possible

Cody: local fisherman, no economic interest; has seen dozens of emergency orders annually; unprecedented abuse of resource from different places; fish aren't making it into the river, not only a habitat issue; time to start managing correctly

AJ Hoffman: hopes everyone walks away with passion; started AK sportfishing association as a way to access funding and resources; let groups know where you need help; healthy fishery allows everyone to harvest; have to think forward

JS: thanks to members of the public for showing up; passion, knowledge and feelings are important; show up at BOF meetings, keep passion you have brought tonight

Pat Brashler: visited in 70s, moved here in 90s; watching UCI get destroyed – unsure about management, but recognizes things need to change; important to take family out fishing and catch a salmon

Neil Dewitt: land owner, personal use subsistence user; fed side of house is in session currently, hasn't seen anyone at those meetings telling them what you heard here tonight; bycatch higher than escapement goals are; expects to see some folks at future meetings

Greg Acord: acknowledged challenges in ADFG jobs

Ted Eischeid: thank you to FWC for sponsoring meeting; a lot of passion in the room; important to use passion and bring to BOF meeting; a lot of decent people at ADFG; work with FWC to bring voice to BOF

#### VI. PRESENTATIONS

- A. Staff Report Maija DiSalvo
- B. Colton Lipka reported on Commercial Fishing 2023 Notable Highlights & Observations: 2023 season showed greater abundance of sockeye, but lower coho 5.1M salmon, UCI around 6.5M; harvested above average sockeye numbers; restrictive season, king directed fishery did not open; restrictions continued through first week of July due to projections below escapements; chum in Northern District were above average (6900 20 year avg around 3200)

- C. Sam Ivey reported on Sport Fishing 2023 Notable Highlights & Observations: king salmon, season started closed exceptions on Little Su and Yentna, had achieved escapements the year before; when deshka closes, king fishery closes; missed EG by a large margin, historical low count; Little Su weir was a challenge with high water; kings weren't in a hurry to move in June, got hit by flooding closed catch and release; individual goals were missed, not surprising, areas closed for duration of season; sockeye high numbers this year; Fish Creek personal use fishery (6<sup>th</sup> year) 20-30k sockeye were harvested; EG was at the top of the range (45k); Larson creek had better water conditions for moving fish; Susitna personal use fishery has been open since 2020 6 days fished, positive reports; coho had funding to operate weirs that had been cut, were able to run Deshka, Jim Creek, Fish Creek and Little Su; complete count only at Fish Creek, made goal; closed coho fisheries took awhile to realize the weakness of run; EOs in place by mid August; ADFG has funding to operate weirs next season (Deshka, Little Su, Fish Creek)
- D. Israel Payton reported on the Federal Management of Exclusive Economic Zone: Commissioner couldn't attend because he is at a NPFMC meeting on this topic; shared a powerpoint presentation with the FWC regarding UCI; issue is still open for comment until Dec 18; plan is to mirror state management; aware of weaker stocks and belugas

#### VII. ITEMS OF BUSINESS

A. FWC/ADF&G Dialogue on Mat-Su Fisheries/FWC Questions

KZ: Is ADFG looking into cold-water refugia? Sam Ivey: partner orgs are doing research – learning more about salmon behavior, experiencing warmer temps

PP: ADFG made a comment that NPFMC will mirror state management, but concerned to see 2 12 hour periods; FWC has commented that the proposal increases time.

Israel Payton: aware of that timeframe, council mentioned that several times; PP: also concern for the feds to react inseason – have fed background, response time is not 1-4 days, it is much longer – how can they respond in a timely manner to prevent overfishing?

Israel Payton: unknown at this time, it is a question for the department as well

LE: how many of you in the public are familiar with EEZ? Has potential to cause a lot of issues in the mixed stock fishery; angler days have continued to drop, economic and social impacts we are all aware of; need involvement to represent your views; attend BOF; major changes mean we need more involvement; attending one meeting is not enough

AC: hear that they will will try to stay in within the state parameters with EEZ management, but runs tend to be later; doubling fishing time makes comm

harvest happen earlier; all fisheries benefit from all users having a full season; fishing to the limit early season could be devastating to Northern District, does ADFG recognize that?

Colton Lipka: if harvest is focused early you could see impacts on stocks whose run time correlate with that early timeframe; relate to sockeye, have done genetic studies and current drift management plan has those protections; would likely have a big impact of Susitna sockeye

HD: How are you going to staff the Little Su public use facility and Susitna Landing? ADFG is proposing one person p/t at each; how well does the dept think that will work in light of all poaching and other activities? What do they expect and why are they shifting away from f/t?

Sam Ivey: for various reasons have moved away from full time; it is evolving, looking at moving to campground hosts as support, more online ways to pay for things on sites

HD: We are talking biology all night, but the thing most easily managed is people; population has grown significantly

GK: Is the technology used at Lake Creek impacted by flooding in the same way as other waterways?

Sam Ivey: good thing about sonar is a little more leeway than weir; sometimes can't use a weir because of geographical/environmental factors, but sonar allows water levels to go up and down; good count on kings despite water levels; good program, will hopefully stay funded in the future

JS: FC personal use fishery – open 6 years in a row, unprecedented; result of Conservation Corridor; started a research test fishery showing where fish were headed north, seems that data needs to be completed and updated because it is a reflection of our northern-bound fish; are there some hot spots in the Central District that could be subjects of test fisheries?

Colton Lipka: current test fishery is centralized in CI; if there are other areas to institute a test fishery, there are no plans to do that now

JS: TAC being proposed – amount of data gathered in commercial fishery is realtime making real decisions, but we don't have any realtime data in Northern District – need more data to restore our fisheries.

PP: How long will the weirs run in 2024?

Deshka – mid September; Little Su – mid September; FC and JC through EO September; burden of budget cuts awhile back cut 50% through the run on Aug 15<sup>th</sup>; flooding has impacted; looking at moving weir locations to mitigate; sonar potential on lower river; full season funding will be really big AC: ADFG mentioned a mark/recapture study on susitna sockeye, monitoring at all three weir sites; what would the cost be and how soon could we get something up and running?

Colton Lipka: will look into it; already have operating plans/procedures in place to implement

HD: the preseason run forecast has been off by up to 100% - is ADFG trying to do anything to refine forecasting methods to make them more realistic? Colton Lipka: continually trying to improve methods; difficult to do and works better on normal years

KZ: Question 7 in packet – coho estimates are only from 2013-2016 – what would it take to get stock assessments? Is it worth going after and could it help forecasts?

Colton Lipka: fiscal limitations – if funding was available, ADFG could do it; complicated because have to make certain levels of sampling to get clarity; don't do coho forecasting

AC: right now coho are most important to in river sport fisheries – last 3 years have had poor harvests in inriver sport fisheries; is there a way to shoot towards meeting midpoint of coho goals instead of shooting for bottom and missing? Sam Ivey: EGs are built on percentile approach, ranked data analyzing; don't always have power to make happen; depends on run timing, may have more or less wiggle room; EO has more power if used earlier.

Public: How far out are king goals? Israel Payton: working on them now, deciding how to move forward

Israel Payton: has been on the other side; early 2000s had some of highest king runs of all time, very low right now; controlling mother nature is difficult, because we don't understand it that well – trying to understand the ocean better and do more proactive management; king sport fish hatchery is expensive, but kings can come back as fast as they; you create management plans through BOF process; susitna sockeye is a huge win that wasn't addressed; troopers created 70 positions; ADFG is recruiting, difficulties hiring; implementing rules and regulations made at BOF is unique to Alaska

#### VIII. ADF&G/FWC MEMBER COMMENTS (15 minutes)

JS: thank you to staff coming tonight; encourage public to use website and reach out to commissioners, appreciate you showing up; weirs are great, hope they can be staffed; fed eez overtakes management of kenai/Kasilof sections, hopes state and feds will work together; how can we get more data to make sure cc continues to work

Rep. Kevin McCabe: fisheries committee in house, happy to help if there are

issues; have to show up to make a difference – has been only person there at many meetings; continue showing up; need southcentral public testimony

KZ: No comments

LE: thank you for attending and responding to questions in advance and tonight HD: No comments

GK: thank you; started in same position as many of the public, realized the way to make a difference is to get involved as you can

AC: thank you to ADF&G for coming out and the public, rep McCabe; we have better representation on the BOF than in some of the past years, three from southcentral

Israel Payton: BOF process – staff can help, grab a mentor so it isn't intimidating; call area managers, etc.; we are here to help navigate the process

PP – remind FWC members, next meeting is at 2:00 pm and EEZ comments are due by Wed AM; will finalize draft comments for discussion at next meeting, as well as the BOF Booklet; these are challenging issues, hope you listen to those with experience; thanks to ADFG for being here

- IX. NEXT MEETING DATE: December 14, 2023 @ 2:00 PM MSB Assembly Chambers
- X. ADJOURNMENT

AC moved to adjourn the meeting; seconded by LE. Motion passed unanimously.

Meeting stands adjourned at 7:20 PM.

#### MATANUSKA-SUSITNA BOROUGH Fish and Wildlife Commission

Regular Meeting: December 14, 2023 DSJ Building, Assembly Chambers/TEAMS

#### **Meeting Minutes**

#### I. CALL TO ORDER Vice Chair Peter Probasco called the meeting to order at 2:02 p.m.

II. ROLL CALL – DETERMINATION OF QUORUM

<u>Present</u>: Andy Couch (AC) - online Howard Delo (HD) Larry Engel (LE) Peter Probasco (PP) Gabe Kitter (GK) Kendra Zamzow (KZ) - online Jim Sykes (JS) – arrived at 2:08 pm

<u>Absent</u>: Tim Hale (TH)

Quorum Established.

PP read the land acknowledgement:

We acknowledge that we are meeting on traditional lands of the Ahtna and Dena'ina people, and we are grateful for their continued stewardship of the land, fish, and wildlife throughout time immemorial.

#### III. APPROVAL OF AGENDA

Moved by LE; seconded by HD. Discussion: add an ADF&G summary at the end, if time allows Motion passed unanimously.

- IV. PLEDGE OF ALLEGIANCE
- V. AUDIENCE PARTICIPATION

Bill Gamble: New District 5 Assembly member Cory Burg: local guide, trying to get more involved in process; hard to find meeting information, find new ways to advertise Ken: small business owner, not directly impacted, but trickle down effects; wants to learn more and be more involved

Shane Ford: local guide in area; concerns with pike in Willow Creek; not legally allowed to snag, but can't put them pack in the water; what to do if not biting?

Erin Hoffman: SC Sportfishing Association; regs with king salmon retention on parks – could simplify for tourists and everyday users; PP recommendations to follow BOF process for regulatory change

Pete Imhoff: lifetime resident

Carrie Brophil: NVE – on agenda to talk about draft plan, can answer question Melissa Hauer: Susitna River Coalition

Chennery Fife: Trout Unlimited, SC Alaska engagement coordinator; would like official endorsement for Eklutna Dam removal project

Mark Lamoreaux: NVE, happy to answer questions offer support – thank you to FWC for letter

Mike Wood: BOF; good to see new people attending; listening in Sam Oslund: ADFG

Oliver Querin: ADFG, fish biologist

Stephen Braund: Northern District Setnetters

#### VI. STAFF/AGENCY REPORTS & PRESENTATIONS

- A. Staff Report Maija DiSalvo
- B. Chair's Report PP
- C. Waterbody Setback Advisory Board KZ

Have a meeting today, will be talking about codes over the years; can get a variance if not living where you should be, 45 have been approved since 1987

#### VII. Board of Fisheries Planning

Booklet Updates:

- P. 2 add commissioner names
- P. 8 update 2021 Fish Creek numbers provided by ADFG

P 10 – update graphic to match 2020 booklet

P 15 – add source information

P. 16 – "and maintain the current drift gillnet length of 150 fathoms"; change box to light green

- P. 17 Current State Inseason Manamgement (TITLE)
- P. 18 Funded and unfunded update from GIS
- P. 23 Habitat is Critical, but it takes fish to make fish

P. 27 Reword mission to: A mission of the MSB Fish & Wildlife Commission is to work towards adopting management plans conservative enough to reach midpoint escapement goals for Northern Cook Inlet sockeye, coho, and king salmon, providing more realistic and reasonable shared harvest opportunities throughout the season for all users.

AC moved to approve the 2024 It Takes Fish To Make Fish booklet with above amendments; seconded by LE. Motion passed unanimously.

VIII. Federal Management of EEZ

HD moved to approve letter as written; seconded by AC.

LE moved to add the first two sentences in small green box on page 12 of It Takes Fish To Make Fish booklet before "Within this area" to the second paragraph; seconded by AC. Motion passed unanimously (amendment).

Motion passed unanimously (main).

AC moved to copy our state legislators, MSB legislators, national legislators, governor; seconded by LE. (AC will provide list; It Takes Fish To Make Fish booklet will be included as enclosure) Motion passed unanimously

IX. Eklutna Hydro Project

LE moved that PP and GK will attend the January public meetings on behalf of the FWC; seconded by AC. Motion passed unanimously.

Carrie Brophil gave a summary of the concerns with the draft Fish & Wildlife Plan. Eklutna continues fo fight for full restoration on the river and habitat; passage to the lake could open a whole new fishery and there are 15 miles of tributaries above the lake; info on all sides can be found on: eklutnariver.org and eklutnahydro.net

- Alaska Salmon Research Task Force
   Public comment due March 15; looking for research/data
- XI. Beaver Meadows Subdivision No updates from DNR at this time

#### XII. ADF&G Discussion Recap

Discussion: Acknowledgement of the large turnout and public engagement; ADF&G handled criticism professionally; funding gaps for test fisheries; a lot of concern with lack of enforcement, adequate enforcement could mitigate a lot of issues; Sam Oslund of ADF&G updated that the group met with wildlife enforcement after the meeting and they have some things in the works; members of the public expressed concerns with enforcement not being well trained to run the river and suggested guide support; also concerns about troopers being able to identify illegal activities; potential for community education for those who don't know the regulations

#### XIII. 2024 Meeting Calendar

Move to second Thursday of the month except March 21<sup>st</sup> and September 26<sup>th</sup> - 4pm (no meetings June-Aug.)

#### XIV. MEMBER COMMENTS

AC: appreciate all of the help on the commission and booklet comments; appreciate everyone's opinions, even if different; all doing valuable work; Merry Christmas

GK: booklet and letter are great; good to be a part of it, reason he wanted to be involved; thanks to Maija

HD: happy to finalize a few things; commend Maija on booklet work; welcome to Bill Gamble

LE: happy holidays; reminder that tomorrow is deadline for draw tags

JS: Thank you for all good work; pleased with booklet; happy holidays; thanks to public

PP: welcome to Bill, appreciate having Assembly members involved and look forward to working with you; good to get to know Pete; wish the best to everyone for the holidays

- XV. NEXT MEETING DATE: January 11, 2024 @ 4:00 pm DSJ Assemby Chambers
- XVI. ADJOURNMENT

#### LE moved to adjourn the meeting; seconded by HD. Motion passed unanimously.

Meeting stands adjourned at 4:58 PM.

Little Susitna River Sport Harvests COHO 2000 - 2004 average 17,137 coho / year 2018 - 2022 average 3,612 coho / year Approximately 79% decline

#### SOCKEYE

2000 - 2004 average 2,773 sockeye / year 2018 - 2022 average 156 sockeye / year Approximately 94% decline

#### KING

2000 - 2004 average 2538 kings / year 2018 - 2022 average 69 kings / year Approximately 97% decline

**Regular Meeting** 



<u>18 of 100</u>

## NOTICE OF PUBLIC MEETING OF THE ALASKA BOARD OF FISHERIES COMMITTEE ON BOARD PROCESS, MANAGEMENT, AND RESEARCH NEEDS

The Alaska Board of Fisheries (board) Committee on Process, Management, and Research Needs will meet on Thursday, January 18, 2024 beginning at 1:00 pm. This committee is composed of three board members: Märit Carlson-Van Dort (chair), Mike Wood, and Greg Svendsen. <u>The purpose of this meeting is to have a discussion about the incorporation of Traditional Knowledge (TK) reports following the board's Kodiak finfish meeting and whether any changes are needed in regard to TK reports before the board's next meeting on Upper Cook Inlet finfish issues.</u>

This meeting will take place via webconference. The public will also have an opportunity to provide input to the committee during this meeting (similar to the board's committee of the whole process).

The webconference can be accessed by computer at:

https://us06web.zoom.us/j/83470851657?pwd=vUe4QAbn9ekwdcFPIqzNnAWEtIIQ7j.1

The meeting can also be accessed by phone at:

Phone: +1 253 215 8782

Meeting ID: 834 7085 1657

Written public comment can be submitted for this committee meeting. Comments are limited to no more than 100 single-sided pages and are due no later than January 15, 2023. Written comments can be submitted through an online submission portal at <u>https://arcg.is/1qyXOz1</u>.

Comments can also be mailed to Alaska Board of Fisheries, P.O. Box 115526, Juneau, AK 99811-5526 or sent by fax to (907) 465-6094.

All documents, including the agenda and public comments received, will be posted to the meeting page for this meeting at:

https://www.adfg.alaska.gov/index.cfm?adfg=fisheriesboard.meetinginfo&date=01-18-2024&meeting=Webconference

If you are a person with a disability who needs a special accommodation to participate in this meeting, please contact Art Nelson at (907) 267-2292 by 5:00 p.m. Tuesday, January 16, 2024 to make any necessary arrangements.

For more information about this meeting, contact Art Nelson, Board of Fisheries Executive Director at <u>art.nelson@alaska.gov</u> or 907-267-2292.

/S/

Art Nelson, Executive Director

ADF&G Boards Support Section

December 29, 2023

Date

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**Regular Meeting** 

<u>19 of 100</u>

MATANUSKA-SUSITNA BOROUGH WATERBODY SETBACK ADVISORY BOARD AGENDA



Edna DeVries, Mayor

CJ Koan, (Vice-Chair) Planning Commission Kendra Zamzow, MSB Fish and Wildlife Matthew LaCrouix, Mat-Su Salmon Habitat Partnership Tim Alley, Design & Construct Stormwater Abatement Background Bill Klebasadel, Design & Construct Stormwater Abatement Background William Haller, Home Builder, Lending, Real Estate Background Carl Brent, At-Large Bill Kendig (Chair), At-Large Jeanette Perdue, At-Large

Support Staff: Alex Strawn, Planning & Land Use Director

#### **REGULAR MEETING**

Michael Brown, Borough Manager

PLANNING & LAND USE DEPARTMENT Alex Strawn, Planning & Land Use Director Kim Sollien, Planning Services Manager Jason Ortiz, Development Services Manager Fred Wagner, Platting Officer

> Location: **Employee Break Room** of the Dorothy Swanda Jones Building 350 E. Dahlia Avenue, Palmer

> > January 9, 2024

#### Ways to participate in the meeting:

**IN PERSON:** You will have 3 minutes to state your oral comment.

**IN WRITING:** You can submit written comments to Alex Strawn at <u>alex.strawn@matsugov.us</u> and Karol Riese at <u>karol.riese@matsugov.us</u>. Written comments are due at noon on Friday prior to the meeting.

6:00 P.M.

#### **TELEPHONIC TESTIMONY:**

- Dial 1-855-290-3803; you will hear "joining conference" when you are admitted to the meeting.
- You will be automatically muted and able to listen to the meeting.
- When the Chair announces audience participation or a public hearing you would like to speak to, press \*3; you will hear, "Your hand has been raised." (There may be a delay, please be patient with the system.)
- When it is your turn to testify, you will hear, "Your line has been unmuted." State your name for the record, spell your last name and provide your testimony.
- I. CALL TO ORDER, ROLL CALL, AND DETERMINATION OF QUORUM
- II. APPROVAL OF AGENDA

- III. PLEDGE OF ALLEGIENCE
- IV. APPROVAL OF MINUTES: December 14, 2023
- V. AUDIENCE PARTICIPATION (three minutes per person for items not scheduled for public hearing)
- VI. ITEMS OF BUSINESS
  - A. Presentation from State of Alaska Department of Conservation Presenters: Ashley Oleksiak, Environmental Program Specialist 3, Nonpoint Source Water Quality and Sam Kito III, P.E., Engineer 2, Storm Water/Wetlands
  - B. Reschedule Meeting Dates for March 12 and April 9
  - C. Future Agenda Items
- VII. BOARD MEMBER COMMENTS
- VIII. ADJOURNMENT

**Regular Meeting** 



# MATANUSKA-SUSITNA BOROUGH <u>Fish & Wildlife Commission</u> Planning and Land Use Department Planning Division

350 East Dahlia Avenue • Palmer, AK 99645 Phone (907) 861-7833 • Fax (907) 861-7876 www.matsugov.us • planning@matsugov.us

Board Of Fisheries 2024 FWC Draft Planning Document: Task Table 1				
Task	Target DateNote 1Note 2Compl		Complete	
				Date
Develop Initial	Nov. '22- Jan.			January 2023
FWC Goals	·23			
FWC BOF	Jan. '23	Currently:	Work to	Final request
Pudgat		\$49.073.36. Submit	increase by	to MSB by
Budget		budget request to	\$10K - \$15K	2/1/23
		MSB Planning.		
Identify Allied	Dec. '22 – Feb.			Ongoing
Groups	·24			
Develop FWC	Dec. '22 –			Submit April
BOF Proposals	March '23			1, '23
Extend BOF	April – May '23	Current project	Extend current	6/1/23
Project Funds		expires 6/30/23.	project to	
5			6/30/24.	
BOF Member	Summer '23	Develop/offer field	Involve	August '23
Education		trips for BOF and	Salmon Habitat	
		stakeholders	Partnership	
FWC BOF Media	June '23 – Feb.	Booklet	Need a FWC	Final Booklet
Development	'24	Website	Work Group	Printed Dec.
		StoryMap	Prior to 6/1/23	'23



Task	Target Date	Note 1	Note 2	Complete
				Date
BOF Consultant	July – Aug '23	RFP developed		August '23
Hired	varj 11ag. 20	nublicized		Tugust 25
Inica		acongultant hirad		
			<b>D</b> : (	
BOF Outreach	Develop June –	Identify key target	Print	Ongoing
Plan	Oct. '23;	groups; develop	Social media	
	Deliver Nov.	content messaging;	Presentations	
	'23-Feb. '24	deliver program.	Workshops	
ID Partners for	Summer '23	Onsite meeting		May '23 FWC
sharing onsite		room; printing		reso in
resources		resources.		support.
BOF Proposal	Fall '23	FWC Committee		Dec. '23
Review &				
Recommendations				
After Action	March '24	Internal report	Community	March '24
Summary Report			summary press	
			releases	
Strategy	April – May '24			May '24
Reflection for				
BOF '27				

Approved by FWC at their 10/20/22 meeting.

# UPPER COOK INLET PROPOSAL INDEX (186 proposals)

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	Remove the Kenai River Late-Run King Salmon OEG as follows:
PR	OPOSAL 76
	Remove the Kenai River Late-Run King Salmon OEG as follows:
<u>PR</u>	OPOSAL 77
	Modify the Kenai River Late-Run King Salmon OEG as follows:
<u>PR</u>	OPOSAL 78
	Remove the Kenai River Late-Run King Salmon OEG as follows:
PR	OPOSAL 79
	Create additional step-down measures to the KRLRKSMP as follows:
PR	OPOSAL 80
	Modify the Kenai River Late-Run King Salmon Management Plan as follows:
PR	OPOSAL 81
	Provide addition commercial fishing opportunity for salmon within the Kenai Ri
	Late-Run King Salmon Management Plan as follows:
<u>PR</u>	OPOSAL 82
	Repeal portions of intent language from the Kenai River Late-Run King Salmon
	Management Plan and shorten plan duration as follows:
PR	OPOSAL 83
	Modify the Kenai River Late-Run King Salmon Management Plan as follows:
<u>PR</u>	OPOSAL 84
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	the preseason forecast is below 20,000 fish as follows:
PR	OPOSAL 85
	Prohibit use of motorized vessels in the Kenai River if the sport fishery is closed
	IOIIOWS:
PR	OPOSAL 86
	Prohibit bait in the Kenai River through Oct 31 if the king salmon sport fishery is closed by EO as follows:
<u>PR</u>	OPOSAL 87
	Prohibit guided sport fishing on the Kenai and Kasilof Rivers when sport fishing
	king salmon is closed as follows:
<u>PR</u>	OPOSAL 88
	Prohibit nonresidents from fishing from a guide vessel on the Kenai River if the
	salmon sport fishery is closed as follows:
PR	OPOSAL 89

salmon fishery as follows:
PROPOSAL 90
Expand weekly time-period "windows" where the commercial salmon fishery is closed as follows:
PROPOSAL 91
Amend criteria for commercial set gillnet fishing periods, in the Upper Subdistrict, after August 1 as follows:
PROPOSAL 92
Exempt the East Foreland Section from 'paired restriction' measures in the <i>Kenai</i> <i>River Late-Run King Salmon Management Plan</i> as follows:
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PROPOSAL 96       54         Modify operation of set gillnet gear in the Upper Subdistrict, as follows:       54         PROPOSAL 97       55
PROPOSAL 96       54         Modify operation of set gillnet gear in the Upper Subdistrict, as follows:       54         PROPOSAL 97       55         Amend the Kenai Late-Run King Salmon Management Plan to provide additional fishing opportunity in the sport and set gillnet commercial fisheries as follows:       55
PROPOSAL 96       54         Modify operation of set gillnet gear in the Upper Subdistrict, as follows:       54         PROPOSAL 97       55         Amend the Kenai Late-Run King Salmon Management Plan to provide additional fishing opportunity in the sport and set gillnet commercial fisheries as follows:       55         PROPOSAL 98       56
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PROPOSAL 96       54         Modify operation of set gillnet gear in the Upper Subdistrict, as follows:       54         PROPOSAL 97       55         Amend the Kenai Late-Run King Salmon Management Plan to provide additional fishing opportunity in the sport and set gillnet commercial fisheries as follows:       55         PROPOSAL 98       56         Modify the commercial set gillnet fishery in the Upper Subdistrict when restricted to achieve the Kenai River late-run king salmon optimal escapement goal as follows:       56         PROPOSAL 99       57         Make numerous changes to the Kenai River Late-Run King Salmon Management Plan as follows:       57         PROPOSAL 100       61
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PROPOSAL 96       54         Modify operation of set gillnet gear in the Upper Subdistrict, as follows:       54         PROPOSAL 97       55         Amend the Kenai Late-Run King Salmon Management Plan to provide additional fishing opportunity in the sport and set gillnet commercial fisheries as follows:       55         PROPOSAL 98       56         Modify the commercial set gillnet fishery in the Upper Subdistrict when restricted to achieve the Kenai River late-run king salmon optimal escapement goal as follows:       56         PROPOSAL 99       57         Make numerous changes to the Kenai River Late-Run King Salmon Management Plan as follows:       57         PROPOSAL 100       61         Allow a 600-foot set gillnet commercial fishery when Kenai River late-run large king salmon escapements exceed 13,500 fish as follows:       61         PROPOSAL 101       62
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ΡΡΟΡΟς ΑΤ 1/0	
Allow use of reef nets in the Upper Cook Inlet commercial salmon fis	sherv as
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Increase waters closed to commercial fishing for salmon in the Northen District King Salmon Management Plan as follows:
PROPOSAL 206
Reduce the number of king salmon that may be commercially harvested in the Northern District of Upper Cook Inlet as follows:
PROPOSAL 207
Adopt additional restrictions in the Northern District King Salmon Management Plan as follows:
PROPOSAL 208
Restrict the commercial king salmon fishery in the Northern District as follows: 150
PROPOSAL 209
PROPOSAL 210
Modify the Northern District Salmon Management Plan and Northern District King Salmon Management Plan as follows:
PROPOSAL 211
Repeal certain restrictive provisions of the Northern District Salmon Management Plan as follows:
<u>PROPOSAL 212</u>

follows:
PROPOSAL 213
Adopt new 'paired restrictive' management measures for the Northern District commercial salmon set gillnet fishery as follows:
PROPOSAL 214       158         Adopt new 'paired restrictive' management measures for the commercial salmon set gillnet fishery within the Northern District Salmon Management Plan as follows:         158
PROPOSAL 215
Provide additional commercial fishing opportunity for salmon within the <i>Northern</i> <i>District Salmon Management Plan</i> as follows:
Cook Inlet Smelt (2 proposals)
PROPOSAL 216
Reduce the commercial smelt guideline harvest level in Upper Cook Inlet, as follows:
PROPOSAL 217
Repeal the Cook Inlet Smelt Fishery Management Plan as follows:
Susitna River Sport Fisheries (10 proposals)
PROPOSAL 218 165
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna River Drainage Area as follows:
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna River Drainage Area as follows:
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna River Drainage Area as follows:
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna River Drainage Area as follows:       165 <b>PROPOSAL 219</b> 166         Close fishing for all species within the confluence of Unit 2 waters when sport fishing for king salmon is closed as follows:       166 <b>PROPOSAL 220</b> 167
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna         River Drainage Area as follows:       165 <b>PROPOSAL 219</b> 166         Close fishing for all species within the confluence of Unit 2 waters when sport       166 <b>PROPOSAL 220</b> 167         Open additional waters in the Big River drainage to sport fishing for coho salmon as follows:       167
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna         River Drainage Area as follows:       165 <b>PROPOSAL 219</b> 166         Close fishing for all species within the confluence of Unit 2 waters when sport       166 <b>PROPOSAL 220</b> 167         Open additional waters in the Big River drainage to sport fishing for coho salmon as follows:       167 <b>PROPOSAL 221</b> 167
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna         River Drainage Area as follows:       165 <b>PROPOSAL 219</b> 166         Close fishing for all species within the confluence of Unit 2 waters when sport       166 <b>PROPOSAL 220</b> 167         Open additional waters in the Big River drainage to sport fishing for coho salmon as follows:       167 <b>PROPOSAL 221</b> 167 <b>Oreate a bag and possession limit of 3 coho salmon in the Susitna River Drainage, as</b> follows:       167
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna         River Drainage Area as follows:       165 <b>PROPOSAL 219</b> 166         Close fishing for all species within the confluence of Unit 2 waters when sport       166 <b>PROPOSAL 220</b> 167         Open additional waters in the Big River drainage to sport fishing for coho salmon as follows:       167 <b>PROPOSAL 221</b> 167 <b>PROPOSAL 222</b> 168
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna         River Drainage Area as follows:       165 <b>PROPOSAL 219</b> 166         Close fishing for all species within the confluence of Unit 2 waters when sport       166 <b>PROPOSAL 220</b> 167         Open additional waters in the Big River drainage to sport fishing for coho salmon as       167 <b>PROPOSAL 221</b> 167         Open additional waters in the Big River drainage to sport fishing for coho salmon as       167 <b>PROPOSAL 221</b> 167 <b>PROPOSAL 222</b> 167         Description       167 <b>PROPOSAL 221</b> 167 <b>Description</b> 167
Itor OSAL 210         Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna River Drainage Area as follows:         165         PROPOSAL 219         166         Close fishing for all species within the confluence of Unit 2 waters when sport fishing for king salmon is closed as follows:         166         PROPOSAL 220         167         Open additional waters in the Big River drainage to sport fishing for coho salmon as follows:         167         PROPOSAL 221         167         PROPOSAL 221         167         PROPOSAL 221         167         PROPOSAL 221         167         PROPOSAL 222         167         PROPOSAL 222         167         PROPOSAL 222         168         Increase the Susitna River drainage sport fish limits for pink salmon as follows:         168         Increase the Susitna River drainage sport fish limits for pink salmon as follows:         169 <td< td=""></td<>
Allow harvest of king salmon between 20 and 24 inches in Unit 4 of the Susitna         River Drainage Area as follows:       165 <b>PROPOSAL 219</b> 166         Close fishing for all species within the confluence of Unit 2 waters when sport       166 <b>PROPOSAL 220</b> 167         Open additional waters in the Big River drainage to sport fishing for coho salmon as       167 <b>PROPOSAL 221</b> 167 <b>PROPOSAL 221</b> 167 <b>PROPOSAL 221</b> 167 <b>PROPOSAL 221</b> 167 <b>PROPOSAL 222</b> 167 <b>PROPOSAL 221</b> 167 <b>PROPOSAL 222</b> 168         Increase the Susitna River drainage sport fish limits for pink salmon as follows:       168 <b>PROPOSAL 223</b> 168 <b>PROPOSAL 223</b> 169         Redefine the special management areas for rainbow trout in the Susitna River       169 <b>PROPOSAL 224</b> 169

PROPOSAL 225
Open rainbow trout fishing in Unit 4 of the Susitna River drainage year-round with a
bag limit of 5 fish, 10 in possession as follows:
PROPOSAL 226
Allow anglers to use two artificial lures in tandem in Susitna River Drainage waters as follows:
PROPOSAL 227
Remove the length restriction on Dolly Varden in Unit 4, as follows:
Susitna River Personal Use Fisheries (4 proposals)
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Close dipnetting in the vicinity of Anderson Creek during the personal use fishery
on the lower Susitna River as follows:172
PROPOSAL 229
Increase the number of days the Susitna River dip net fishery is open as follows: 173
PROPOSAL 230
Increase the open season of the Susitna River dipnet fishery as follows:
PROPOSAL 231
Modify dates of the Susitna River dip net fishery as follows:
Upper Cook Inlet Salt Water King Salmon Sport Fishery Plan(5 proposals)
PROPOSAL 1
Amend the Upper Cook Inlet Summer Salt Water King Salmon Sport Fishery Management Plan, as follows ( <i>This proposal will be heard and public testimony will be taken at both the LCI and UCI meetings and deliberated at the UCI meeting</i> ): 175
PROPOSAL 2
Amend the Upper Cook Inlet Summer Salt Water King Salmon Management Plan as follows (This proposal will be heard and public testimony will be taken at both the LCI and UCI meetings and deliberated at the UCI meeting):
<u>PROPOSAL 3</u>
Amend the management plans for the Upper Cook Inlet Summer and Kenai River late-run king salmon fisheries as follows ( <i>This proposal will be heard and public testimony will be taken at both the LCI and UCI meetings and deliberated at the UCI meeting</i> ):
PROPOSAL 4
Redefine the boundaries of the Upper Cook Inlet Area as follows ( <i>This proposal will be heard and public testimony will be taken at both the LCI and UCI meetings and deliberated at the UCI meeting</i> ):
Cook Inlet – Areawide Sport Fisheries (2 proposals)
PROPOSAL 232
Allow Alaska residents to sport fish additional gear and take multiple limits in Upper Cook Inlet as follows:
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PROPOSAL 233 178
Establish sport fishing derby approval process as follows:
Knik River Area (16 proposals)178
PROPOSAL 234
Clarify the northern boundary of the Knik Arm management area and the Palmer- Wasilla Zone and exclude certain flowing waters from the Palmer-Wasilla Zone as follows:
PROPOSAL 235
Reduce the size of the Palmer - Wasilla Zone as follows:
PROPOSAL 236 180
Update the stocked lakes list for the Knik Arm drainage area as follows:
PROPOSAL 237
Allow bow and spear as legal gear for northern pike and Alaska blackfish year round in the Palmer-Wasilla Zone, as follows:
PROPOSAL 238
Establish a motor size restriction for the Little Susitna River as follows:
PROPOSAL 239
<u>PROPOSAL 240</u>
Increase the number of days bait is allowed in the Little Susitina River drainage as follows:
PROPOSAL 241
Allow use of bait in the Little Susitna River sport fishery based on location of commercial fishery openings as follows:
PROPOSAL 242
Prohibit anglers from releasing coho salmon in the Little Susitna River as follows: 
PROPOSAL 243 186
Create a bag and possession limit of 3 coho salmon in the Knik Arm Drainages, as follows:
<u>PROPOSAL 244</u>
Define the mouth of Fish Creek as follows:
PROPOSAL 245
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PROPOSAL 246
Update the lists of lakes where anglers may use five lines while fishing for northern pike through the ice in designated Northern Cook Inlet waters as follows:

PROPOSAL 247
Prohibit chumming in Big, Mirror, and Flat Lakes as follows:
PROPOSAL 248 190
Restrict Big Lake Arctic char to catch-and-release in the Fish Creek drainage as follows:
PROPOSAL 249 191
Remove the effective date of regulation pertaining to sport fishing from a motor driven boat as follows:
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PROPOSAL 250
Modify the closure date for the Ship Creek king salmon fishery as follows:
PROPOSAL 251
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PROPOSAL 252
Increase the bag and possession for salmon, other than king salmon, as follows: . 193
PROPOSAL 253
Allow anglers to use two artificial flies in tandem in a portion of Campbell Creek as follows:
PROPOSAL 254 194
Add a portion of Chester Creek to the Anchorage Bowl Drainage special management areas for trout as follows:
PROPOSAL 255
Create a personal use dip net fishery for salmon in the 20-Mile and Placer Rivers as follows:



MATANUSKA-SUSITNA BOROUGH <u>Fish & Wildlife Commission</u> Planning and Land Use Department Planning Division 350 East Dahlia Avenue • Palmer, AK 99645 Phone (907) 861-7833 <u>http://www.matsugov.us</u> • <u>planning@matsugov.us</u>

October 24, 2023

Ms. Samantha Owen Senior Regulatory and Licensing Consultant McMillen Jacobs Associates 1101 Western Avenue, Suite 706 Seattle, Washington 98104

# Re: Preferred alternative for the Eklutna Hydroelectric Project – restoration of Eklutna River and Lake salmon habitat and production

Dear Ms. Owen:

The Matanuska Susitna Borough Fish and Wildlife Commission (FWC) represents the interests of the Borough in the conservation and allocation of fish, wildlife and habitat. Specifically, the FWC advises borough officials, state or federal agencies and other organizations with interests that may affect conservation of fish, wildlife, and habitat across an area the size of West Virginia. Within this area, residents fish commercially, personal use dip net, sport fish, and four indigenous communities are important subsistence users—Tyonek, Knik, Eklutna and Chickaloon. The members of the FWC combined bring well over 150 years of experience managing fish and wildlife resources within Alaska.

It is the understanding of the FWC that in your capacity you represent the three owners of the Eklutna Hydroelectric Project. Pursuant to the 1991 Fish and Wildlife Agreement for Snettisham and Eklutna Projects we would like to provide our recommendations in the restoration of the historically important Eklutna River and Lake. In our opinion for this to be accomplished per the 1991 agreement will require sufficient water flows to support passage of anadromous fish species to and from Eklutna Lake to the confluence of the Knik River. United States Congresswoman Ms. Peltola clearly articulates that in authorizing the sale of the Eklutna Hydropower Project it was the intent of Congress that the Utilities must mitigate for drying up the Eklutna River. How best to accomplish this will require an investment that if done correctly will demonstrate how this hydroelectric project can be done responsibly and would gain a much broader public and environmental support. The recommendations offered by the National Marine Fisheries Service are proven steps which would provide for the positive outcome in meeting the objectives of the 1991 agreement. The FWC supports these recommendations and those offered through resolution by the Native Village of Eklutna.

Eklutna Hydroelectric Project

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It is important to note and clarify that the analysis performed by McMillen in addressing the potential spawning and rearing habitat for anadromous fish species and the primary productivity of Eklutna Lake seems to ignore the production of very similar lakes within Alaska. It also seems to ignore the effects of salmon carcasses in providing nutrient amendments for sustaining and restoring stream and lake productivity.

The portal option is not a vital option if in fact the goal is to restore both the river and lake to their historical production. Leaving approximately 1 mile of dry riverbed definitely fails to connect the river to the lake and would ignore the goal of restoring the lakes' productivity. Basic understanding of fish production clearly points to the need of having both Eklutna Lake and River connected by continuous water flow.

Providing fish passage from the river to the lake when properly engineered has been demonstrated in many river/lake systems throughout the Pacific Northwest. Here in Alaska, one only has to look as far as Kodiak Island and the Frazer Lake system. Frazer Lake is the second largest lake on Kodiak, and was barren of anadromous fish. A 10-meter waterfall stood as a barrier for sockeye salmon heading back to their natal waters to spawn. A fish pass was constructed around the barrier, which allowed fish to autonomously migrate up and access Frazer Lake and tributary spawning habitats. Frazer Lake is one of the most successful introduced runs in the world and a major producer of sockeye salmon in the Kodiak Management Area, with annual runs exceeding 1 million in recent years. When comparing Eklutna Lake to Frazer Lake surface acres you find very similar sizes, 3,520 and 3,978 acres respectively.

An important point to consider, implementing a sound mitigation plan which not only restores fish production in this historically important system, is also an important step in maintaining and protecting the health of salmon in the Upper Cook Inlet area, the body which connects migratory salmon to the waters of the Matanuska Susitna Borough. The FWC greatly appreciates the coordination and work which has gone into this planning process. We look forward to a final plan which recognizes a process which brings back a salmon resource so important to us all.

Sincerely,

Indrew N. Couch

Andy Couch, Chair Mat-Su Borough Fish and Wildlife Commission

Eklutna Hydroelectric Project

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Cc: Edna Devries, Mayor, Matanuska Susitna Borough Mike Dunleavy, Governor, State of Alaska Native Village of Eklutna

> Board of Directors Chugach Electric Association 5601 Electron Way Anchorage, Alaska 99518

Board of Directors Matanuska Electric Association 163 E. Industrial Way Palmer, Alaska 99645

David Bronson, Mayor, Municipality of Anchorage 632 W 6th Avenue, Suite 840 Anchorage, AK 99501

Eklutna Hydroelectric Project

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HABITAT SECTION Southcentral Regional Office

> 333 Raspberry Road Anchorage, Alaska Main: 907.267.2342 Fax: 907.267.2499

November 27, 2023

Dear Eklutna Hydroelectric Project Owners,

ADF&G has reviewed the Draft Fish and Wildlife Program and submits the following comments for your consideration.

1. Table 2-2, Page 39 – footnote contains an incomplete sentence.

GOVERNOR MIKE DUNLEAVY

- 2. Table 2-4, page 40 The difference in capital cost between ADF&G Alternative B and the proposed alternative is \$19 million, but in Table 2.7 it appears that the incremental cost per acre of habitat gained is the same. Please clarify this discrepancy. We assume that the increased capital cost and other costs associated with ADF&G Alternative B is the additional cost of the installation of a fixed wheel gate at the dam. There is no cost analysis for the proposed fixed wheel gate in the draft plan. Please provide that analysis.
- 3. Table 2-6, Page 42 ADF&G Alternative B provides an additional 1.4 acres of Chinook rearing habitat and 1.7 additional acres of coho rearing habitat. This is an increase of 22% and 17% respectively and is substantial compared to the proposed preferred alternative.
- 4. Table 2.7, Page 43 The incremental cost analysis per acre for ADF&G Preferred Alternative B is the same as the preferred alternative selected. It appears that the incremental cost is the same with a significant additional amount of rearing habitat (22% for Chinook and 17% for coho).
- Figure 3-3, Page 52 Add a figure showing the Rearing Habitat Curves below the AWWU Portal similar to Figure 3-3 (which presents the Spawning Habitat Curves). Benefits to rearing from increased flows should be discussed/detailed similar to benefits for spawning.
- 6. Section 3.3.2, Page 57 There are some inaccuracies and incomplete reporting in the last paragraph. In 2021 there were two coho and one Chinook collected. One of the coho collected was determined to be wild and the other one of hatchery origin. The Chinook carcass collected in 2021 was determined to be a wild fish. In 2022 there were two Chinook collected and they were determined to be of hatchery origin. There were also two coho carcasses collected in 2022 but they have not been analyzed.

Drainage	Date	Long.	Lat.	Species	Sex	Length (	(cm)	Otolith Markir	g Hatchery Origi	Comments	
Eklutna Rive	10/27/2021	-149.38233	61.45226	Coho	Female	4	49.5	2 1,5H	Y	Hatchery-origin	
Eklutna Rive	10/27/2021	-149.39447	61.45302	Coho	Female	5	54.3	1-w	N	Wild	
Eklutna Rive	7/31/2021	-149.38831	61.45325	Chinook	Female	7	79.0	3-w	N	Wild	
Eklutna Rive	9/1/2022			Chinook	Female	N/A		2,3 CI- H	Y	Hatchery-origin; most likely from Eklutna Tailrace per Cody Blo	ck
Eklutna Rive	9/1/2022			Chinook	Female	N/A		2,3 CI- H	Y	Hatchery-origin; most likely from Eklutna Tailrace per Cody Blo	ck
Eklutna Rive	10/21/2022	-149.39589	61.45458	coho	male	22 inche	es			Still need to be read	
Eklutna Rive	10/21/2022	-149.40654	61.45576	coho		23 inche	25			Still need to be read	

7. Section 3.4.2, Page 58 – Since there is an allocated amount of water for a given year (24,280 acrefect, Section 3.4.2.1) there is no flexibility built into this plan to increase instream flows above this allocation unless that increase is compensated for the following year. If monitoring indicates that the proposed flow regime is not providing the additional spawning and rearing habitat that has been modeled, then this will make any adaptive management strategy ineffective. The plan as proposed would not have the flexibility to provide more than an incremental increase in proposed flows since

the combined maximum discharge of water from the portal valve (80 cfs) and the current dam outlet gate (190 cfs) would not provide the additional water needed to implement other higher flow alternatives such as ADF&G Alternative B.

- 8. Section 3.4.3.2, Page 60 Please provide a detailed breakdown of the estimated \$270,000 budget for monitoring efforts.
- 9. Section 3.4.3.2, page 60 The draft plan states that the Committee may revise the monitoring plan or seek supplemental funding to conduct additional monitoring efforts if desired. Clarification is needed on where the source of this supplemental funding would come from.
- 10. Section 3.4.3.2, Page 60 Because channel maintenance flows are scheduled for fall, they have the potential to scour salmon redds and dislodge incubating eggs. Monitoring efforts should include scour depths in spawning areas to assess impacts of the maintenance flows timing on spawning habitat for adaptive management purposes.
- 11. Section 3.4.3.2, Pages 61 and 62 All monitoring efforts other than discharge are proposed to take place over 5 years except for winter temperature monitoring (3 years). Although the draft plan states that this additional monitoring need not take place in consecutive years, this effort would be inadequate to assess changes or determine long-term trends in fish use and improvements in habitat. Since the success of this program will be evaluated over 35 years a more robust monitoring program should be proposed.
- 12. Section 3.4.3.2, Page 62 Hatchery Fish Straying section Modify first sentence 'All Chinook and coho carcasses (heads) observed in the Eklutna River during adult salmon surveys should be collected and delivered to ADFG for stock origin analysis to evaluate if straying is occurring and if so, at what proportion to wild escapement.'
- 13. Section 3.4.3.2, Page 62 Angler days or catch per unit effort data from the tailrace fishery will not provide information to detect straying from the tailrace into the Eklutna River. Determining potential straying should be based on the results of spawner surveys on the Eklutna River and the results of the stock origin analysis. Project owners should focus the annual coordination with ADFG to determine if straying is occurring on these criteria and not tailrace data.
- 14. Section 3.4.4, Page 63, paragraph 1 In addition to determining what monitoring efforts should be conducted annually, a cost estimate should be developed on an annual basis for this effort.
- 15. Section 3.4.4, Page 63 paragraph 3 states that the Committee may request modifications to the peak flow releases as long as the total volume of water released in a 10-year period does not exceed 2,913 acre-feet. We assume that this is based on the total amount of water proposed in Table 3.3, Page 55. Please clarify.
- 16. Section 3.4.4, Page 63 The last paragraph states that the Project Owners are not responsible for responding to natural processes that result in undesirable conditions in the river such as debris flows associated with precipitation, beaver activity, large wood build-up, etc. We are therefore assuming that then if any undesirable condition in the river is a result of the provisions of the plan being carried out will be the responsibility of the Project Owners to rectify. For example, if a log jam that blocks fish passage is the result of the release of a channel maintenance flow that the Project Owners would remediate the blockage to fish passage since it would not be the result of a natural event. Maintaining the free passage of fish in the Eklutna River is essential to the success of the Fish and Wildlife Plan and should be incorporated into the plan.
- 17. Section 4.1, Page 65 This section fails to take into account all aspects of habitat gains by only utilizing spawning habitat for Chinook and coho salmon. The draft plan also needs to include gains

in rearing habitat for these species. The section and corresponding figures should be updated to reflect this.

- 18. Figure 4-3, Page 70 "other lake systems Kokanee" should be identified by collection location. Is this fish from Alaska or the lower 48? Alaska kokanee are typically smaller than those from warmer systems in the lower 48 and either an Alaskan fish should be presented or the fish identified as from the lower 48 and not necessarily representative of a typical Alaskan kokanee.
- 19. Section 4.8, Pages74 and 75 Physical habitat manipulation should be incorporated into this draft plan. While there is potential federal funding for this, there is no guarantee that this outside funding can be secured. To ensure that this plan will effectively promote the anticipated positive effect on fish and their habitats physical habitat improvements should be included.
- 20. Section 4.8, Pages74 and 75 Additionally, woody vegetation has encroached on the channel due to limited flows. The impacts of the vegetation in the channel, after some flow is returned to the river, should be assessed to determine if this vegetation needs to be managed to fully realize the projected habitat gains presented in the plan.
- 21. Section 4.9, Page 75 Regardless of funding secured by the State of Alaska to address current damage to the trail system, additional funding should be dedicated to remediating any additional trail damage that occurs as a result of project operations.

ADF&G is aware of the current situation regarding supply and demand of energy for the railbelt and the desire to maintain renewable energy sources to the maximum extent as well as the additional cost to ratepayers and property owners in Municipality of Anchorage (MOA) and ratepayers in the Mat-Su. As exhibited in Table 2-5, Page 41, implementation of ADF&G Alternative B would result in only a modest increase to ratepayers as compared to other alternatives considered while maximizing increases in habitat. In the 1991 Agreement, the purpose of this plan is to develop and propose to the governor a program to protect, mitigate damages to, and enhance fish and wildlife impacted by the project. ADF&G strongly encourages the Project Owners to consider adoption of ADF&G Alternative B, and specifically the construction of a fixed wheel gate at the project dam, to allow for flexibility of instream flows into the future. Placing a hard cap on the annual water budget does not allow for effective adaptive management strategies to be implemented, if needed, to ensure the success of the Fish and Wildlife Plan. An initial annual water budget of 24,280 acre-feet may be adequate to assess the effectiveness of the Fish and Wildlife Plan but providing flexibility over the 35-year term of this plan is essential to ensure the success of the program. The addition of the fixed wheel gate to the Fish and Wildlife Plan would provide that flexibility.

The Draft Fish and Wildlife Plan contains little reference to how the success of the Fish and Wildlife Plan will be evaluated other than goals for the winter temperature monitoring and substrate size. Criteria should be developed to determine if the plan is successful or not, including an increase in spawning and rearing habitat, effectiveness of channel forming flows and general fish abundance.

Please feel free to contact me with any questions you may have regarding our comments.

Sincerely,

Rin Benkont

Ron Benkert Regional Supervisor ADF&G Habitat Section

**Regular Meeting** 



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Ecc. Ben Mulligan, ADF&G Al Ott, ADF&G Josh Brekken, ADF&G



## Enclosure: US Fish and Wildlife Service Comments on the Draft Fish and Wildlife Program and Draft Summary of Study Results for the Eklutna Hydroelectric Project

### Overview

The Draft Fish and Wildlife Program (Draft Program) does not address fish passage, it proposes to release a baseline level of year-round instream flows from the Anchorage Water and Wastewater Utility portal valve located approximately 1 mile downstream from the Eklutna Lake dam, and it does not propose infrastructure changes to accommodate the higher flows required for channel and habitat maintenance. As drafted, we believe the Program does not entirely meet the intent of the 1991 Agreement, which was established in part due to of concerns for the sockeye salmon (*Oncorhynchus nerka*) run<sup>1</sup>, and which was expected to be as protective as the Federal licensing process<sup>2</sup>. Instead, the U.S. Fish and Wildlife Service (Service) recommends a phased approach which sets interim terms or benchmarks to spur incremental progress towards a long-term and mutually agreeable solution that ultimately provides fish passage at the dam and instream flows capable of supporting fish and wildlife into the future.

Overall, to meet the intent of the 1991 Agreement, we believe the Final Fish and Wildlife Program should include the following:

- Provide water to the full length of the river on a year-round basis.
- Provide a long-term solution to get marine derived nutrients from the river to the lake.
  - We have expressed openness to a phased approach in returning sockeye salmon to the lake. The Final Program should provide a commitment to design a phased approach within 5 years of the Final Program.
- Include methods to facilitate larger channel maintenance flows from the lake, such as a new gate at the dam.
- Include a higher instream flow regime to increase downstream salmon rearing habitat; the channel maintenance flow regime should be increased commensurate with the increased instream flow regime.
- Include a summary section in the Program or Draft Summary of Study Results that provides quantification of acres impacted, where possible.
- Include physical habitat manipulation in both the Program and the Adaptive Management Plan.
- Provide more flexibility in the Adaptive Management Plan so that PMEs can be implemented as effectively as possible.

<sup>2</sup> The 1991 Agreement specifically states the Agreement is a "mechanism to develop and implement measures to protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat) [and] obviate the need for the Eklutna Purchasers and AEA to obtain FERC licenses". The 1992 Divestiture Summary Report stated that the 1991 Agreement would work "at least as well as Federal regulation for the intended purpose of mitigation and enhancement of affected fish and wildlife resources" and would therefore be sufficient to restore and maintain habitat.

<sup>&</sup>lt;sup>1</sup> According to the Alaska Energy Administration's EA, during negotiations of the Eklutna sale, "One significant problem was identified; namely, loss of a sockeye run that once spawned in Eklutna Lake. The loss was caused by a small private power development constructed in 1929. This problem was not identified in pre-authorization studies for the Federal Eklutna Project and the Federal project does not include any 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 first to recommendation that the two projects [Eklutna and Snettisham] be placed under FERC jurisdiction; and subsequently to the August 7, 1991 Agreement that provides a process similar to FERC's but without a requirement for Federal regulation." (AEA 1992).

The Service provides the following comments on the Draft Fish and Wildlife Program and Draft Study Results Summary. Comments are provided according to the sections of the Draft Program.

### 2.4 Comprehensive Alternatives

The Draft Program presents in Table 2-1 (p. 37) the preferred infrastructure modifications of stakeholders, with a footnote explaining the Service's alternatives C and D are in descending order of preference if public and financial support for alternative A and B are not obtained.

In a letter dated July 3, 2023, we presented our preferred alternative, including our preferred engineering measures:

"Our preferred alternative includes Measure P, the replacement dam as described in the enclosure because it greatly increases the amount of available fish habitat while providing for year-round power generation. Although this alternative seems to find a balance with a wide range of stakeholder values and considerations, we understand that the capital expenditure estimates for construction are appreciable. Therefore, we support a Fish and Wildlife Program that includes time and opportunities for gathering public and financial support with the option to use components of Measures K, A, or C as described in the enclosure as part of a phased implementation approach or as a tiered contingency plan should public and financial support for Measure P fall short.

If it is not possible for a Fish and Wildlife Program to include opportunities for gathering public and financial support for Measure P as described above, then our preferred engineering measure would be Measure K, the existing dam with fish passage as described in the enclosure."

It was not our intent to suggest that engineering measures that do not provide fish passage would be acceptable on their own as part of the Fish and Wildlife Program. Our long-term goal has been ecological connectivity to the lake, and for the Fish and Wildlife Program to reflect that same goal.

### 3.1 Impacts to Fish and Wildlife

One of the main ecological functions of a river in a watershed is to transport water, sediments, and nutrients to and from freshwater and marine environments. Eklutna Lake and other headwater features in the watershed are a critical source of these nutrients. Recognizing the importance of this component of the watershed, the Service recommends the Fish and Wildlife Program include methods to reconnect Eklutna Lake to the Eklutna River at the dam.

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.

The Service shares the Native Village of Eklutna's (NVE) desire to return salmon to the Eklutna River, which NVE has stated in Resolution 2022-04<sup>3</sup>. The original Eklutna hydropower project in 1929, 94 years ago, marks the beginning of watershed function decline. Since that time, impacts to the riverine and wetland ecology have continued to mount; notable among these is the 1955 and 1964 establishment of the

<sup>3</sup> Native Village of Eklutna Tribal Government Resolution 2022-04, Addendum to Resolution 2019-11. May 14, 2022

present-day dam at the outlet of the historical glacial moraine lake, namesake of the Eklutna people, which all but cut off stream flows downstream of the hydropower dam.

The historical impacts associated with the complete dewatering of an anadromous stream of ecological and cultural significance have not been adequately quantified through the 1991 Agreement process. According to the 1991 Agreement, Project Owners are required to fund and conduct studies to examine and, if possible, quantify impacts to fish and wildlife as a result of the Project. The Draft Program (p. 45) does qualitatively describe impacts associated with river impoundment, stating the existing hydroelectric project "diverted all outflows from Eklutna Lake, [and that] reduced flows to the Eklutna River led to loss of winter rearing habitat, poor sediment transport, excessive siltation of stream channels, gravel starved stream channels, reduced water quality, and insufficient water depth for Chinook salmon spawning." Adding, "in addition to impacting fish habitat, the Project also impacted wetlands downstream of Eklutna Dam, both riparian wetlands that existed in the upper river and estuarine wetlands below the railroad bridge." The Draft Program (p. 45) summarizes, "[i]mpacts to salmon and wetlands likely had an indirect impact on the wildlife that depend on the salmon and utilize those wetlands".

While the Draft acknowledges historical conditions and loss of ecosystem functions, it stops short of attempting to quantify the change between pre-development and existing conditions, stating that "the original impact of the Project on fish and wildlife resources is difficult to quantify since no fish or wildlife studies were conducted pre-construction (p. 45)." This statement discounts multiple lines of inquiry which could have been followed to estimate actual system wide impacts associated with dam river impoundment and hydropower operation. Using models developed for this project could provide another means of comparing relative habitat losses with potential habitat gains. While the models developed for estimating habitat gains under different alternatives are only calibrated to 375 cubic feet per second (cfs), it would be informative to see what they would predict for spawning and rearing habitat at the historic flow levels to estimate loss.

Section 3.1 of the Draft Program does not quantify impacts to fish and wildlife. Therefore, as the majority of the watershed has been affected by the ecological repercussions of removing water, we recommend the final Program include impacts to consider the watershed effects. Avenues to explore quantification of impacts include: 1) employing higher test flow releases to calibrate instream flow and habitat models to flow levels commensurate with historical, formative flows; 2) giving due credit and scientific credence to Indigenous Knowledge provided by Native Village of Eklutna knowledge bearers regarding the historical state of the fishery and watershed; 3) empirical inferences of pre-dam hydrology and habitat conditions based on cross section morphology; and 4) an analog comparison of similar river systems through either reference stream case studies or literature review.

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.

These direct, indirect, and cumulative impacts over time and throughout the watershed have degraded the river channel and floodplain to the point they are no longer capable of self-maintenance. Unstable sediment transport causes riverine habitats to excessively fill or cut as flows are either incapable of routing incoming silt, sand, and rocks, or are unable to reach historical elevations for incipient points of flooding where stream power diminishes upon contact with the floodplain and erosive power is tempered. Reduced or lost access to upstream and lateral (side channel, slough, and wetland) habitats directly interferes with the ability of salmon to complete their complicated lifecycles and reduces the ability of all aquatic species to move in response to disturbance. Salmon begin their lifecycle in fresh water; as they move through the river and off channel areas to the marine environment, they are an important food source to many predators from other fish to birds, beluga whales, and humans. They also provide food to many species, including eagles, wolves, and bears, as they migrate back upstream through the river, ponds, lakes and tributaries, where they complete their life cycle and decay to transfer important marine derived nutrients back to the system.

The Service agrees with the U.S. Army Corps of Engineers (USACE 2004) in their assessment that "salmon populations are severely impacted by the removal of all Eklutna Lake water from the Eklutna River." For decades, the majority of Eklutna Lake water has been captured and discharged outside of the Eklutna River watershed. As water was diverted for power, not only was the Eklutna Lake and stream channel affected, but the entire watershed was impacted. Diverted water was used for hydropower and a fish hatchery in Knik Arm, with that the richness of salmon as food and nutrients were diverted from the Eklutna watershed as well.

The Eklutna River is approximately 12 river miles long from dam to discharge into Knik Arm with a historic average width of 100 feet. That amounts to 145.5 acres of direct impacts in addition to other watershed impacts (wetlands, off-channel habitat, lake habitat, upper tributaries, and coastal habitat) that should be considered, as well as impacts on fish and wildlife using surrounding riverine and upland habitat.

Using the watershed approach sets a boundary to quantify potential direct, indirect, and cumulative impacts on fish and wildlife based on habitat. The Eklutna watershed is 174 square miles (111,360 acres) of which Eklutna Lake is 119 square miles (76,160 acres), the Eklutna River drainage is 17 square miles (10,880 acres), and the remaining area is in the Thunderbird Falls sub-watershed (USACE 2004, p.9). Therefore, the Draft Program should consider the 10,880 acres of habitat impacted in the Eklutna River drainage and should also include acres of habitat impacted by fluctuations in 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.

The Wetlands and Wildlife Study covered an area of 1,357.5 acres (ABR 2023b) using 2022 LiDAR and aerial photos from the 1950s to compare the extent and ecological function of current wetlands and wildlife habitats to historic conditions. Comparing total change of acres by waters, wetlands, and uplands in Section 5.2 does not adequately represent loss of function or impacts of habitat modification and lack of water on fish and wildlife. However, distinct changes begin to emerge as wetland types were compared from historic to current conditions in Appendix D<sup>4</sup>. In the 1950s there was greater complexity and off-channel habitat throughout the river, especially from River Mile (RM) 5 to the old upper dam location, when the river was still getting discharge from the lake. After the new dam was built and water

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<sup>&</sup>lt;sup>4</sup> Appendix D: National Wetland Inventory (NWI) wetland types mapped from current (2022) and historical (1950) imagery in the Wetlands and Wildlife Habitat Study area, Eklutna Hydroelectric Project, 2022



Figure 1. Example conversions, Tile 3 and Tile 4, mapped wetland types comparing historic to current habitats (ABR 2023b).



was diverted, significant habitat changes developed. This is especially evident from RM 12 to RM 5 and at the mouth of the river from RM 1 to RM 0, (Figure 1, Appendix D, Tiles 1, 3, and 4; ABR 2023b).

The largest areas of loss and conversion are permanently, temporarily, and seasonally flooded areas (R3UHB, R3USA, L1UBH, and PSS1C). Together these areas represent 522.3 acres of direct impacts for just those four wetland types, which still does not account for impacts for fluctuations at the lake, uplands, tributaries, or coastal impacts.

The Terrestrial Study Report (ABR 2023a) uses the information compiled in the Wetlands and Wildlife Habitat Study (ABR 2023b) to estimate the acreage of change from historic to current habitats due to changes from construction and water diversions of the hydroelectric Project on wildlife in the Eklutna River drainage prior to construction of the upper dam. According to ABR (2023a), prior to water diversion in 1959, Seasonally Flooded Low and Tall Alder-Willow Shrub Scrub covered approximately 151 acres in the August 1950 aerial photographs, compared to the approximate 47 acres identified in 2022 LiDAR imagery. This change "is almost certainly due to the dewatering of the river and the reduction in peak flood flow events, which ranged from 1,420 to 2,530 cfs between 1947 and 1954 and began to drop in 1955 after construction of the Goat Mountain diversion tunnel began operation" (USGS 2022 as referenced in ABR 2023a). Historic overbank flows, which likely occurred twice annually (spring and late summer), were sufficient to maintain riparian areas in an early to mid-successional shrub phase and the extent of the riparian shrub in the 1950s photography may be underestimated.

The Eklutna Lake Aquatic Habitat and Fish Utilization Study (Kleinschmidt 2023a) found Dolly Varden, rainbow trout, and kokanee in the shallows of Eklutna Lake. This study estimated a range of up to 3.61 acres of existing suitable habitat for spawning ocean-run fish in the East and West Forks of Eklutna Creek. In addition, spawning kokanee were observed in lower Eklutna Creek and the East Fork, Tributary 4.1 and Tributary 4 below the perched culverts (p. 45). Observed spawning kokanee ranged up to 6.5 inches in length. There is also a small pond on the east shoreline of Eklutna Lake that has season habitat for Dolly Varden, rainbow trout, and kokanee.

All of these watershed impacts should be quantified in the in the Fish and Wildlife Program. Quantifying these impacts gives context to the PME measures proposed.

### 3.2 PME Measures for Fish and Wildlife

The protection, mitigation, and enhancement (PME) measures the Project Owners proposed provide yearround base flows and periodic channel maintenance flows from Eklutna Lake into the Eklutna River. This is an improvement over the current conditions of no flow. However, year-round water is proposed to be released 1 mile downstream from the dam and only during channel maintenance (flushing) flows from the existing gate at the dam. This would only supply a small percentage of historical water flow back to the river and would leave a 1-mile reach remaining completely dewatered. No other measures were proposed for mitigation of impacts to fish and wildlife, other than an Adaptive Management Plan that limits the volume of water to be released.

The proposed Program does not mitigate for all impacts of the Project. Performance of a wetland functional assessment was previously planned to quantify impacts, as agreed upon by the TWG. However, according to the Wetlands and Wildlife Study Results (p.38, ABR June 2023), because no

permits were needed, functional loss was based on best judgement of the Project Owner's consultant instead, and no mitigation for loss of wetlands was proposed.

The Service recommends a broader scale of PME measures be developed to mitigate the full range of impacts from the Project. The Service provided our preferred alternative on July 3, 2023. In summary, our recommendation included the replacement dam and our preferred flow regimes: year-round instream flows of 160 cfs June through October and 75 cfs January to May, with an adaptive management strategy that allows for adjusting the flow regime based on new information and monitoring results; and channel maintenance flows of 800 cfs once, then 700 cfs every 3 years.

Additionally, as described in our recommendation letter, dated July 3, 2023, the Service recommends AWWU bridge construction, partial lakeside trail improvements, and physical habitat improvements. We are open to a phased implementation approach whereby more water is returned to the Eklutna River as soon as possible while time is provided in the Fish and Wildlife Program for planning a new dam. If a new dam is not possible, then the next best alternative would be the existing dam with new infrastructure for fish passage.

The Fish and Wildlife Program should incorporate habitat improvements, including repair and maintenance of the perched culverts and other fish passage structures such as those along the AWWU access road. The Program should include enhancement and protection of spawning a rearing habitat in Eklutna Lake and tributaries, and Eklutna River habitat. Additional PMEs and Adaptive management Strategies are provided below in Section 3.4.

### **3.2.1 Year-Round Instream Flows**

The Draft Program states:

"...a flow release prescription has been developed that is focused on restoring habitat for Pacific salmon in the Eklutna River to productive levels, but at the same time, and in accordance with the 1991 agreement, is balanced with the needs of other water resource users in the basin (e.g., wildlife, electric rate payers, municipal water utilities, recreation, and others)...As discussed previously, the flow regime proposed in this Draft Program 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 to release the water" (p.47).

While introducing some flow is an improvement over no flows, we disagree that introducing baseline levels for 11 out of the 12 miles of river with no connectivity to the lake restores habitat to productive levels or that the proposed flow regime would achieve a significant amount of the potentially available habitat, and the Service has provided previous comments on this subject.

Habitat loss associated with dam development is not enumerated. Instead, existing conditions were set as the baseline for assessing potential PME measures for instream flow, geomorphology, sediment transport, and habitat models. These analyses were all based on test releases of up to 150 cfs, one tenth of historical bankfull flows (1,527-1,682 cfs in the pre-development historical channel; Hanson 2019, p. 6 and Appendix B). This flow level allowed for extrapolation of modeling up to 375 cfs (Kleinschmidt 2023b, pp. 18-19), which only evaluates habitat within the historical low flow channel. At this intermediate flow, the water never reaches the tops of the stream banks or accesses the floodplain. As we have stated previously (Service 2022, p. 3), this produces flawed estimates of rearing habitat gains and losses at different flow levels.

Intermediate flows in an oversized channel that has no access to a floodplain will produce depths and water velocities that are unsuitable for both salmon spawning and rearing, but particularly rearing (as rearing habitats are largely associated with side channel, wetland and riparian areas). The lack of modeled suitable rearing habitat in this case does not reflect reference watershed conditions. All of the figures and tables in the Eklutna River Instream Flow Year 2 Study Report (Kleinschmidt 2023b) and Draft Summary of Study Results referencing "maximum available habitat" are speaking to the modeled depth and velocity of water within the historical low flow channel up to 375 cfs. Models show rearing habitat declining at intermediate flows as current velocities and shear stress within the low flow channel increase until the water surface reaches the incipient point of flooding and accesses the floodplain, at which point, rearing habitat is maximally available. 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. The 2D HEC-RAS modeling does show increasing gains of off-channel habitat with increases in flow, with those habitat increases continuing beyond 375 cfs and may be a more useful tool for understanding rearing habitat dynamics across potential flow release levels (Kleinschmidt 2023b, pp. 93-97).

The Service continues to recommend an instream flow regime that targets 160 cfs during the salmon spawning and migration window, and 75 cfs throughout the winter and shoulder seasons. These are the modeled flow levels which produce stream depths suitable for Salmon spawning and rearing, respectively (Moyle 2002, OSGC 1963, Thompson 1972, and DeVries 1997). Service recommended flow levels consider the literature as well as empirical Eklutna River reference stream channel measurements reported on in Hanson 2019.

### **3.2.2.2** Channel Maintenance Flow Regime

The Draft Program (pp. 55-56) proposes channel maintenance flows with a duration of 72 hours in 3 out every 10 years. Flows would start at 40 cfs, be at a maximum of 220 cfs for 36 hours, and slowly decrease to mimic a more natural hydrograph. Channel maintenance flows are proposed to occur in fall (when lake levels are highest) as spill events from the existing maintenance gate at the dam in combination with flow releases at the Eklutna River Release Facility downstream. According to the Draft Program, if there is not enough water to spill over, then the proposal is to raise reservoir surface height to achieve the desired flow rate. According to the Terrestrial Wildlife Study Report (p. 66) there have only been nine high-flow events between the 1965 and 2019, when water overtopped the Eklutna Lake Dam spillway, during this period flows ranged from 85 cfs to 1,022 cfs (ABR 2023a). This proposal does not provide adequate flows to restore natural watershed hydrologic dynamics.

The Service recommends an initial release of 800 cfs to reorganize the downstream channel and route as much aggraded sediment as possible, followed by triannual peak flows of 700 cfs. Routine peak flows target a water quantity that is seven times the mean annual flow, mimicking the rainfall peak in similar Alaskan rivers (Cathy Dube, personal communication).

The Draft proposes a maintenance flow regime that fails to meet the standards of the Agreement studies themselves. A channel maintenance flow regime of a 220 cfs flow in 3 out of every 10 years is inadequate, and less than the lowest peak flow considered in the Geomorphology and Sediment Transport Study (lowest was 300 cfs; Watershed GeoDynamics 2023, pp. 109-110). The study highlights channel maintenance flows of 300 to 500 cfs for encouraging substrate particle sorting within the range of preferred spawning gravels for the target species coho salmon (*O. kisutch*) and Chinook salmon (*O. tshawytscha*; Watershed GeoDynamics 2023, p. 115).

The notion that fractional maintenance flows are capable of maintaining instream habitats created under significantly higher flow conditions conflicts with our understanding of basic stream processes. A flaw in instream flow, habitat, and sediment transport analyses is that the studies assume the size and shape of the downstream channel will remain consistent with existing conditions. All flow levels less than historical conditions will be incapable of maintaining existing channel conditions in their reference (preimpoundment) state. Every proposed flow level will therefore require modification of channel and floodplain to create self-sustaining habitat conditions within the river channel and adjacent side channel, wetland, and riparian habitats.

The surface water elevation of the agreed upon maintenance flow sets the target elevation for floodplain restoration. The lower the maintenance flow surface water elevation and, therefore, floodplain bench elevation, the more technically challenging, prone to failure, and costly it becomes to restore these habitats.

It is important to also note that the infrastructure modifications proposed in this Draft cannot accommodate the higher channel maintenance flows needed. All previously analyzed alternatives included a fixed-wheel gate which provided flexibility for controlled flow releases originating entirely at the lake.

### 3.4 Monitoring and Adaptive Management Program

Because the Service believes the selected year-round instream flow and the channel maintenance flow regimes are inadequate to achieve ecological connectivity and watershed restoration, the proposed water budget is also inadequate. Not only should it be higher to accommodate larger flow regimes, but it should have more flexibility for adaptive management. The Adaptive Management Plan needs more flexibility so that PMEs can be implemented as effectively as possible.

The Draft Plan includes conditions limiting the amount of banked water that can be used the following year, limiting how long water can be banked, and setting a May 1 deadline for flow modification requests. While the Service understands the Project owners need to minimize uncertainty to be able to effectively manage operations, we believe the conditions placed on water management restrict the effectiveness of the Adaptive Management Program. Banked water should not expire, and while the Adaptive Management Program should have a mechanism to make modifications within the water year if the Committee identifies a need and implementing the change is feasible. The Adaptive Management Committee should include a Project Owner representative.

There should also be a mechanism to address the water budget should any significant differences be found between modeled and actual habitat gains at different flow release levels.

Additionally, we proposed other PMEs with their own adaptive management components, and we continue to believe these should be a part of the Adaptive Management Program.

### **Additional PMEs and Adaptive Management Plan Objectives**

The Draft Program should include other actions to avoid, reduce, mitigate, and compensate for Project related impacts on fish and wildlife from the Eklutna Project. The Service worked with the Owners and others during TWG meetings to identify other mitigation (PMEs); those mitigation measures should be described in the Fish and Wildlife Program. The PME measures to be addressed in the Fish and Wildlife

Program include the following, all of which would need to be monitored under an adaptive management plan:

- Reestablish Eklutna River hydrology through year-round instream flows that achieve longitudinal and lateral connectivity, fish passage through barriers, water quality standards, and suitable winter instream conditions to support functioning, resilient, and sustainable salmon habitat.
- Reestablish channel maintenance flows that maintain bedform diversity and sediment continuity, maintain fish passage through all river reaches, and avoid fish stranding during down-ramping.
- Create self-sustaining instream, off-channel, and lake habitat for fish and wildlife.
  - Design instream and floodplain habitat enhancements so that the channel is fitted to the watershed hydrology and sediment loads so that there is channel complexity, floodplain and wetland connectivity, and riparian function.
- Improve water quality at the lake by implementing measures to stabilize banks.
- Implement measures to enhance spawning and rearing habitat based on functional deficits.
- Implement stream crossing structures that promote stream functionality and flood resiliency.
- Restore wild sockeye salmon runs by implementing mechanisms for fish passage into and out of the lake, expediting the reestablishment of the runs, implementing other lake enhancements that increase nutrients and the quality of and access to spawning habitat, and reducing entrainment at the intake.
- Provide ongoing protection through continued collaboration so that adaptive management and monitoring remains effective and takes advantage of available resources.

The goal of an adaptive management program is to maximize the effectiveness of these PME measures. The plan should be structured such that PME measures have elements; each element has objectives and monitoring to measure success; and PME measures have strategies listed for adaptive management, as described in the Service's letter, September 29, 2023.

### 4.5 Measures Not Selected for Fish and Wildlife Program – Fish Passage

A sustainable Eklutna River fishery requires that fish have access to both lateral and headwater habitats. Effects of hydropower development and operation cannot be fully mitigated without reconnecting the river and the lake.

The Draft Program cites a 2011 U.S. Army Corps of Engineers (USACE) study where they surmise that limitations to productivity likely prevented any significant numbers of sockeye salmon from spawning in the lake (USACE 2011, pp. 25-26). That was likely based on the USACE 905b Eklutna Watershed study<sup>5</sup> (2004) which goes on to say that glacial fed systems, similar to Eklutna Lake, are more turbid and while they are not as conducive to significant primary production, they do support stable fish runs; "glacially dominated sockeye systems hold juvenile fish for 3 to 4 years before they enter the marine environment, and at a size similar to a sockeye rearing for 1 year in a productive system." Both the USACE studies and

<sup>5</sup> Eklutna Watershed 905(b) Study (p.7) "Current Eklutna River water quantity and stream system quality restricts habitat potential for resident and migratory fish. The Upper Eklutna Dam has eliminated all flows from Eklutna Lake into the Eklutna River. The only means to convey water to the upper Eklutna River is via an uncontrolled spillway at the crest of the dam during extreme flood events. This dam brought any existing Eklutna River sockeye runs to extinction and severely impacted remaining pink, Chinook, and chum salmon. Remaining salmon populations are severely impacted by the removal of all Eklutna Lake water from the Eklutna River. Resulting low flows have led to loss of over-wintering habitat, poor sediment transport, excessive siltation of stream channels, gravel starved stream channels, and insufficient water depth for Chinook salmon spawning.



the Draft Program acknowledge that Traditional Ecological Knowledge from the Native Village of Eklutna indicates that sockeye salmon were present before the dams blocked access to the lake.

The USACE Eklutna Watershed study recommended future analysis of marine derived nutrient levels in Eklutna Lake. The Draft Program mentions a study by Loso et al. (2017) that used marine derived nutrients as a biochemical marker in lake sediment to determine if there was a change in sediment composition after the lower dam was installed in 1929, indicative of the loss of marine derived nutrient chemical signals. While there was no significant difference, it was determined that annual escapements ranging from 1,000 to 15,000 sockeye salmon could have occurred without measurably altering the sediment composition<sup>6</sup> (Loso et al. 2017, p. 270). Even if historical escapements were less than 15,000 fish, Alaska has multiple sockeye salmon runs with escapements within or near this range that are important for subsistence, with Neva Lake near Hoonah (sockeye salmon escapement range of 2,823 fish in 2008 to 11,393 fish in 2003; Van Alen and Mahara 2011, page 20), and Redoubt Lake near Sitka (the State maintains an optimal sockeye salmon escapement goal of 7,000 to 25,000 fish; 5 AAC 01.760) as two examples.

The Year 2 Study Report for the Eklutna Lake Aquatic Habitat and Fish Utilization (Kleinschmidt 2023a) and associated Technical Memorandum for the draft report (Kleinschmidt 2022) provide greater detail about how lake and tributary habitats were assessed. Between September 28 and October 4, 2022, spawning surveys were completed throughout approximately 4.5 river miles of lake tributary reaches determined to be accessible by lake fish at the time of sampling. Limitations of the survey were acknowledged in several places, including the inability to definitively determine habitat suitability based on one observation at a singular low flow event (page 34), and the inability of the consultants to conduct a watershed wide habitat census (page 35). For these reasons, the tributary spawning survey should be interpreted as validation of the existence of suitable salmon spawning habitat upstream of the lake, as opposed to the extent of anadromy or a complete estimate of all available habitat. Suitable habitats modeled by the consultants are validated by NVE visual encounter spawning surveys. Staff biologists surveyed upstream tributaries and recorded each salmon or salmon carcass encountered by species and lifestage. Coordinates were logged and photographs taken. The NVE estimates there are 15 to 20 miles of suitable salmon habitat upstream of the lake (Carrie Brophil, personal communication). The Service believes the extent of tributary habitats upstream of Eklutna Lake that are suitable for salmon spawning is significant to the understanding of loss associated with dam construction and operation, and potential gains associated with an alternative that includes fish passage at the dam.

Also, the Service proposed spill with turbulent attraction flows as an additional downstream passage mechanism that was included in three alternatives (ND-2ST, ND-1ST, and ND-FL7ST). The idea was to use active methods (like water jets and propellors) to generate adequate attraction flows at the dam to support volitional downstream fish passage, all while not impacting the instream flow regime because the attractant flows would be returned to the lake once the juvenile fish reached a bypass gate. This measure was not discussed in the in Draft Program.

<sup>&</sup>lt;sup>6</sup> Loso et al. 2017, "Our laboratory results provide only one piece of evidence regarding the question of historic salmonid presence or absence. Considering analytical uncertainties and natural variability, even a conservative interpretation of our sensitivity test confirms that thousands of salmon per year could have run into Eklutna Lake without being detected, and it is possible that a run as large as 15 000 salmon per year could have escaped notice. Our results do not demonstrate that such runs existed, but neither can our results be construed as evidence that they did not".

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### 4.8 Physical Habitat Manipulation

The Draft Program excludes any physical habitat manipulation that would adjust the river to the new flow regime because, it says, Federal funding is being pursued for this work. However, the Service believes physical habitat manipulation should be included in the Program because it will be important mitigation for the impacts of the project, and because grant funding is not guaranteed. Habitat manipulation should be included in the Adaptive Management Program since funding, designing, and implementing projects will require a collaborative strategy to ensure concerns are addressed and habitat goals are met.



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**Meeting Packet** 



# United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE Southern Alaska Fish and Wildlife Field Office 4700 BLM Road Anchorage, Alaska 99507



In Reply Refer to: FWS/R7/SAFWFO

Ms. Samantha Owen Senior Regulatory and Licensing Consultant McMillen Jacobs Associates 1101 Western Avenue, Suite 706 Seattle, Washington 98104

### Subject: Draft Fish and Wildlife Program and Draft Summary of Study Results for the Eklutna Hydroelectric Project (Service file number 2022-0074477)

Dear Ms. Owen:

Thank you for providing the Draft Fish and Wildlife Program (Program), dated October 27, 2023, and Draft Summary of Study Results, dated October 31, 2023, on behalf of the Owners of the Eklutna Hydroelectric Project (Project). The U.S. Fish and Wildlife Service (Service) appreciates the time and effort that have gone into the studies and development of alternatives. The Service has reviewed the Draft Program and Draft Summary of Study Results, we offer the following background and recommendations.

The 1991 Fish and Wildlife Agreement (1991 Agreement) was developed in response to resource agency concerns over the loss of a sockeye salmon (*Oncorhynchus nerka*) run that once spawned in Eklutna Lake<sup>1</sup> (AEA 1992). According to the Environmental Assessment (EA; AEA 1992), the loss caused by the 1929 development project and the desires of the fish and wildlife agencies to provide appropriate consideration to fish and wildlife resources led to agencies' initial recommendation that the Project be placed under Federal jurisdiction. The 1991 Agreement process was intended to be as protective as the Federal Power Act (FPA) such that it would

<sup>1</sup> According to the Alaska Energy Administration's EA, during negotiations of the Eklutna sale, "One significant problem was identified; namely, loss of a sockeye run that once spawned in Eklutna Lake. The loss was caused by a small private power development constructed in 1929. This problem was not identified in pre-authorization studies for the Federal Eklutna Project, and the Federal project does not include any 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 first to recommendation that the two projects [Eklutna and Snettisham] be placed under FERC jurisdiction; and subsequently to the August 7, 1991, Agreement that provides a process similar to FERC's but without a requirement for Federal regulation." (AEA 1992).

obviate the need for the Federal Energy Regulatory Commission (FERC) licensing process<sup>2</sup>. The 1995 Alaska Power Administration Sale Act addressed the sale of the only two assets administered by the Alaska Power Administration (APA), the Eklutna and Snettisham Projects, and directed the Secretary of Energy to terminate the APA<sup>3</sup>. Mitigation commitments were required for the divestiture<sup>4</sup>; specifically. The Fish and Wildlife Agreement ensured protection and enhancement of fish and wildlife and protection of cultural resources that may be identified in the future, making it legally enforceable<sup>5</sup>.

According to the 1991 Agreement and subsequent EA, the Project Owners are required to develop future environmental studies to quantify impacts and develop proposals for the protection, mitigation, and enhancement of fish and wildlife affected by such hydroelectric development. The overarching goal of the 1991 Agreement is for the Eklutna Owners to work in consultation with resource agencies to quantify the impacts of the Eklutna Hydropower Project on fish and wildlife resources and to develop and implement a Fish and Wildlife Program with measures to protect, mitigate damages to, and enhance (PME) fish and wildlife (including related spawning grounds and habitat) affected by the Eklutna Project<sup>6</sup> (AEA 1992). The 1991 Agreement was intended to provide a means to identify and address fish and wildlife issues postsale.

<sup>3</sup> Alaska Power Administration Sale Act, 1995 H.R. 104-187 "These findings indicate that the time for the Federal Government's divestiture of these projects is ripe, since the goals as originally intended have been met."

- <sup>4</sup> APA EA. "Mitigation commitments required for Implementation of Proposed Alternative [divestiture]
  - The final Environmental Management Plan will include language that affords protection to cultural resources that may be identified in the future.
  - Protection and enhancement of fish and wildlife is ensured through the Fish and Wildlife Agreement; Snettisham and Eklutna Projects (effective August 7, 1991). This agreement encompasses assessment of damages to resources."

<sup>5</sup> Alaska Power Administration Sale Act, 1995 H.R. 104-187 "H.R. 1122 and separate formal agreements provide for the full protection of fish and wildlife. The purchasers, the State of Alaska, the U.S. Department of Commerce, the National Marine Fisheries Service (NMFS) and the U.S. Department of the Interior have entered into a formal agreement providing for post-sale protection, mitigation and enhancement of fish and wildlife resources affected by Eklutna and Snettisham. H.R. 1122 makes that agreement legally enforceable. As a result of this formal agreement, the Department of Interior and the Department of Commerce all agree that the two hydroelectric projects warrant exemption from the Federal Energy Regulatory Commission (FERC) licensing under the Federal Power Act." <sup>6</sup> AEA EA, "Protection and enhancement of fish and wildlife is ensured through the Fish and Wildlife Agreement (effective August 7, 1991), which encompasses assessment of damages to resource, and provides for future resource enhancement and mitigation procedures. In addition, the process includes public involvement that will be utilized toward development of a fish and wildlife program."

<sup>&</sup>lt;sup>2</sup> The 1991 Agreement specifically states the Agreement is a "mechanism to develop and implement measures to protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat) [and] obviate the need for the Eklutna Purchasers and AEA to obtain FERC licenses." The 1992 Divestiture Summary Report stated that the 1991 Agreement would work "at least as well as Federal regulation for the intended purpose of mitigation and enhancement of affected fish and wildlife resources" and would therefore be sufficient to restore and maintain habitat.

### **Draft Fish and Wildlife Program**

The Draft Program does not address fish passage; it proposes to release a baseline level of yearround instream flows from the Anchorage Water and Wastewater Utility portal valve located approximately 1 mile downstream from the Eklutna Lake dam, and it does not propose infrastructure changes to accommodate the higher flows required for channel and habitat maintenance. As drafted, we believe the Program does not entirely meet the intent of the 1991 Agreement, which was established in part due to concerns for the sockeye salmon run.

While the 1991 Agreement was intended to be as protective as the Federal licensing process and therefore obviate the need for licensing by FERC; however, there are some significant disparities between what has occurred and would have occurred under FERC licensing. Under the FERC process, section 18 of the FPA would have provided the Service and National Marine Fisheries Service (NMFS) with authority to issue fishway prescriptions. Section 10(j) of the FPA would have required license conditions for protection, mitigation of damages to, and enhancement of fish and wildlife resources and related habitat based on recommendations from Federal and State fish and wildlife agencies, pursuant to the Fish and Wildlife Coordination Act. Section 10(j) recommendations typically address water quantity, water quality, instream flows, ramping rates, and habitat management, and may also include recommendations for the development and improvement of fish and wildlife in the project area. Under the FPA, FERC would then have considered any rejected Section 10(j) conditions as Section 10(a) recommendations<sup>7</sup>. During analysis under the National Environmental Policy Act, FERC would have analyzed direct, indirect, and cumulative impacts of the project, including impacts from the 1929 dam and the connected actions of Eklutna dam construction and redesign. Furthermore, the Federal licensing process would have allowed for official government to government consultation between Federally Recognized Tribes and FERC. Instead, the concerns of Native Village of Eklutna regarding the loss of culturally important resources are given equal consideration as other beneficial uses such as impacts to recreation.

The Program should provide connectivity to the lake, release year-round instream flows sufficient to support salmon spawning and rearing habitats throughout the river corridor, and accommodate periodic high-volume flows that maintain habitat characteristics through a self-sustaining dynamic equilibrium between the hydrograph and natural sediment supply. The Service acknowledges the appreciable costs associated with a Program that adequately addresses sockeye salmon and other stakeholder concerns. However, we do not believe that cost alone is a compelling enough argument to dismiss the Eklutna Lake sockeye salmon fishery, which was the primary driver for the 1991 Agreement. Recognizing this divide, the Service recommends a phased approach which sets interim terms or benchmarks to spur incremental progress towards a



<sup>&</sup>lt;sup>7</sup> Federal Power Act, Section 10(a), would require that the Project adopted be: (A) best adapted to a comprehensive plan that considers improving, developing, or conserving waterways; (B) considers recommendations of Federal and State resources agencies and recommendations (including fish and wildlife recommendations) of Tribal entities affected by the Project; and (C) considers the electricity consumption efficiency improvement program of the applicant, including its plans, performance, and capabilities for encouraging or assisting its customers to conserve electricity.

long-term and mutually agreeable solution that ultimately provides fish passage at the dam and instream flows capable of supporting fish and wildlife into the future.

### **Draft Summary of Study Results**

The Summary of Study Results should include a section dedicated to discussing and quantifying the impacts of the project on fish and wildlife. As the last obstacle to year-round instream flows and connectivity to the lake, it is important to address past and ongoing impacts of Eklutna hydropower on salmon. With the exception of the Wetlands and Wildlife Habitat and the Terrestrial Wildlife Study Reports, the emphasis of many of the studies became answering questions related to the operational capabilities of the project and developing models to evaluate proposed PME measures; however, there should be a summary to evaluate and quantify the impacts the project has had on fish and wildlife. The lower dam, which was part of the original project, was the initial obstruction to fish passage and the Initial Information Package details how the responsibility for the project facilities changed with different ownership through the years. The Federal Government eventually became responsible for all project facilities<sup>8</sup> until the lower dam was conveyed to Eklutna Inc. through Alaska Native Claims Settlement Act in 1986 and 1987. The lower dam has since been removed, the current Project continues to restrict water in Eklutna River and impact salmon production.

Additional comments and recommendations regarding the Draft Program and Draft Summary of Study Results are provided in the enclosure.

Overall, to meet the intent of the 1991 Agreement, we believe the Final Fish and Wildlife Program should include the following modifications:

- Provide water to the full length of the river on a year-round basis.
  - Provide a long-term solution to get marine derived nutrients from the river to the lake.
    - We have expressed openness to a phased approach in returning sockeye salmon to the lake. The Final Program should provide a commitment to design a phased approach within five-years of the Final Program.
- Include methods to facilitate larger channel maintenance flows from the lake, such as a new gate at the dam.
- Include a higher instream flow regime to increase downstream salmon rearing habitat; the channel maintenance flow regime should be increased commensurate with the increased instream flow regime.
- Include a summary section in the Program or Draft Summary of Study Results that provides quantification of acres impacted, where possible.
- Include physical habitat manipulation as components in both the Program as well as in the Adaptive Management Plan.

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<sup>&</sup>lt;sup>8</sup> USBR 1958 Technical Report, "Since the old plant would be of help for only 2 or 3 months of the year and this during the light-load period and to the extent of 2,000 kilowatts (less than 1 year's load growth), there appeared to be no justification to use the existing plant; therefore, the old plant has been put out of "standby" service and no attempt will be made to maintain it."

• Provide more flexibility in the Adaptive Management Plan so that PMEs can be implemented as effectively as possible.

Thank you for the opportunity to share our comments and recommendations, and we look forward to working with you toward the Final Program. For more information or if you have any questions, please contact Senior Fish and Wildlife Biologist Wildlife Conservation, Ms. Jennifer Spegon at (907) 271-2768 or via email jennifer\_j\_spegon@fws.gov, or Senior Fish and Wildlife Biologist Ecological Services, Ms. Carol Mahara at (907) 271-2066 or via email carol mahara@fws.gov and reference Service file number 2022-0074477.

Sincerely,

Douglass M. Cooper Ecological Services Branch Chief

Enclosure

December 6, 2023

Samantha Owen Senior Regulatory and Licensing Consultant McMillen Jacobs Associates 1101 Western Avenue, Suite 706 Seattle, Washington 98104

Re: Draft Fish and Wildlife Program preferred alternative for the Eklutna Hydroelectric Project; 1991 Fish and Wildlife Agreement

Dear Ms. Owen:

The National Marine Fisheries Service has reviewed the draft Fish and Wildlife Program (draft Program) as provided by Anchorage Municipal Light and Power, Chugach Electric Association and Matanuska Electric Association (collectively, the "Owners") on October 27, 2023. This draft Program was provided to us pursuant to the *1991 Fish and Wildlife Agreement for Snettisham and Eklutna Projects* (1991 Agreement). We appreciate the time and effort required to develop and implement the studies, complete the study reports and alternative analysis, and produce the documents provided for review.

As parties to the 1991 Agreement, we have been involved in the development of the Fish and Wildlife Program from the earliest stages. Throughout this process, we endeavored to maintain the intent of the 1991 Agreement<sup>1</sup> as defined in the Agreement, the 1992 Environmental Assessment<sup>2</sup> for the divestiture sale, and the 1995 House Report<sup>3</sup>. The main impact of the Eklutna Hydropower Project (Project) on the Eklutna River and its fish, wildlife, and habitat is the complete lack of water in the upper Eklutna River and the reduced flows throughout. Since the Eklutna Project became operational, it has prevented the flow of water to the Eklutna River. The Project diverts 90% of the water for generation to the Knik River, while 10% is diverted for Anchorage drinking and wastewater.

<sup>1</sup> The 1991 Agreement specifically states the Agreement is a "mechanism to develop and implement measures to protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat) [and] obviate the need for the Eklutna Purchasers and AEA to obtain FERC licenses". The 1992 Divestiture Summary Report stated that the 1991 Agreement would work "at least as well as Federal regulation for the intended purpose of mitigation and enhancement of affected fish and wildlife resources", and would therefore be sufficient to restore and maintain habitat.

<sup>2</sup> Alaska Power Administration's 1992 Environmental Assessment for the sales of the Eklutna and the Snettisham Projects states that the 1991 Agreement is intended to "*work at least as well as Federal regulation for the intended purpose of mitigation and enhancement of affected fish and wildlife resources.*"

<sup>3</sup> House Report 104-187, Alaska Power Administration Sale Act. July 13, 1995, reiterates that the intent of the 1991 Agreement is to provide "*post-sale protection, mitigation, and enhancement of fish and wildlife resources affected by* [the Eklunta Hydropower Project]..."

Project operations are designed to refill the reservoir in the spring and summer as much as possible without spilling. Only ten spill events have occurred since 1965. This persistent lack of water has resulted in cascading negative effects on other natural resources, cultural and traditional resources, and ecological functions.

To date, the process for evaluating Project related impacts and potential mitigation options has been satisfactory. However, based on our review of the draft Program as provided by the Owners, the proposed mitigation measures do not meet the stated intent to protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat), and to be at least as effective as the Federal Energy Regulatory Commission (FERC) licensing process<sup>4</sup>. The proposed mitigation measures do not address Project related impacts within the full length of the affected river and do not address connectivity with lake and upper tributary habitat. We recommend the draft Program be modified to address the following concerns: rewatering the full river, seasonal flows, channel maintenance flows, new spillway gate infrastructure, fish passage, and habitat connectivity.

### **Re-Watering the Eklutna River**

The proposed actions within the draft Program do not align with our management interests to rewater the full length of the Eklutna River as outlined in our September 11, 2023, recommendations. This leaves extensive project related impacts unaddressed. To meet the intent of the 1991 Agreement for mitigating project related impacts, to enhance fish, wildlife, and habitat affected by the Project, and to function at least as well as would have been the case under FERC licensing, the entire river should be re-watered on a year-round basis. Adding water to the full extent of the river is possible with a new spillway gate (discussed below) and would provide broader, holistic ecological benefits that will, in turn, benefit species like Pacific salmon and their prey species. Further, minimum flows in the entire reach of the river affected by Project operations are a common FERC license requirement<sup>5</sup>. Adopting this recommendation to re-water the full length of the Eklutna River would promote the stated 1991 Agreement intent to function *at least as well* as Federal regulation. We understand the limitations of the existing Project design to meet this stated goal. However, in our view appropriate Project modifications and an adaptive management plan can better balance water availability for fish habitat and hydropower generation. A new spillway gate could be the first step.

### **Seasonal Flows**

The seasonal minimum flows outlined in the draft Program do not address the scale of direct Project related impacts and appear to be limited to the capability of the existing infrastructure. In order to account for and address the full scope of Project impacts, the mitigation measures need to re-establish a broader range of habitat availability within the Eklutna River. To do this, moderate increases in winter flow to 40 -70 cfs is a better option.

<sup>&</sup>lt;sup>4</sup> References to the Federal Energy Regulatory Commission (FERC), Federal licensing, and Federal regulation are synonymous in this context.

<sup>&</sup>lt;sup>5</sup> e.g., Allison Creek (P-13124) License Article 402; Falls Creek (P-11659) License Article 404; Grant Lake (P-13212) License Article 410.

We acknowledge the limitations of the existing infrastructure to provide winter flows and maintain hydropower operations; however, we see the potential for mitigation measures that balance these interests. Similarly, the draft Program's proposed summer flows of 40 cfs are described as flows that will increase habitat for coho and Chinook; however, our recommended summer flow of 160 cfs provides greater habitat availability to address project related impacts. The range of flows discussed in the first alternatives meeting included 80-90 cfs for maximum coho spawning habitat and 150-160 cfs for maximum Chinook habitat. Here, too, we see opportunity for better mitigation of Project related impacts while balancing hydropower generation. In addition, each of the resource agencies who are signatories to the 1991 Agreement recommended seasonal flows greater than seasonal flows identified in the draft Program. We recommend re-evaluating the seasonal flows in the context of our resource management interests and the data from the alternatives analysis process.

### **Channel Maintenance Flows**

The draft Program does not provide sufficient channel maintenance flows (also referred to as "flushing flows") to address our resource management interests of reviving the riverine habitat after decades of no inflow and to ensure long-term in-stream habitat complexity. Similar to minimum flow for bypass reaches, flushing flows are consistent with Federal licensing requirements<sup>6</sup>. Although we agree with the timeframe for flushing flows, the proposed 220 cfs and associated water budget are inadequate to meet our resource management interests for migratory fish and their habitat. The proposed flows are unlikely to modify substrates and support habitat complexity in a meaningful way after nearly a century of limited impactful flow events. Our proposal for flushing flows of 700 cfs will result in significant, meaningful habitat modifications, consistent with natural hydrographs in unmodified rivers, and will mitigate impacts to the Eklutna River from hydropower development. These larger flushing flows need greater consideration for their functionality to mitigate project related impacts and meet the intent of the 1991 Agreement.

### **New Spillway Gate**

The draft Program did not adopt our recommendation for a new spillway gate at the existing dam. The analysis provided indicates that continual flows from the dam would greatly diminish hydropower generation by requiring the pond to be held at a higher level<sup>7</sup>. Thus, the draft Program proposed a new gaging system to improve estimates of flow releases. This proposed measure does not increase the range of flows or address future flow conditions. Further, this proposed measure does not fulfill the intent of the 1991 Agreement, which states that the Owners shall prepare a draft Program for "the protection, mitigation of damages to, and enhancement of fish and wildlife (including related spawning grounds and habitat)."<sup>8</sup>

<sup>8</sup> 1991 Agreement at 3.

<sup>&</sup>lt;sup>6</sup> e.g., Gartina Falls (P-14066) License Article 404.

<sup>&</sup>lt;sup>7</sup> In an average year the water surface elevation fluctuates from El. 830.0 ft (local datum) to El. 867.0 ft with the ability to draw down to El. 814 ft. Releases year-round at the existing dam would require the reservoir to remain above El. 861 ft to maintain connectivity with the dam outlet gate.

The Owners could have considered impacts on electric ratepayers and municipal water utilities in the Study Plans, and the Governor may consider efficient and economical power production during his review, but the draft Program's mandate is solely to propose measures to protect and enhance fish and wildlife and to mitigate damages to such from the Project. By not including a new spillway gate in the draft Program, the potential for implementing a variety of flows to the Eklutna River is limited.

Further, not including a new spillway gate in the draft Program does not take into account the pervasive changes to inflows to Eklutna Lake, to fisheries, or habitat driven by climate change. The Fifth National Climate Assessment for Alaska<sup>9</sup> includes two key messages that resonate with the 1991 Agreement process and development of mitigation measures. First, our built environment will become more costly. Much of Alaska's infrastructure was built for a stable climate, and changes in permafrost, ocean conditions, sea ice, air temperature, and precipitation patterns place that infrastructure at risk. The assessment indicates with high confidence that further warming is expected to lead to greater needs and costs for maintenance or replacement of infrastructure. Planning for further change and greater attention to climate trends and changes in extremes can help improve infrastructure resilience around Alaska. In addition, there is high confidence that Alaska's ecosystems are changing rapidly due to climate change. Many of the ecosystem goods and services that Alaskans rely on are expected to be diminished by further change. Careful management of Alaska's natural resources to avoid additional stresses on fish, wildlife, and habitats can help avoid compounding effects on our ecosystems. This climate assessment for Alaska, which includes modeled and observed climate related trends, demonstrates negative implications for the Eklutna Hydropower Project operations related to water control. Warming trends and increased precipitation will influence the impoundment level throughout the year, potentially leveling the flow duration curve, and will likely increase the potential for uncontrolled spill at the existing dam. Our recommendation for a new spillway gate will increase the resilience of the project to climate change effects, likely mitigating the potential for long-term maintenance and repairs, as well as improving the ability to implement cost effective mitigation measures or natural resources. Incorporating a new spillway gate at the existing dam, as discussed throughout the alternatives assessment process, would expand the range of flows released to the Eklutna River to mitigate direct project related impacts and build resilience to the project infrastructure in the face of climate change.

### Fish Passage and Habitat Connectivity

Fish passage was not included in the draft Program at this time due to the significant costs, impacts, and uncertainty regarding the viability of introducing anadromous species above the Project dam.



<sup>&</sup>lt;sup>9</sup> Huntington, H.P., C. Strawhacker, J. Falke, et.al. 2023: Ch. 29. Alaska. In: *Fifth National Climate Assessment*. Crimmins, A.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, B.C. Stewart, and T.K. Maycock, Eds. U.S. Global Change Research Program, Washington, DC, USA. https://doi.org/10.7930/NCA5.2023.CH29

The Native Village of Eklutna (NVE) provided a resolution<sup>10</sup> stating their interests for salmon passage into Eklutna Lake and moderation of Eklutna Lake level variability at levels sufficient to facilitate sockeye spawning, among several priorities. In their comment letter regarding the draft Program<sup>11</sup>, NVE reiterated their interests for returning salmon to the Eklutna River to restore their traditional, cultural, and subsistence resources. We continue to support NVE's goals as a means to outline objectives of the Fish and Wildlife Program and meet the intent of the 1991 Agreement.

Under the FERC licensing process, the Department of Commerce through the National Marine Fisheries Service, and the Department of Interior through the U.S. Fish and Wildlife Service have prescriptive authority for fishways, pursuant to the Federal Power Act<sup>12</sup>. The administrative record, including traditional ecological knowledge, supports the need for fish passage within the timeframe of a typical FERC license (30-50 years). Therefore, the draft Program should incorporate long-term measures to address fish passage in order to be consistent with (1) the intent of the 1991 Agreement to function "*at least as well as Federal regulation*" for mitigating and enhancing project related impacts to natural resources; (2) the typical timeframe needed to implement complex fish passage projects; and (3) the provision that the 1991 Agreement shall "*…remain in full force and effect so long as that project remains in operation.*"

Likewise, the FERC licensing process includes a regulatory requirement to consider comprehensive plans. Section 10(a) of the Federal Power Act requires FERC to ensure the proposed project "will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of waterpower development, for the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses."<sup>13</sup> FERC shall consider the extent to which the project is consistent with a comprehensive plan (where one exists) for improving, developing, or conserving a waterway or waterways affected by the project; the recommendations of Federal and State agencies exercising administration over resources in which the project is located; and the recommendations (including fish and wildlife recommendations) of Indian tribes affected by the project.<sup>14</sup> This means, under the FERC licensing process, all relevant comprehensive plans, such as those to protect and mitigate damages to fish and wildlife, must be reviewed for consistency with the proposed project. If a project is inconsistent with a comprehensive plan, FERC would then assess whether it would be reasonable to include conditions in the project license to make the project consistent with the comprehensive plan.

<sup>11</sup> Native Village of Eklutna, draft Fish and Wildlife Program comment letter dated December 4, 2023
<sup>12</sup> 16 U.S.C. § 811.

<sup>14</sup> 16 U.S.C. § 803(a)(2).

<sup>&</sup>lt;sup>10</sup> Native Village of Eklutna Tribal Government Resolution 2022-04, Addendum to Resolution 2019-11. May 14, 2022.

<sup>&</sup>lt;sup>13</sup> 16 U.S.C. § 803(a)(1).

Similarly for this Project, the draft Program should fully account for pertinent comprehensive plans in order to be consistent with the intent of the 1991 Agreement to function "*at least as well as Federal regulation*" for mitigating and enhancing project related impacts to natural resources. For our interests, the fishery management plan for Pacific salmon<sup>15</sup> and Cook Inlet beluga whale recovery plan<sup>16</sup> should be considered comprehensive plans for consideration in this process. Incorporating provisions to improve fish passage and habitat connectivity will support the restoration of Pacific salmon, sockeye salmon in particular, and further advance the goals of these comprehensive management plans.

Availability of prey was identified as one of nine threats to the recovery of the endangered Cook Inlet beluga whale. Listed as endangered in 2008, the Cook Inlet beluga has experienced continued population decline and range retraction, with the entire population now occurring primarily in the upper and middle Inlet. Pacific salmon are a key prey item for Cook Inlet belugas, and the geographic distribution of the whales is strongly influenced by seasonal fish runs. Knik Arm, into which the Eklutna River flows, is important Cook Inlet beluga whale foraging habitat. In addition, Knik Arm, including the mouth of the Eklutna River, is designated critical habitat for the population. We identified five physical or biological features that are deemed essential to the conservation of the population, one of which is the presence of primary prey species consisting of four species of Pacific salmon (Chinook, sockeye, chum, and coho)<sup>17</sup>. Improving fish passage and habitat connectivity, as we recommend here, is anticipated to have beneficial effects to both the Cook Inlet beluga whale and its critical habitat and will support recovery of the population.

The Eklutna Project's cumulative effects on fish and wildlife includes the disruption of habitat connectivity from the lower river to the lake and upstream tributaries. Although discussed in the supporting material in the draft Program, measures for addressing the full scope of connectivity were not adopted. The justification includes cost, complexity, and uncertainty of overall benefits. These justifications are not considerations that the Owners were mandated to take into account under the 1991 Agreement. Based on our discussions with the Native Village of Eklutna, there may be more data to evaluate the potential extent of Chinook spawning habitat in tributaries above the Eklutna Lake. The potential benefits of improved connectivity warrant continued discussion among the technical working group members in the capacity of the adaptive management team. We recommend the draft Program be modified to incorporate this topic as an item within the scope of the adaptive management plan working group.

### **Adaptive Management**

Lastly, we appreciate that an adaptive management approach with a designated coordinator was included in the draft Program. We can agree with most of the proposal, though we would like to discuss the details to better understand the scope.

<sup>15</sup> North Pacific Fishery Management Council. 2021. Fishery Management Plan for the Salmon Fisheries in the EEZ off Alaska. Appendix A. Anchorage, Alaska, North Pacific Fishery Management Council.

<sup>16</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>17</sup> 50 CFR § 226.220(c)

We are concerned, however, that the coordinator for the adaptive management team would not be a representative of the Owners. A designee appointed by the Governor may be too far removed from the process to ensure consistency and advocacy for successful mitigation. It may provide disruption as the Governor and associated administration priorities change. We recommend the adaptive management team be coordinated by a representative who has a more direct investment in the process and will ensure successful implementation.

### Conclusion

Our analysis indicates that modification to the draft Program is warranted to improve the efficacy of actionable mitigation measures and their alignment with our resource management interests, and to meet the intent of the 1991 Agreement. Actions implemented to protect, mitigate damages to, and enhance fish and wildlife need to holistically address project related impacts and support functioning, resilient, and sustainable salmon habitat in the Eklutna River and Lake. Mitigating the project impacts holistically will likewise manage climate change related stressors and build resilience to effects that are otherwise compounded by Project operations. Habitat resilience can be enhanced by reestablishing habitat connectivity and maximizing habitat diversity and availability<sup>18</sup>. In support of this holistic approach for mitigating impacts and promoting climate change resilience, the draft Program should be modified to include: seasonal flows that are more than the baseline available by existing infrastructure; greater consideration of traditional ecological knowledge and loss of cultural resources; a forward-looking, long-term approach to coordinate larger mitigation measures using an advocate with investment in the process; and mitigation measures to account for climate change effects to the larger Eklutna River, the lake, and glacier.

We look forward to continuing the discussion of mitigation measures with you in advance of the public review process. Please contact Sean McDermott (<u>sean.mcdermott@noaa.gov</u>) if you have any questions.

Sincerely

Jonathan M. Kurland Regional Administrator

cc: Marc Lamoreaux, NVE, <u>marcl@eklutna.org</u> Brenda Hewitt, NVE, <u>bhewitt@eklutna.org</u> Carrie Brophil, NVE, <u>cbrophil@eklutna.org</u> Curtis McQueen, Eklutna Inc., <u>mcqueen.curtis@yahoo.com</u> Jennifer Spegon, USFWS, <u>jennifer j\_spegon@fws.gov</u> Carol Mahara, USFWS, <u>carol\_mahara@fws.gov</u>

<sup>18</sup> Pelletier, M.C., Ebersole, J., Mulvaney, K. *et al.* Resilience of aquatic systems: Review and management implications. *Aquat Sci* 82, 44 (2020). https://doi.org/10.1007/s00027-020-00717-z

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November 27, 2023

Ms. Samantha Owens McMillen Corp. 2607 Western Ave, Unit 360 Seattle, WA 98121

Subject: Public Comment on Eklutna River Fish & Wildlife Program

Dear Ms. Owens,

We are writing to express our concerns and comment on various aspects of the Eklutna Power Project -Draft Fish & Wildlife Program (Program). While we are disappointed, however unsurprised, by the preferred option selected by the Project Owners, we are more disappointed with the analysis in the draft document. It is extremely unusual for a preferred option to be advanced in a preliminary plan without fully evaluating each viable option. Typically, a suite of 3-4 options is identified, and each option is reviewed through a series of criteria, on a point-by-point basis, leaving the public with an opportunity to review the case for each option. Options forwarded by the federal agencies and the Native Village of Eklutna were not thoroughly evaluated under the same criteria the Portal option was given. For the Program to be legally defensible, a full evaluation of each option – now including dam removal – should be included in the Program.

In addition to the issue of inadequate option evaluation, the issues outlined below are important to Eklutna, Inc., and we believe they require careful consideration to ensure the well-being of the public, environment, and indigenous rights.

#### I. Economic and Property Rights

We urge a more thorough examination of the economic impact on Eklutna, Inc. due to the devaluation of landholdings and the consequential impact on fisheries. Eklutna, Inc. owns nearly all the land on each side of the Eklutna River (River). Further, the State of Alaska's Public Access Assertion and Defense unit has deemed Eklutna, Inc. to own the Eklutna Riverbed. There should be consideration of the legal ramifications of Eklutna, Inc.'s ownership of the riverbed and how access along the River will be managed. There is a need for a more comprehensive assessment of riparian rights for landholdings with a consideration of the effective regulatory taking of the Eklutna, Inc. land, suppression of economic opportunities on these lands, and the destruction of public and subsistence resources.

Further, the North Anchorage Land Agreement mandates that Eklutna, Inc. must consent to most forms of development on its land within the Chugach State Park. Our review of the Program did not indicate whether the lands utilized for the Portal option are Eklutna, Inc. lands. Please provide in the Program a description of all lands proposed for use on the Portal option.

#### II. Preserving Indigenous History and Rights

The historical presence of Eklutna around the Eklutna Lake and land selection issues must be acknowledged and integrated into the decision-making process. In most documents evaluating project alternatives, the original condition of the environment is considered. We suggest including a detailed accounting of the Eklutna River before the 1928 hydroelectric power project, rooted in tribal ecological knowledge from the records of the Native Village of Eklutna and other available sources. The public deserves to understand better what may be gained through connecting the Eklutna Lake to the Inlet. Currently, the Program advances selective studies dispelling the existence and viability of sockeye in the Eklutna Lake. A fair and balanced document would include the narrative on pre-1928 River condition.

Protection of Native hunting, fishing, and gathering rights is a part of federal law throughout the United States. There was no discussion of subsistence rights and resources in the study. This analysis would be included in a Federal Energy Regulatory Commission relicensing process. We believe the public would expect a detailed description of subsistence resources along the Eklutna River. Rather than discuss Eklutna River public and subsistence resources, the Program inexplicably assesses the impacts of an artificial fishery – Eklutna Tailrace. Please explain the obligation to mitigate an artificial fishery created to substitute for the destruction of a prominent salmon run less than 10 miles away. We do not understand why that impact is worth considering while the evaluation of subsistence fishing is essentially ignored.

#### **III. Energy Considerations**

Eklutna, Inc. is situated within the service areas of Matanuska Electric Association, Inc. (MEA) and Chugach Electric Association, Inc. (CEA). Eklutna, Inc. is currently exploring alternative energy projects with both utilities that would augment energy generation from alternative/renewable energy sources. We believe it is worth exploring an option where the Eklutna Dam is removed once adequate renewable energy sources are commissioned to replace the production from the Eklutna Project. The country is seeing repeated success stories of salmon recovery after dam removal. The Eklutna people have given their lands and resources to Anchorage public water usage and electricity generation - the Eklutna Generation Station and the Eklutna Dam. We understand 90% of Anchorage's water and 90% of MEA's energy generation is attributable to these projects on or affecting Eklutna lands.

The stated need for the continuing existence of the Eklutna Project is the economic value of damming the River. The Program states the Eklutna Project is the lowest-cost energy source in the MEA and Chugach systems. The Program indicates the electricity is generated at \$85/MWh. Recently, it was reported that the Houston Solar project power was purchased at \$65/MWh. We understand solar is an intermittent energy generation source, and a firm power source such as natural gas or hydroelectric is preferred, but it would be helpful for the Program to provide additional analysis on claims such as this.

#### IV. Corporate and Government Accountability

The Program outlines the remaining process for public review and the Governor's decision on the final Program. The utility-driven public process is understood, but the Governor's Public Interest Determination (Determination) process is not well-defined. The Program alludes to the Alaska Energy Authority leading the State evaluation process; however, that agency would be an unlikely candidate for executing a public process and delivering a decision on the Governor's behalf. We request greater clarity on which agency or division within the State of Alaska will be responsible for the public process and the Governor's Determination decision.

#### V. Economic Analysis and Utility Revenue

We appreciate the Program recognizing Eklutna, Inc.'s contributions to the financial pro forma for the dam replacement. Eklutna, Inc. only reviewed the earth-moving aspects of replacement. It would be advised to seek estimates from industry professionals on the other civil aspects of replacing a dam to ensure the project costs can be trusted.

We request a detailed discussion on the financial implications of dam replacement and the accuracy of revenue generation estimates. During project meetings, revenue figures for the utilities benefiting from the water in Eklutna Lake have been bandied about without an explanation or details. We request to include a section on the specific economics of the project. This is likely public information that should be easily attainable to provide to the public as part of their Program review.

Finally, we would like to see more details of ratepayer increases. The Program discusses the differences in perceived ratepayer increase. The public generally does not understand how rates increase and how the direct costs of a dam replacement, Portal release, or dam removal actually materialize. Discussing how the rates will increase for water and electricity is essential to informing the public of a potential impact on their finances. A cursory estimate is inadequate for a public-facing document.

In conclusion, we strongly urge the responsible parties to prioritize the concerns raised in our comments and work collaboratively towards solutions that ensure the sustainable development and preservation of the Eklutna River ecosystem. We look forward to discussing how to improve the Program throughout December.

Thank you for your attention to these matters.

Sincerely,

Kyle Foster, CEO

Michael E. Curry, Board President and Chair

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From:	Barrett, Tom R (DNR)
То:	Owen, Samantha
Cc:	Wagner, Ben J (DNR); Brooks, Henry C (DNR); Sager, Kimberly R (DNR)
Subject:	RE: Eklutna Draft Fish and Wildlife Program
Date:	Monday, November 27, 2023 5:44:32 PM
Attachments:	image001.png

#### **CAUTION:** This email was received from an external source

Hi Samantha;

DNR's Division of Mining Land and Water reviewed the Draft Fish and Wildlife Program and have just a couple comments to offer. The report is nicely written.

**Section 1.1.1.9**- I suggest a couple changes to the second paragraph on page 11. Though AWWU's permit term expires, they will apply for a certificate of appropriation by submitting a statement of beneficial use. Alaska uses a two step program for high volume water rights where applicants are issued an initial permit for a limited term, then they submit a statement of beneficial use claiming their actual water use. After that they are issued a "certificate of appropriation." I suggest we replace "license" with "permit" and add to the sentence after "LAS 2569 expires..." to make it clear that AWWU will have a water right.

"Further, MOA and APA worked with Congress to amend the Eklutna Project Act to reflect the additional public water usage of the Eklutna Lake which was otherwise reserved for the purposes of the Project.9 MOA also obtained a 40-year license permit to appropriate water from the State of Alaska to utilize water from Eklutna Lake, referred to as "LAS 2569." LAS 2569 expires on December 31, 2025 and will be replaced with a certificate of appropriation. In addition, the original 1950 federal legislation authorizing construction of the project was amended to "grant the appropriation of water for the purposes of public water supply in accordance with the same compensation agreement."10

#### Dam Safety general comments-

The State Dam Safety Engineer participated in the alternatives analysis discussions hosted by the project owner between April and August 2023. This involvement included providing input regarding the Alaska Dam Safety Program regulatory requirements for the proposed alternatives but did not involve expressing a preferred alternative for the use of the water.

The Project Owner's Draft Program would create an Eklutna River Release facility adjacent to the existing AWWU portal valve approximately one mile downstream from the dam. As the concept is described in the draft program, the infrastructure modification may not require a Certificate of Approval from the Alaska Dam Safety Program. It would utilize existing outlet works from the reservoir to the AWWU facility downstream. Additional development of the option would be required to make a definitive determination.

This proposed alternative would require revisions to the operations and maintenance management of the Eklutna Lake Dam and appurtenant works which would require approval from the ADNR to



maintain compliance with the state dam safety regulations. These proposed changes would require the installation of additional monitoring instruments and equipment automation. Depending on the scope and location of these modifications, an application for Certificate of Approval to Modify a Dam may be required.

Thanks, Tom

From: Sam Owen <info@eklutnahydro.com>
Sent: Tuesday, October 31, 2023 11:08 AM
To: Owen, Samantha <owen@mcmillen.com>
Subject: Eklutna Draft Fish and Wildlife Program

**CAUTION:** This email originated from outside the State of Alaska mail system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello all,

The purpose of this email to inform the broader stakeholder group that the Draft Fish and Wildlife Program for the Eklutna Hydroelectric Project was distributed to the Parties to the 1991 Agreement and the Native Village of Eklutna on Friday, October 27 for review and comment. It is also publicly available on the Project website and be accessed using the below link.

https://eklutnahydro.com/wp-content/uploads/2023/10/2023-10-27-Eklutna-Draft-Fish-and-Wildlife-Program\_with-Appendices.pdf

Regards,

Samantha Owen Senior Regulatory Consultant

owen@mcmillen.com C: (305) 409-5201 | O: (206) 743-9251 2607 Western Ave, Unit 360, Seattle, WA 98121 mcmillencorp.com





NATIVE VILLAGE OF EKLUTNA

December 4, 2023

Submitted via Email

Samantha Owen Senior Regulatory Consultant McMillen Inc. 2607 Western Ave, Unit 360 Seattle, WA 98121

### Re: Eklutna Hydroelectric Project Draft Fish and Wildlife Program

Dear Ms. Owen:

The Native Village of Eklutna ("NVE") provides the following comments on the Chugach Electric Association, Matanuska Electric Association, and Municipality of Anchorage ("Project Owners")'s Eklutna Hydroelectric Project Draft Fish and Wildlife Program ("Draft Program").<sup>1</sup>

Our elders tell us that Eklutna (*Idlughet*) is an old, old Village located by the Eklutna River, which was once an abundant salmon system. The Eklutna River (*Idluytnu*) has provided nutritional and cultural benefits to Eklutna Dena'ina throughout time immemorial, but hydroelectric dams have severely degraded its productivity. NVE has adopted a vision for fully restoring the Eklutna River for fish and wildlife habitat, traditional subsistence uses, and sustainable natural resource development, from the top of the watershed to Cook Inlet.<sup>2</sup>

NVE has broad support for this vision. Eklutna Inc. recently remarked that "[c]onnecting Eklutna Lake to Cook Inlet will benefit not just the adjacent landowner but our collective community," including all Southcentral Alaska.<sup>3</sup> The Alaska Federation of Natives, the largest statewide Native organization in Alaska, passed a resolution in 2020 proclaiming that "[AFN] supports efforts to restore traditional rivers and streams for fish and wildlife habitat, traditional subsistence uses, and sustainable natural resources development, and in particularly, supports tribes like Native Village of Eklutna [...] to restore the Eklutna River for salmon habitat."<sup>4</sup>



<sup>&</sup>lt;sup>1</sup> Chugach Electric Association, Matanuska Electric Association, and Municipality of Anchorage ("Project Owners"), Eklutna Hydroelectric Project Draft Fish and Wildlife Program (Oct. 27, 2023) <u>https://eklutnahydro.com/wp-content/uploads/2023/10/2023-10-27-Eklutna-Draft-Fish-and-Wildlife-Program\_with-Appendices.pdf</u>.

<sup>&</sup>lt;sup>2</sup> Native Village of Eklutna, "Our Vision for the Eklutna River" (accessed Nov. 20, 2023) <u>https://static1.squarespace.com/static/5f52cd19995bf84b22653379/t/642742b42454b574f1be304f/1680294580774/</u> <u>A+Vision+for+the+Eklutna+River+%282%29.pdf</u>.

<sup>&</sup>lt;sup>3</sup> Eklutna, Inc., Letter to Anchorage Assembly Re: Eklutna Draft Fish and Wildlife Program (Nov. 21, 2023).

<sup>&</sup>lt;sup>4</sup> Alaska Federation of Natives, Restoration of Traditional Salmon Habitat Resolution 20-7 (2020).

Alaska's late Representative Don Young, who was largely responsible for the sale and divestiture of the Eklutna Project, affirmed his "keen[] interest[] in seeing the timely restoration of the Eklutna River and the recovery of salmon for the benefit of the Native people of Eklutna," and further that "[r]estoring healthy salmon runs in the Eklutna River will benefit a great many Alaskans who live in Anchorage and the Mat-Su Valley."<sup>5</sup> Alaska's current Congresswoman Mary Peltola maintains that commitment, stating that "[l]ike my predecessor, Congressman Don Young, I support the efforts of the Eklutna Dena'ina to restore their river and the salmon runs they depend on."<sup>6</sup> The Assembly of the Municipality of Anchorage, which owns 53.33% of the Eklutna Project, passed a resolution in 2022 committing to "the restoration of the Eklutna River and into Eklutna Lake [...]."<sup>7</sup>

Since the Eklutna Hydroelectric Project ("Project") became operational in 1955, it has caused the Eklutna River to run dry. The hydrological record is clear on this point. As we have previously explained:

Currently, no water spills over the Eklutna Lake Dam down the river except during floods. A 4.5-mile bypass tunnel diverts water from the lake to the power plant. Of the water diverted, 90% is diverted to the Knik River for hydropower, while 10% is diverted for Anchorage drinking and wastewater, effectively blocking the remaining 14 miles of Eklutna River from its water source.<sup>8</sup>

The Project's adverse effects on fish and wildlife resources in the Eklutna River were not evaluated for almost 70 years after project construction due, in part, to the existence of the lower diversion dam, which prevented salmon from ascending to Eklutna Lake (*Idlu bena*) and the upper reaches of the river. However, since the lower diversion dam was removed in 2018, the Project's continued diversion of all controllable flow at Eklutna Lake to the Project's powerhouse on Knik Arm (*Nuti*) and the complete disconnection of the river to the lake and upper tributaries are, and will continue to be under the Project Owners' Program, *the primary causes* for ongoing degradation of fish and wildlife habitat in the Eklutna River system.

The Eklutna River ecosystem, including its fish and wildlife resources and particularly its salmon runs, is fundamental to the historical properties and traditional and cultural resources of the Eklutna People. The dewatering of the river and destruction of salmon are adverse effects of the

<sup>&</sup>lt;sup>5</sup> Congressman Don Young, Letter to Matanuska Electric Association (Aug. 6, 2018).

<sup>&</sup>lt;sup>6</sup> Congresswoman Mary Peltola, Letter to Chugach Electric Association (May 12, 2023).

<sup>&</sup>lt;sup>7</sup> Anchorage Assembly, A Resolution of the Anchorage Municipal Assembly in Support of Efforts to Restore the Eklutna River AR No. 2022-262 (Sept. 13, 2022); *See also*, Eklutna Draft Fish and Wildlife Program at 3 ("MOA's ownership share of the Project is 53.33%, Chugach's ownership share is 30%, and MEA's ownership share is 16.67%.").

<sup>&</sup>lt;sup>8</sup> Native Village of Eklutna, "Eklutna River: Idlughetnu" (accessed Nov. 17, 2023) <u>https://eklutna-nsn.gov/departments/land-and-environment/eklutna-river/;</u> *see also,* Kleinschmidt Associates, Draft Instream Flow Technical Memo at 2 (Sept. 28, 2022) <u>https://eklutnahydro.com/wp-content/uploads/2022/12/2022-9-27-Eklutna-Instream-Flow-Tech-Memo\_DRAFT.pdf</u> ("In 1955, the federal government completed construction of a new hydropower project and in 1964 a new storage dam which *effectively eliminated any flow releases from Eklutna Lake to the Eklutna River.*" (emphasis added)).

Project that have already degraded and threaten to destroy the significance of these properties and resources.<sup>9</sup> The Project Owners are required to afford protection to these cultural resources.<sup>10</sup>

Eklutna Dena'ina's health, families, and culture depend on restoring salmon to the Eklutna River. Rather than fully evaluate alternatives that would avoid, minimize, or mitigate the project's adverse effects, as would generally be required for the relicensing of any other similarly-sized non-federal hydropower project, the Project Owners have put forward a Draft Program that would maintain those adverse effects by continuing to dewater a portion of the lower Eklutna River and deny salmon access to the majority of the system's salmon habitat for the next 35 years. The Draft Program shows that the Project Owners did not fully evaluate alternatives that would mitigate and enhance, let alone avoid or minimize the Project's ongoing impacts to sockeye, Chinook, and coho salmon habitat even though the loss of the sockeye salmon run was one of the express reasons for the Agreement.

This letter outlines our proposed alternative to truly meet the purposes of the Agreement, our concerns with the Draft Program analysis, process, and conclusions, and our requests for further procedures. As we say, Liq'a nagh qinqtudeł - we are hopeful the salmon will return to us.

#### I. Purpose of the 1991 Fish and Wildlife Agreement

The purpose of the 1991 Eklutna Fish and Wildlife Agreement ("Agreement") and the resultant Fish and Wildlife Program is to develop and implement measures to "protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)" from the harms of the Project.<sup>11</sup> Salmon spawning grounds and habitat harmed by the project include the lower Eklutna river below the dam, Eklutna Lake, and the upper tributaries to Eklutna Lake. The Divestiture Summary Report for the Sale of Eklutna and Snettisham Hydroelectric Projects ("Divestiture Report"), to which the Agreement is an appendix, notes that mitigating harms to sockeve salmon and their spawning habitat was particularly important in creating the Agreement. The Divestiture Report explained that "[d]uring reviews of the legislative proposal, loss of a sockeye salmon run that once spawned in Eklutna Lake was identified[...] 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>12</sup> The Divestiture Report notes that the Agreement's fish and wildlife measures were intended to "work at least as well as Federal regulation for the intended purpose of mitigation and enhancement of affected fish and wildlife resources," and were to be "quite similar to that under the [Federal Energy Regulatory Commission ("FERC")] licensing" process for hydroelectric projects.<sup>13</sup>

<sup>&</sup>lt;sup>9</sup> 36 C.F.R. § 800.5(a)(2).

<sup>&</sup>lt;sup>10</sup> Divestiture Report at Appendix E-12 ("The final Environmental Management Plan will include language that affords protection to cultural resources [...].")

<sup>&</sup>lt;sup>11</sup> Fish and Wildlife Agreement Snettisham and Eklutna Projects at 1 (Aug. 7, 1991) <u>https://eklutnahydro.com/wp-content/uploads/2019/05/1991-Fish-and-Wildlife-Agreement.pdf</u>; *See also* Eklutna Draft Fish and Wildlife Program at 45; *See also* Alaska Power Administration Asset Sale and Termination, Pub. L 104-58, title I § 104(a)(2) (Nov. 28 1995) <u>https://www.govinfo.gov/content/pkg/STATUTE-109/pdf/STATUTE-109-Pg557.pdf</u>.

 <sup>&</sup>lt;sup>12</sup>Divestiture Summary Report, Sale of Eklutna and Snettisham Hydroelectric Projects at 19 (Apr. 1992)
 <u>https://eklutnahydro.com/wp-content/uploads/2020/03/APA-1992-Divestiture-Summary-Report.pdf</u>.
 <sup>13</sup> Id. at 20, 18.

#### II. NVE's Recommended Alternative Would Meet the Purpose of the 1991 Agreement

To meaningfully meet the purpose of the Agreement, NVE proposes an alternative solution – removing the Eklutna Lake dam within ten years when sufficient renewable power generation is available to offset the lost power generation from dam removal.<sup>14</sup> In 2011, the U.S. Army Corps of Engineers ("USACE") proclaimed that "[t]rue restoration of the Eklutna River ecosystem would require removal of both dams [...]."<sup>15</sup> The Eklutna Lake dam does not impound Eklutna Lake but merely increases lake storage capacity for hydropower generation. Doing so severs the connection between the lower Eklutna River, Eklutna Lake, and upper tributaries, blocking all outflow of water, drying up the Eklutna River, and decimating the salmon runs.<sup>16</sup> Now that the lower Eklutna dam is gone, it is time to plan for a future with a free-flowing Eklutna River and salmon runs truly restored.

NVE's alternative of dam removal within ten years will provide fish passage upstream and downstream to and from the lake and upper tributaries and return the river's natural flow regime that salmon co-evolved to depend upon, restoring the entire river and lake ecosystem. This proposal aligns closely with National Marine Fisheries Service ("NMFS"), US Fish and Wildlife Service ("USFWS"), and other Technical Working Group ("TWG") member's study period preferred alternatives with fish passage to and from the lake and flows that closely mimic the river's historic natural flow regime.<sup>17</sup> The Conservation Fund has pledged to pay all the costs of removing the Eklutna Lake dam.

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>18</sup>

<sup>17</sup> Eklutna Draft Fish and Wildlife Program at 37-40.

<sup>18</sup> Watershed GeoDynamics, Eklutna Hydroelectric Project Lakeside Trail Erosion Study Report Draft at 1 (Feb. 2022) <u>https://eklutnahydro.com/wp-content/uploads/2022/06/2022-2-11-Eklutna-Study-Report\_Lakeside-Trail-</u>

<sup>&</sup>lt;sup>14</sup> See Native Village of Eklutna, Letter to Anchorage Assembly Re: Eklutna Draft Fish and Wildlife Program (Nov. 10, 2023).

<sup>&</sup>lt;sup>15</sup> U.S. Army Corps of Engineers Alaska District, Eklutna River Aquatic Ecosystem Restoration Technical Report at i (Nov. 2011) <u>https://eklutnahydro.com/wp-content/uploads/2020/03/USACE-2011-Eklutna-River-Aquatic-Ecosystem-Restoration-Technical-Report.pdf</u>.

<sup>&</sup>lt;sup>16</sup> See Trout Unlimited, Eklutna River Workshop: Summary of Outcomes, Recommendations, and Future Needs at 4-6 (Jun. 2018) <u>https://www.tu.org/wp-content/uploads/2019/06/Eklutna-Workshop-Report-20181005-Final.pdf</u>

<sup>(&</sup>quot;[...] typical pre-1955 seasonal streamflow [on the Eklutna River downstream from the lake outlet] ranged from approximately 100 cubic feet per second (cfs) to as much as 1,000 cfs".)

In comparison, the "AWWU Portal" plan proposed in the Draft Program by the Project Owners leaves Eklutna Lake and its upper tributaries completely disconnected from the lower Eklutna River, maintaining over a mile of dry streambed.<sup>19</sup> Furthermore, the flows the Project Owners propose to release from the AWWU Portal are the minimum flows considered by any of the signatory parties to the Agreement ("Parties") during the Agreement study process, with inadequate higher flushing flow events in only three out of every ten years.<sup>20</sup>

The AWWU Portal proposal provides no solution for the complete blockage of salmon reaching the extensive lake spawning habitat required by sockeye salmon (which was the key driver for the Agreement in the first place) and 15 miles of upper tributaries spawning habitat above the lake that is highly amenable to Chinook and coho salmon.<sup>21</sup> Without a connection to Eklutna Lake, restoring those key spawning grounds and habitat is impossible. The Project Owners admit in the Draft Program that "no change in sockeye rearing habitat is anticipated."<sup>22</sup> The proposed nominal flow releases from the AWWU Portal, which represent less than 10% of the inflows to Eklutna Lake, will only minimally enhance Chinook and coho salmon and their habitat in the lower Eklutna River and bear no resemblance to historic flows.<sup>23</sup> Alaska's late Congressman Don Young who spearheaded the sale and divestiture of the Eklutna Project would almost certainly agree that the Project Owner's proposal is far from adequate, stating in 2018 when celebrating the removal of the lower dam that "[S]almon can now move upstream for the first time in 88 years. But the salmon need more water. With the lower dam removed it is now time to find ways to restore normal water flows to the Eklutna River."<sup>24</sup>

<sup>19</sup> Eklutna Draft Fish and Wildlife Program at 46-56.

Erosion DRAFT.pdf ("Operation of the Eklutna Hydroelectric Project results in variations in the water level in Eklutna Lake and may influence erosion of the trail in locations where it is directly adjacent to the lakeshore. Lake elevation fluctuation may also contribute to erosion at other facilities such as public use cabins and can inundate portions of the Bold airstrip along the lake shoreline.")

<sup>&</sup>lt;sup>20</sup> Id. at 39, 40; see, e.g., Trout Unlimited, Eklutna River Workshop: Summary of Outcomes, Recommendations, and Future Needs at 4-6; see also, e.g., U.S. Fish and Wildlife Service, Upper Eklutna River Survey Preliminary Fish Habitat Flow Assessment (July 14, 2019) https://www.tu.org/wp-content/uploads/2019/06/Upper-Eklutna-Flow-Assessment-071419-1.pdf.

<sup>&</sup>lt;sup>21</sup> See, e.g., Native Village of Eklutna, Eklutna Lake and Tributaries Salmon Habitat (2022)

https://static1.squarespace.com/static/5f52cd19995bf84b22653379/t/630683349fc05e329044d6bf/1661371211807/L ake+%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; See also, e.g., Native Village of Eklutna, TWG 2021-2022 Final Report (Jul. 23, 2023).

<sup>&</sup>lt;sup>22</sup> Eklutna Draft Fish and Wildlife Program at Appendix B-4 (emphasis added).

<sup>&</sup>lt;sup>23</sup> McMillen Jacobs Associates, Initial Information Package at 77 (Sept. 2020) <u>https://eklutnahydro.com/wp-</u> content/uploads/2020/10/200928-Eklutna-IIP FINAL.pdf ("According to flow records from 1923 to 1928 taken at the mouth of the canyon prior to construction of the first dam in 1929, "[t]he minimum flow recorded ... was 50 cfs and the average for the whole period was 640 cfs. The maximum discharge recorded was 2,930 cfs in September 1925." In comparison, the Project Owners' proposed flows from the AWWU Portal are average daily flows of 27-40 cfs and flushing flows that are intended to mimic maximum discharge of only 220 cfs for 36 hours three years out of every ten years.). See also Eklutna Draft Fish and Wildlife Program at 39, 49. <sup>24</sup> Cong. Don Young, Letter to MEA.

As such, we reject the AWWU Portal alternative because it:

- 1. Fails to remedy the harms to sockeye salmon and their spawning habitat that instigated the Agreement and Program process;
- 2. Leaves one mile of dry riverbed that prevents fish from reaching Eklutna Lake;<sup>25</sup>
- 3. Blocks access to the majority of sockeye, Chinook, and coho salmon spawning and rearing habitat in the lake and its tributaries;
- 4. Delivers inadequate flows for fish below the Eklutna Lake dam;<sup>26</sup>
- 5. Ignores the requests of the Eklutna Dena'ina for the recovery of a natural river after 94 years of harm;
- 6. Ignores the science-based recommendations of the two federal agencies (USFWS and NMFS) that are responsible for protecting salmon and other affected fish and wildlife resources;
- 7. Could jeopardize the Anchorage drinking water system; and,
- 8. Burdens ratepayers and taxpayers with \$57 million in unnecessary cost increases.<sup>27</sup>

The Project Owners are not providing decision-makers and the public with the full range of alternative solutions and mitigation measures to meet the Agreement requirements. NVE has requested the Project Owners analyze alternatives that would restore connectivity of Eklutna Lake and upper tributaries to the lower river, including a formal request for analyzing removal of the Eklutna Lake dam on October 5, 2023, echoing The Conservation Fund's repeated and specific requests for evaluation of removal of the dam throughout the study plan and alternatives analysis process.<sup>28</sup> The Project Owners rebuffed these requests based on a cost-benefit analysis and subsequent balancing test they are not qualified to undertake nor authorized to administer.

The Eklutna River has been degraded by hydropower for 94 years. It is not worth rushing into an expensive and ineffective solution when we can properly fix the problem within the next decade. NVE's alternative calls for a phased solution instead of a commitment to an additional 35-year term of devastation. Rather than commit ratepayers and taxpayers to a \$57 million expense for the AWWU Portal, we suggest saving that money and waiting a few more years to do the job right at little to no cost to ratepayers and taxpayers.

NVE's vision for the Eklutna River includes a commitment to expanding renewable energy in Southcentral Alaska, and we are eager to work with all the Parties toward that goal. Recent projections are that Alaska will easily meet the 80% renewable portfolio standard by 2040, given the known opportunities that include a major expansion of the Bradley Lake hydroelectric project that will generate more power than the Eklutna project alone, an estimated 200 MW of new wind and solar projects under good-faith negotiations across the Railbelt, and increased

<sup>&</sup>lt;sup>25</sup> Eklutna Draft Fish and Wildlife Program at 46 ("Release of water from the portal valve will provide year-round flow to 11 of the 12 river miles.").

 <sup>&</sup>lt;sup>26</sup> See, e.g., USFWS, Upper Eklutna River Survey Preliminary Fish Habitat Flow Assessment; see also, e.g., Trout Unlimited, Eklutna River Workshop: Summary of Outcomes, Recommendations, and Future Needs at 4-6.
 <sup>27</sup> Eklutna Draft Fish and Wildlife Program at 64.

<sup>&</sup>lt;sup>28</sup> See Native Village of Eklutna, Eklutna Alternatives Analysis Letter to Samantha Owen, McMillen Inc. (Oct. 5, 2023); see also, e.g., The Conservation Fund, Year 2 Study Plans – Eklutna Hydroelectric Project Comments at 3 (Mar. 11, 2022) <u>https://eklutnahydro.com/wp-content/uploads/2022/06/Eklutna-Draft-Year-2-Study-Plans Comments TCF.pdf</u>.

Railbelt grid efficiency required by Alaska SB123 passed in April 2020 and the resultant Regulatory Commission of Alaska May 2020 Order.<sup>29</sup>

# III. The Draft Program Analysis is Incomplete, Flawed, and Otherwise Insufficient for a Decision on the Future of the Eklutna River under the Agreement

The Draft Program is severely flawed and insufficient, and we contest the scientific and policy analysis on which many of its findings and conclusions are based.

*A.* The Project Owners Did Not Follow the Delineation of Responsibilities in the Agreement

The Agreement carefully divides which considerations should be made by which Parties at which stage of the mitigation process. During the Study Plan stage, the Project Owners are "to examine, and quantify, if possible, the impacts to fish and wildlife from the Eklutna [...] project" and "shall consider the impacts of fish and wildlife measures on electric rate payers, municipal water utilities, recreational users and adjacent land use, as well as available means to mitigate these impacts."<sup>30</sup> The Agreement then requires the Project Owners to recommend measures "for the protection, mitigation of damages to, and enhancement of fish and wildlife (including related spawning grounds and habitat)."<sup>31</sup> While it can be reasonably interpreted that the Program would include the analysis from the study plan of the impacts of fish and wildlife measures on other considerations, such as electric ratepayers, the Agreement does not state, as it does clearly in other sections, that other considerations, such as electric rate payers, power production or energy conservation, are to be considered when evaluating and recommending measures that are necessary to mitigate the Project's impacts on fish and wildlife.<sup>32</sup> The Agreement is clear that the Program's only consideration is meeting the purpose of the Agreement, which is "the protection, mitigation of damages to, and enhancement of fish and wildlife (including related spawning grounds and habitat)."33

It is then the Governor of Alaska's responsibility, *not the Project Owners*', to evaluate whether the proposed Program of fish and wildlife measures is appropriate after considering the several criteria listed in the Agreement in making his final Program determination.<sup>34</sup>

The Project Owners overreach their authority under the Agreement by claiming that they are charged not just with undertaking the study process, but also with undertaking the policy analysis to give equal consideration to the eight purposes the Governor must balance in his final decision

<sup>&</sup>lt;sup>29</sup> Alaska SB 123 (2020); Regulatory Commission of Alaska, Order R-20-001 (May 18, 2020).

<sup>&</sup>lt;sup>30</sup> Fish and Wildlife Agreement at 2.

 $<sup>^{31}</sup>$  *Id.* at 3.

<sup>&</sup>lt;sup>32</sup> *Id.* at 2, 3.

<sup>&</sup>lt;sup>33</sup> *Id.* at 3.

<sup>&</sup>lt;sup>34</sup> *Id.* at 4 ("The Governor shall give equal consideration to the purposes of efficient and economical power production, energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife (including related spawning grounds and habitat), the protection of recreation opportunities, municipal water supplies, the preservation of other aspects of environmental quality, other beneficial public uses, and requirements of state law.").

when promulgating a Program.<sup>35</sup> They are neither qualified nor authorized to make policy determinations and have plain conflicts of interest. This calls into question the integrity of the entire Draft Program and its ability to meet the Agreement's purpose.

### B. The Draft Program Does Not Meet the Purpose of the Agreement

The Draft Program fails to meet the fundamental purpose of the Agreement and steps far beyond fish and wildlife considerations laid out in the Agreement. The AWWU Portal plan proposed in the Draft Program by the Project Owners leaves Eklutna Lake and upper tributary streams completely disconnected from the lower Eklutna River, maintaining over a mile of dry streambed.<sup>36</sup> Furthermore, the flows the Project Owners propose to release from the AWWU Portal are the minimum flows considered by any of the parties during the Agreement study process, with small high-flow events in only three out of every ten years.<sup>37</sup> This proposal provides no solution for the complete blockage of salmon reaching the extensive lake spawning habitat required by sockeye salmon (which was the key driver for the Agreement in the first place), and 15 miles of upper tributaries spawning habitat above the lake that is highly amenable to Chinook and coho salmon completely stranded.<sup>38</sup> Without a connection to Eklutna Lake and upper tributaries, restoring those key spawning and rearing grounds and habitat is impossible. The Project Owners admit in the Draft Program that "no change in sockeye rearing habitat is anticipated."<sup>39</sup> The proposed nominal flow releases from the AWWU Portal will only minimally enhance Chinook and coho salmon and their habitat in the lower Eklutna River.

Instead of focusing on the most beneficial program for fish and wildlife, the Draft Program is primarily concerned with implementation costs, along with impacts on power generation, ratepayers, and drinking water.<sup>40</sup> The Program states that the AWWU Portal is the "most cost-effective" alternative in its rationale for choosing that option. Cost-effectiveness is not a primary consideration in the Agreement, nor one of the eight factors the Governor must consider in his decision.<sup>41</sup> The Draft Program's incorporation of aspects far beyond fish and wildlife takes the task of balancing considerations away from the Governor and places them in the hands of the Project Owners. This is a significant conflict of interest that was intended to be avoided by the clear language of the Agreement. The Draft Program should have been concerned only with protecting, mitigating, and enhancing fish and wildlife habitat, and its failure to do so resulted in a thoroughly flawed Draft Program.

C. The Project Owners Have Not Implemented the Consultation Process to Protect Fish and Wildlife from Project Impacts "At Least As Well" as a FERC Process

<sup>38</sup> See, e.g., Native Village of Eklutna, Eklutna Lake and Tributaries Salmon Habitat (2022)
 <u>https://static1.squarespace.com/static/5f52cd19995bf84b22653379/t/630683349fc05e329044d6bf/1661371211807/L</u>
 <u>ake+%26+Tributaries+Habitat.pdf</u>; See also McMillian Jacobs Associates, Eklutna Lake Aquatic Habitat and Fish
 Utilization, Year 2 Study Report Draft (2023) <a href="https://eklutnahydro.com/wp-content/uploads/2023/04/Draft-Eklutna-Lake-Habitat-and-Fish-Y2-Report.pdf">https://eklutnahydro.com/wp-content/uploads/2023/04/Draft-Eklutna-Lake-Habitat-and-Fish-Y2-Report.pdf</a>; See also Native Village of Eklutna, TWG 2021-2022 Final Report.
 <sup>39</sup> Eklutna Draft Fish and Wildlife Program at Appendix B-4.

<sup>&</sup>lt;sup>35</sup> Eklutna Draft Fish and Wildlife Program at 44.

<sup>&</sup>lt;sup>36</sup> *Id.* at 46-56.

<sup>&</sup>lt;sup>37</sup> Id. at 39.

<sup>&</sup>lt;sup>40</sup> *Id.* at 44.

<sup>&</sup>lt;sup>41</sup> Id.

The consultation process agreed to in the Agreement was intended to be "quite similar to that under [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>42</sup> The Agreement process was intended to work "at least as well" for fish and wildlife as a FERC relicensing process.<sup>43</sup> Yet, the consultation process has not been implemented in a manner that matches the procedural protections afforded to fish and wildlife in a FERC relicensing process. The deficiencies in the process are manifested in a Draft Program that will not provide adequate or equitable protection, mitigation, and enhancement of fish and wildlife in the Eklutna watershed that have been adversely impacted by the Project. These include not only the impacts of project construction, but the totality of impacts of project construction, operation, and maintenance on fish and wildlife and their habitat, including the temporal loss of services and functions of a free-flowing anadromous river.<sup>44</sup> Alaska's Congresswoman Mary Peltola unambiguously states that "[t]he intent of Congress was clear: [the Project Owners] must mitigate for drying up the Eklutna River for the past 70 years."<sup>45</sup>

One of the primary deficiencies in the consultation process has been the Project Owners' conflation of improvements to the baseline condition with adequate protection, mitigation, and enhancement of fish and wildlife impacted by the Project. This misunderstanding of the level of protection the Project Owners are required to deliver under the Agreement, and that would similarly be required in a FERC proceeding, has contributed to an inadequate scope of study and alternatives analysis. Rather than develop and evaluate alternatives according to their comparative effectiveness in mitigating the impacts caused by the Project's dewatering of the Eklutna River and the resulting destruction of fish and wildlife habitat from the 1950s to present, the Project Owners evaluated alternatives according to their "ecological lift in terms of gains in salmon spawning and rearing habitat" compared to their cost.<sup>46</sup> However, "ecological lift" is not the same as providing adequate and equitable protection, mitigation, and enhancement of fish and wildlife. In short, the Project Owners have developed a Draft Program that would be marginally better for fish and wildlife, but not one that would actually mitigate the project's impacts on fish and wildlife.<sup>47</sup>

<sup>&</sup>lt;sup>42</sup> Divestiture Report at 18.

<sup>&</sup>lt;sup>43</sup> *Id.* at 20.

<sup>&</sup>lt;sup>44</sup> See 40 C.F.R. § 1508.1(g) (definition of "effects" for purposes of environmental analysis under the National Environmental Policy Act); see also USFWS and NMFS, Final ESA Section 7 Consultation Handbook at 4-30 (Mar. 1998) ("The total effects of all past activities, including effects of the past operation of the project, current non-Federal activities, and Federal projects with completed section 7 consultations, form the environmental baseline."); see also 33 C.F.R. § 332.2 (Corps regulations requiring consideration of "temporal loss" in determining appropriate mitigation).

<sup>&</sup>lt;sup>45</sup> Cong. Mary Peltola, Letter to CEA.

<sup>&</sup>lt;sup>46</sup> Eklutna Draft Fish and Wildlife Program at 31 (According to the Draft Program, "[t]he process helped to narrow down the list of comprehensive alternatives by removing those that either did not provide a significant ecological lift, or where multiple alternatives provided a similar ecological lift, those that were more costly could be removed from consideration.")

<sup>&</sup>lt;sup>47</sup> See Eklutna Draft Fish and Wildlife Program at 45-46.

Another significant deficiency in the consultation process has been the Project Owners' unilateral rejection of reasonable alternatives without rigorous study or analysis.<sup>48</sup> This is a departure from a FERC relicensing proceeding where FERC, not the applicant, is required under the Federal Power Act ("FPA") and the National Environmental Policy Act ("NEPA") to undertake a full study of alternatives as the basis for determining that a project, as licensed, will be best adapted to a comprehensive plan of development.<sup>49</sup> Here, by contrast, the Draft Program does not demonstrate the Project Owners adequately considered a reasonable range of alternatives proposed for analysis by the Parties, NVE, and other stakeholders.<sup>50</sup> Rather than provide enough detail about each alternative for the Governor to "evaluate their comparative merits," the Project Owners peremptorily eliminated certain alternatives from detailed study based on their biased cost-benefit assessment.<sup>51</sup>

The Project Owners' exclusion of a dam removal alternative is an egregious error in the environmental analysis.<sup>52</sup> Dam removal is a reasonable alternative because it would provide the most protection, mitigation, and enhancement of fish and wildlife at a cost far lower than other alternatives considered.<sup>53</sup> Other dams, like those on the Elwha River in Washington and the Klamath River in California, have been removed or are planned for removal as the most effective means for achieving restoration of salmon runs that have been decimated by 20<sup>th</sup> century dam construction and operation.<sup>54</sup> Moreover, dam removal to restore fish passage and recover salmon is a NMFS priority action.<sup>55</sup> Yet because the Draft Program does not consider dam removal, the Governor cannot make an informed decision as to how dam removal compares to the Project Owners' preferred alternative.

Again, in a FERC proceeding the Project Owners would not have been allowed to unilaterally limit the analysis of alternative measures, like dam removal, to mitigate the Project's impacts on

<sup>&</sup>lt;sup>48</sup> Based on our review, the Owners have exercised almost complete discretion in the scope and substance of the environmental analysis contained in the Draft Program document. This is a significant departure from a FERC proceeding where FERC is responsible for independently verifying any information it relies upon to comply with its statutory responsibilities to evaluate the environmental impacts of its licensing decisions. *See, e.g.,* 16 U.S.C. § 797d.

<sup>&</sup>lt;sup>49</sup> 16 U.S.C. §§ 803(a), 808(a); *Green Island Power Auth. v. FERC*, 577 F.3d 148, 168 (2d Cir. 2009) (... "FERC is statutorily obligated, pursuant to the 'best adapted' standard outlined in sections 10 and 15 of the FPA, to give full consideration to all feasible alternatives, even where it ultimately cannot license those alternatives."). FERC is subject to a parallel requirement under NEPA to develop and conduct a rigorous and detailed analysis of all reasonable alternatives. 42 U.S.C. § 4332(2)(H), 40 C.F.R. § 1502.14. Given the potentially significant impacts of continued operation of a major hydropower project, FERC complies with NEPA by preparing an environmental document that evaluates the comparative merits of several alternatives in preparation for any licensing or relicensing decision. 40 C.F.R. § 1502(b); 18 C.F.R. §§ 380.5, 380.6

<sup>&</sup>lt;sup>50</sup> See Eklutna Draft Fish and Wildlife Program at 65-75.

<sup>&</sup>lt;sup>51</sup> Id.

<sup>&</sup>lt;sup>52</sup> 40 C.F.R. § 1502.14(a).

 <sup>&</sup>lt;sup>53</sup> U.S. Army Corps of Engineers, Eklutna River Aquatic Ecosystem Restoration Technical Report at i.
 <sup>54</sup> See, e.g., NOAA Fisheries, Dam Removals on the Elwha River (accessed Nov. 17, 2023)

https://www.fisheries.noaa.gov/west-coast/dam-removals-elwha-river; See also, e.g., NOAA Fisheries, As Dam Removals Move Forward, NOAA Explores Next Steps for Habitat Restoration in Klamath Watershed (Dec. 7, 2022) https://www.fisheries.noaa.gov/feature-story/dam-removals-move-forward-noaa-explores-next-steps-habitat-restoration-klamath.

<sup>&</sup>lt;sup>55</sup> See, e.g., NOAA Fisheries, Restoring Fish Passage through Barrier Removal Grants <u>https://www.fisheries.noaa.gov/grant/restoring-fish-passage-through-barrier-removal-grants</u>.

fish and wildlife resources, over the objections of NMFS and USFWS. For example, under FPA section 18, NMFS and USFWS have authority to prescribe fishways that must be included, without modification, in any license issued by FERC.<sup>56</sup> Under FPA section 10(j), a FERC license must include conditions to "adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat) affected by the development, operation, and management of the project" based on recommendations from NMFS, USFWS, and other state and fish and wildlife agencies.<sup>57</sup> NMFS would consider the fishery management plan for Pacific salmon as a comprehensive plan for considering mitigation and enhancement for salmon in this process.<sup>58</sup>

Another significant deficiency in the consultation process has been the Project Owners' failure to evaluate the potential impacts of their proposed Draft Program and alternatives on the critically endangered Cook Inlet beluga whale – a national NMFS priority species – and its designated critical habitat which includes the mouth of the Eklutna River.<sup>59</sup> Again, such evaluation would be required in any FERC relicensing under Endangered Species Act ("ESA") section 7.<sup>60</sup> Given the Agreement's express intent to provide comparable protection to a FERC proceeding, the Owners failure to fully evaluate the Project's impacts on the Cook Inlet beluga whale is inexplicable and unjustifiable.

# D. The Draft Program Undervalues Traditional Ecological Knowledge

It is well-established traditional ecological knowledge that Eklutna Lake and upper tributary streams once hosted abundant salmon runs, including sockeye, Chinook, and coho salmon.

Six elders, now deceased, told now Elder Maria Coleman that the Eklutna River used to be "overflowing" with "abundant" fish before the dams. Elder Louis Munson recalled stories of her family fishing for salmon (Łiq'a – the generic Dena'ina term for all salmon species) at the cabin that was located at the upper end of Eklutna Lake, at the mouth of

Alaska. Appendix A. Anchorage, Alaska (2021) https://www.npfmc.org/wp-

content/PDFdocuments/fmp/Salmon/SalmonFMPAppendix.pdf.

<sup>&</sup>lt;sup>56</sup> 16 U.S.C. § 811; *See American Rivers v. FERC*, 187 F.3d 1007 (9th Cir. 1999), *as amended* 201 F.3d 1186, 1210 (9th Cir. 2000) ("Where the Commission disagrees with the scope of a fishway prescription, it may withhold a license altogether or voice its concerns in the court of appeals, but at the administrative stages, 'it is not the Commission's role to judge the validity of [the Secretary's] position-substantially or procedurally."").

 <sup>&</sup>lt;sup>57</sup> 16 U.S.C. § 803(j)(1). FERC may modify a Section 10(j) recommendation only if it finds an alternative condition will provide adequate and equitable fish and wildlife protection, mitigation, and enhancement. *Id.* at § 803(j)(2).
 <sup>58</sup> North Pacific Fishery Management Council, Fishery Management Plan for the Salmon Fisheries in the EEZ off

<sup>&</sup>lt;sup>59</sup> See 76 Fed. Reg. 20,180 (Apr. 11, 2011).

<sup>&</sup>lt;sup>60</sup> 16 U.S.C. 1536; 18 C.F.R. § 380.13. Under ESA section 7, all federal agencies, including FERC are required to consult with NMFS and/or USFWS to ensure that the reauthorization by the federal agency is "not likely to jeopardize the continued existence of any endangered species [...] or result in the destruction or adverse modification of habitat of such species [...]." 16 U.S.C. § 1536(a)(2); *see also*, FERC, Handbook for Hydroelectric Project Licensing at B-2 (Apr. 2004) <u>https://www.ferc.gov/sites/default/files/2020-04/licensing-handbook.pdf.</u> In the consultation process, the action agency and consulting agencies are required to consider only the best available science. *Id.*.

the Eklutna River tributary to the lake, before the dams were built. Stories included a fish rack and smoking of salmon in quantities to bring back to the Eklutna Village.<sup>61</sup>

Yet, contrary to this well-established traditional ecological knowledge, the Draft Program dismisses the possibility of a substantial sockeye run to the lake and downplays the quality and quantity of salmon habitat in the upper tributaries. The Draft Program concludes that there was never a large run of sockeye to the lake, pointing to limiting factors such as the lake's turbidity, nutrient levels, and size of kokanee, and discounts the critical importance of the upper tributaries for Chinook and coho spawning habitat.<sup>62</sup> This conclusion ignores the traditional ecological knowledge of NVE that the Project Owners are well aware of and which was shared throughout the Study Plan process.<sup>63</sup> Instead, the Draft Program relies solely on Western scientific analysis based on current degraded conditions to justify the hypothesis of a small historic sockeye run, and does not duly weigh traditional knowledge of historic salmon populations in Eklutna lake and the tributaries above.

#### *E.* The Preferred Alternative is Insufficient for Salmon and Maintains a Dead-End River

The AWWU Portal puts the least amount of water in the river of all the alternatives for regular flows and high-flow events.<sup>64</sup> The justification for choosing the lowest flow alternative primarily comes from economic considerations rather than what is best for fish and wildlife. The Agreement makes clear that the consideration of non-fish and wildlife factors should be made by the Governor, not by the Project Owners in the Draft Program. The preferred alternative continues to create a dead-end river, with over a mile of dry streambed below the dam. Creating a dead-end river hardly mitigates the damages caused to fish and wildlife from the Project because it prevents connectivity between Knik Arm, the lower Eklutna River, the lake, and the upper tributaries. The preferred alternative cannot mitigate damages to sockeye in any way because it will continue to prevent nearly all anadromous sockeye from spawning in the Eklutna River system. Because the destruction of the sockeye run was the "specific concern" leading to the Agreement, a Program that continues to prevent almost all sockeye from spawning is impermissible.<sup>65</sup> The preferred alternative permits less than 10% of the river to flow down its historic channel to the Knik Arm, the smallest amount of any proposed alternative.<sup>66</sup>

High flows are essential to mimic beneficial flooding. Seven of the nine alternatives proposed much more water during high flows, yet the Draft Program Plan settles on the lowest water

<sup>&</sup>lt;sup>61</sup> Native Village of Eklutna, Eklutna Lake and Tributaries Salmon Habitat Presentation Slides (2022) <u>https://static1.squarespace.com/static/5f52cd19995bf84b22653379/t/630683349fc05e329044d6bf/1661371211807/L</u> <u>ake+%26+Tributaries+Habitat.pdf</u>.

<sup>&</sup>lt;sup>62</sup> *Id.* at 68-71.

<sup>&</sup>lt;sup>63</sup> See, e.g., Native Village of Eklutna, Comments of Eklutna Hydro Initial Information Package (Apr. 24, 2020) <u>https://eklutnahydro.com/wp-content/uploads/2020/06/Comments-on-Draft-IIP\_NVE.pdf</u>; Native Village of Eklutna, NVE Comments on Proposal Final Year 2 Study Plans: Comments from a Tribal Perspective (Jun. 2022) <u>https://eklutnahydro.com/wp-content/uploads/2022/06/Eklutna-Proposed-Final-Year-2-Study-</u>

<sup>&</sup>lt;u>Plans\_Comments\_NVE\_Maria.pdf;</u> See also, Native Village of Eklutna, TWG 21-22 Final Report at 3 (2023). <sup>64</sup> Eklutna Draft Fish and Wildlife Program at 39-40.

<sup>&</sup>lt;sup>65</sup> See Divestiture Report at 19.

<sup>&</sup>lt;sup>66</sup> Eklutna Draft Fish and Wildlife Program, 39, 49.

discharge for channel maintenance flows of all discharges proposed. The maintenance flow regime in the preferred alternative is severely inadequate because it fails to return the river to its natural flow. The 220 cfs maximum flushing flows in the Draft Program is less than 20% of the average flushing flows of 1,402 cfs that USFWS estimated would be necessary to recreate the flows that historically supported the natural fishery and created the natural river channel and off-channel habitat.<sup>67</sup> Worse, the Draft Program imagines the peak flow for just a few hours for just three out of every ten years before returning to conditions that approximate a severe drought. NMFS concluded that the proposed flushing flows in the Draft Program "are unlikely to modify substrates and support habitat complexity in a meaningful way after nearly a century of limited impactful flow events."<sup>68</sup> The chosen channel maintenance flow hardly mitigates for the Eklutna River's deprivation of almost a century of flooding with a maximum recorded value of approximately 3,000 cfs.<sup>69</sup>

### F. The Draft Program Directly Contradicts NVE's Land and Environment Department and Kleinschmidt Associates' Assessments of Historic and Potential Salmon Habitat in Eklutna Lake and Upper Tributaries

The Draft Program significantly discounts the potential of the upper Eklutna tributaries as vital salmon habitat. NVE's TWG 2021-22 Final Report combines traditional ecological knowledge with current surveys and science of the headwaters of the Eklutna River to conclude that there is expansive, preferred habitat for Chinook and coho salmon, which is currently occupied by Dolly Varden, showing its potential.<sup>70</sup> Our report found that the clearwater tributaries for the West Fork have high-quality habitat and that much of the East Fork has suitable habitat in its main stem and tributaries. NVE's Land and Environment Department has concluded that there are over 15 miles of salmon habitat in the upper tributaries.

The Draft Program also significantly discounts the potential of Eklutna Lake as vital salmon habitat. The Draft Program concludes that there was never a large run of sockeye to the lake, pointing to limiting factors such as the lake's turbidity, nutrient levels, and size of kokanee.<sup>71</sup> This current condition may be due to the denial to the lake of marine derived nutrients from salmon carcasses and impacts from the current 40-60 foot biologically devoid varial zone resulting from hydroelectric power water drawdowns around the lake, including such impacts as reduced aquatic vegetation.<sup>72</sup> Moreover, a primary source for the Project Owner's conclusion is a 2017 study, which they greatly misrepresent. The study concluded that its results "can[not be] construed as evidence that [salmon runs to the lake] did not [exist]."<sup>73</sup> The 2017 study, rather, found that, based on the lake's water volume and turnover rate, as many as 15,000 sockeye could have spawned in the lake annually, which is far from an insignificant number.<sup>74</sup> A co-author of

<sup>&</sup>lt;sup>67</sup> U.S. Fish and Wildlife Service, Upper Eklutna River Survey Preliminary Fish Habitat Flow Assessment.

<sup>&</sup>lt;sup>68</sup> National Marine Fisheries Service, Comment Letter to Draft Fish and Wildlife Program (Dec. 5, 2023).

<sup>&</sup>lt;sup>69</sup> McMillen, IIP at 77.

<sup>&</sup>lt;sup>70</sup> Native Village of Eklutna, TWG 21-22 Final Report (2023).

<sup>&</sup>lt;sup>71</sup> *Id.* at 68-71.

<sup>&</sup>lt;sup>72</sup> See, Email from Rick Sinott to Dustin Lorah, NVE (Dec, 1, 2023 at 10:05AM).

<sup>&</sup>lt;sup>73</sup> Loso, Michael et al., Evaluating Evidence for Historical Anadromous Salmon Runs in Eklutna Lake, Alaska 70 Arctic at 270 (Sept. 2017);

<sup>&</sup>lt;sup>74</sup> *Id.* at 259.

the paper recently stated that "[a]nyone who cites the study to argue that Eklutna Lake had no salmon or an "insignificant" number isn't using it scientifically, they are using it politically."<sup>75</sup>

Kleinschmidt Associates surveyed 14 areas totaling 68,512 square ft. around Eklutna Lake that are potentially suitable for sockeye spawning under favorable lake level regimes. These are now largely in the barren varial zone due to 40-60 foot lake drawdowns. However, they contain appropriate slopes, gravel sizes and seeping groundwater or potentially suitable substrate for sockeye spawning, and there may be even more than reported. A total of 331 spawned-out kokanee were observed at Eklutna Lake during the survey period, finding "[s]pawned kokanee ranged from 4.5 – 6.5 inches […]"<sup>76</sup> Alaska Department of Fish and Game ("ADFG") biologists have told us these would grow to normal sockeye size if allowed to develop in the ocean and that these kokanee are likely descendants of a native ocean-run population, since there is no record that they were ever stocked. The Draft Program acknowledges that Trout Unlimited's Alternative and USFWS's Alternative B – modifying the current dam to allow upstream and downstream fish passage – both create significant gains in sockeye spawning habitat, which would come from increased lake spawning habitat.<sup>77</sup>

Overall, NVE Land and Environment Department's assessments indicate the following stream miles would be restored by reconnecting the lake and upper tributaries to the lower river and restoring the natural flow regime: 12 miles in the river below the lake, 7 miles in the lake, and 15 miles above the lake in the upper tributaries.<sup>78</sup> NVE Land and Environment Department's measurements are in stream miles, and that metric is used to assess lake habitat, so 7 miles of lake habitat undervalues the actual habitat available for restoration in the lake. These estimates also undervalue habitat off the main channel in the lower river below the lake that could be restored with higher flow releases than are proposed in the Draft Program. Full recovery would therefore restore a minimum of 34 miles of salmon habitat. The Draft Program, on the other hand, proposes to marginally restore only 11 miles, less than 35% of the conservative estimate of possible salmon habitat in the Eklutna watershed.<sup>79</sup>

#### G. The Program's Analysis of Non-Salmonid Wildlife is Severely Inadequate

The Agreement's protection, mitigation, and enhancement purpose is not limited to salmon but instead includes all fish and wildlife impacted by the Project. Reducing the ecological function of the tidal wetlands, lower river, lake, and upper tributaries from the Project's impacts reduces the health of fish and wildlife throughout the watershed. However, the Draft Program is not built upon any surveys or studies of marine mammals and its consideration of terrestrial and avian wildlife and habitat is severely inadequate.

<sup>&</sup>lt;sup>75</sup> Email from Rick Sinott to Dustin Lorah, NVE (Nov. 30, 2023 at 6:50PM).

<sup>&</sup>lt;sup>76</sup> Kleinschmidt Associates, Lake Aquatic Habitat and Fish Utilization Study Year 1 Interim Report DRAFT (Feb. 2022) at 12-20 <u>https://eklutnahydro.com/wp-content/uploads/2022/06/2022-2-11-Eklutna-Year-1-Interim-</u> Report Lake-Fish DRAFT.pdf.

<sup>&</sup>lt;sup>77</sup> *Id.* at 42.

<sup>&</sup>lt;sup>78</sup> Native Village of Eklutna, TWG 21-22 Final Report (2023).

<sup>&</sup>lt;sup>79</sup> Id.

The wildlife habitat survey study area boundary was limited to the lower end of the lake, the current river channel corridor, and a section of the wetlands at the river mouth.<sup>80</sup> This study area boundary is insufficient and should have included the entire Eklutna watershed, including the upper tributaries, the entire lake, and the off channel stream areas in the lower river valley, given the Project harms to the whole Eklutna watershed ecosystem. Because of the limited study area, the wildlife analysis could not fully consider the protection, mitigation, and enhancement from all the alternatives, including the potential restoration of habitat from increasing flows and reconnecting the lower river to the lake and upper tributaries.

Terrestrial and avian wildlife and habitat studies were primarily conducted via aerial surveys and literature reviews, both which have issues regarding their accuracy and the amount of placespecific detail they can provide.<sup>81</sup> A recent scientific review of the accuracy of wildlife aerial surveys stated that aerial surveys can be an efficient platform to collect observational counting data "across large spatial areas," but which are far less well-suited for specific and small-scale geographies like the Eklutna survey area.<sup>82</sup> Furthermore, the review noted common errors such as "nondetection, counting error, and species misidentification" that if not adequately addressed at all stages of the study "can provide data that obscure animal-environment relationships or introduce biases into inferences."83 The Project Owners provide no details or assurances that their limited surveys addressed these common errors. Furthermore, aerial and other surveys for wildlife were extremely limited. For example, only one day of raptor aerial surveys were completed, four days of migratory shorebird and waterfowl surveys were completed, and three days of moose surveys were completed, all during 2022.<sup>84</sup> These surveys would not account for any annual variation in wildlife abundance or timing in the Eklutna watershed, as well as seasonal access limitations, among other issues. Wildlife habitat analysis relied on historic and current aerial photography with no ground vegetation surveys completed.<sup>85</sup> Scientific literature on Alaska wildlife and habitat is rarely area specific and is therefore not necessarily a valid representation of species using the Eklutna watershed either for their full lifecycles or for their migration routes or travel corridors.

Overall, the Plan recognizes that increasing the Eklutna River's flow below the dam will "directly or indirectly benefit several ecologically and/or culturally important wildlife species" such as wolves, moose, raptors, and bears.<sup>86</sup> Yet, because of the severe lack of adequate baseline data, it is impossible to truly analyze and understand how the different alternatives would impact and potentially benefit all wildlife and their habitat and to what degree. For example, even though listed in the "observed or expected" wildlife list, the Draft Program fails to consider

<sup>83</sup> Id.

 <sup>&</sup>lt;sup>80</sup> ABR, Inc., Eklutna Hydroelectric Project Wetlands and Wildlife Habitat Study Report Draft at 3 (Mar. 2023)
 <u>https://eklutnahydro.com/wp-content/uploads/2023/04/Draft-Eklutna-Wetlands-and-Wildlife-Habitat-Report.pdf</u>.
 <sup>81</sup> Chugach Electric Association, Matanuska Electric Association, and Municipality of Anchorage ("Project")

Owners"), Eklutna Hydroelectric Project Draft Summary of Study Results at 46-50 (Oct. 2023) <u>https://eklutnahydro.com/wp-content/uploads/2023/11/2023-10-27-Eklutna-Draft-Summary-of-Study-Results.pdf</u>. <sup>82</sup> Davis, Kayla L. et al., Errors in aerial survey count data: Identifying pitfalls and solutions, 12 Ecology and

Evolution e8733 (Mar. 18, 2022) https://onlinelibrary.wiley.com/doi/10.1002/ece3.8733.

<sup>&</sup>lt;sup>84</sup> Eklutna Draft Summary of Study Results at 46-49.

<sup>&</sup>lt;sup>85</sup> *Id.* at 42-43; *see,* Email from Terry Schick, ABR Inc., to Carrie Brophil, NVE (Nov. 22, 2022 at 11:27AM) (on file with NVE).

<sup>&</sup>lt;sup>86</sup> Eklutna Draft Fish and Wildlife Program at 53.

imperiled species like the Little brown bat (*Myotis lucifugus*) that rely on the Eklutna watershed and for which mitigation and enhancement of their foraging habitat in the lower Eklutna River valley, which is currently harmed by the Project, could be improved by increasing flows and rebuilding off channel habitat in the lower river.<sup>87</sup> The Draft Program also fails to analyze why certain wildlife populations appear to be below normal levels. For example, the Summary of Study Results notes that "[w]aterfowl and shorebird numbers in the study area were moderate and low, respectively, during the field surveys" and that "[s]horebirds were noticeably absent during the spring surveys."<sup>88</sup> This may be an example of a system that is in depression from nearly a century of harms from hydroelectric dams. These examples, and many others, highlight the Draft Program's inadequacies in considering and rigorously analyzing how the different alternatives would impact all non-salmonid fish and wildlife in the Eklutna system and whether the preferred alternative provides adequate mitigation and enhancement.

Regarding marine mammals, the Draft Program fails to consider the protection, mitigation, and enhancement of Cook Inlet beluga whales, one of the nation's most critically endangered marine mammals. The best available science shows that Cook Inlet belugas could significantly benefit from increased salmon runs in the Eklutna River. Given the mouth of the Eklutna River is within designated critical habitat in upper Cook Inlet where the majority of the Cook Inlet beluga population forages during the summer, the critically endangered whales should be a primary concern for the Program.<sup>89</sup> The 2011 critical habitat designation for Cook Inlet belugas identified shallow intertidal and subtidal waters of Cook Inlet in close proximity to medium to high flow anadromous fish streams along with four species of Pacific salmon (Chinook, sockeye, chum, and coho) as essential to the beluga's conservation (also known as Primary Constituent Elements).<sup>90</sup> NMFS 2016 Recovery Plan for Cook Inlet belugas identifies prey availability as a threat of medium concern for their recovery.<sup>91</sup> NMFS acknowledges the heightened importance of prey availability, specifically Pacific salmon, for conserving Cook Inlet beluga whales. NMFS' Species in the Spotlight, 2021-2025 report states that, "[s]urvival and recovery of Cook Inlet beluga whales depend on an adequate quantity, quality, and accessibility of prey resources."92 In a recent notice to issue an IHA proposal from the Port of Alaska, NMFS noted that, "Pacific salmon represent the highest percent frequency of occurrence of prey species in CIBW stomachs."93 The notice highlighted that rich foraging areas to the north of the Port of Alaska, including the Eklutna River, are important to belugas and that the whales correlate their movements into Knik Arm around the timing of the salmon runs in those rivers.<sup>94</sup> A recent 2023 study by Wild et al. delineated portions of Cook Inlet, including Knik Arm and the mouth of the

<sup>92</sup> NOAA Fisheries, Species in the Spotlight – Cook Inlet Beluga Whale, Priority Actions 2021-2025 at 14 (Apr. 21, 2021).



<sup>&</sup>lt;sup>87</sup> ABR Inc., Eklutna Hydroelectric Project Terrestrial Habitat Study Report Draft at 23 (Mar. 2023) <u>https://eklutnahydro.com/wp-content/uploads/2023/04/Draft-Eklutna-Terrestrial-Wildlife-Report.pdf</u>.

<sup>&</sup>lt;sup>88</sup> Eklutna Draft Summary of Study Results at 47.

<sup>&</sup>lt;sup>89</sup> 76 Fed. Reg. 20,180 (Apr. 11, 2011).

<sup>&</sup>lt;sup>90</sup> 76 Fed. Reg. 20,203, 20,214 (Apr. 11, 2011).

<sup>&</sup>lt;sup>91</sup> National Marine Fisheries Service, Recovery Plan for the Cook Inlet Beluga Whale at III-13 (2016).

<sup>93 88</sup> Fed. Reg. 76588 (Nov. 6, 2023).

<sup>&</sup>lt;sup>94</sup> Id.

Eklutna River, as a Biologically Important Area (BIA) for the small and resident population of Cook Inlet beluga whales based on scoring methods outlined by Harrison et al. in 2023.<sup>95</sup>

The best available science shows that restoring abundant salmon runs to the Eklutna River may be one of the key strategies available for Cook Inlet beluga recovery by creating more foraging opportunities for belugas in upper Cook Inlet. The results of a 2020 study by Norman et al. suggest that "reproductive success in [Cook Inlet belugas] is tied to salmon abundance" in the Deshka River, which is also located in upper Cook Inlet near Knik Arm and the Eklutna River.<sup>96</sup> That study showed that "if salmon runs remained at their current levels, the [Cook Inlet beluga] population would likely continue its current slow decline," yet the study found that "if Chinook salmon increased 20% or more, the current decline would likely be reversed."<sup>97</sup> Furthermore, the study simulations found that "doubling the salmon abundance would be sufficient to allow recovery of the population regardless of impacts from other threats."<sup>98</sup> The study noted that while Chinook are the most nutritionally important salmon species for Cook Inlet belugas, belugas still rely on other salmon species as important prey.<sup>99</sup> Moreover, a recent 2023 study by McHuron et al. found that if there is enough prey abundance for Cook Inlet belugas, the whales can withstand other intermittent stressors, concluding that increasing prey availability increases the beluga's resiliency to threats.<sup>100</sup> Another recent 2023 study by Warlick et al. stated that "aerial survey data suggest that the [Cook Inlet beluga] population continues to decline[, and the] leading hypotheses include reduced prey availability [...]."<sup>101</sup>

The proposed nominal flow releases from the AWWU Portal will only minimally enhance Chinook and coho salmon and their habitat in the lower Eklutna River. The AWWU Portal provides no solution for the complete blockage of salmon reaching the extensive lake spawning habitat required by sockeye salmon and miles of upper tributaries spawning habitat above the lake that is highly amenable to Chinook and coho salmon, both of which are primary forage species for Cook Inlet belugas.<sup>102</sup> Without connection to Eklutna Lake, protecting, mitigating, and enhancing those key spawning grounds and habitat is impossible. In turn, the mitigation and enhancement for Cook Inlet beluga whales are likely to be minimal as well. Furthermore, no

<sup>102</sup> See, e.g., Native Village of Eklutna, Eklutna Lake and Tributaries Salmon Habitat (2022)

<sup>&</sup>lt;sup>95</sup> Wild, Lauren A. et al., Biologically Important Areas II for cetaceans within U.S. and adjacent waters – Gulf of Alaska Region, 10 Front. Mar. Sci 1134085 (May 5, 2023); Harrison, Jolie, Biologically Important Areas II for cetaceans within U.S. and adjacent waters – Updates and the application of a new scoring system, 10 Front. Mar. Sci. 1081893 (Mar. 14, 2023).

<sup>&</sup>lt;sup>96</sup> Norman, S. et al., Relationship between per capita births of Cook Inlet belugas and summer salmon runs: agestructured population modeling, 11 Ecosphere 1 (2020).

<sup>&</sup>lt;sup>97</sup> *Id.* at 1, 9.

<sup>&</sup>lt;sup>98</sup> *Id.* at 10 (emphasis added).

<sup>&</sup>lt;sup>99</sup> Id.

<sup>&</sup>lt;sup>100</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>&</sup>lt;sup>101</sup> Warlick, A.J. et al., Identifying demographic and environmental drivers of population dynamics and viability in an endangered top predator using an integrated model, Anim. Conserv. (Oct. 6, 2023).

https://static1.squarespace.com/static/5f52cd19995bf84b22653379/t/630683349fc05e329044d6bf/1661371211807/L ake+%26+Tributaries+Habitat.pdf; See also, McMillian Jacobs Associates, Eklutna Lake Aquatic Habitat and Fish Utilization, Year 2 Study Report Final (2023) <u>https://eklutnahydro.com/wp-content/uploads/2023/06/Eklutna-Lake-Study-Y2-Report\_FINAL.pdf</u>; See also, Native Village of Eklutna, TWG 2021-2022 Final Report.

analysis was completed for how the other alternatives considered would benefit Cook Inlet belugas.

The Draft Program's severely inadequate analysis of non-salmonid fish and wildlife fails to meet the purposes of the Agreement and the standard of a similar federal process, and severely inhibits the Governor's ability to make an informed decision.

## *H.* The Draft Program Does Not Provide Specific Information Regarding Additional Requirements for the Draft Program or Any Alternatives

The Draft Program states that there may be additional requirements to implementing the Program, including the potential need to secure permits, land rights, easements and Amendment of ADL 44944.<sup>103</sup> However, it does not describe any strategies the Project Owners have developed for securing necessary permits or land rights for the Draft Program or any alternatives. Instead, the Draft Program document flatly states, "[s]hould any of these requirements fail to be achieved, the Project Owners will not be able to execute on the Fish and Wildlife Program."<sup>104</sup>

There is no basis for the Project Owners' suggestion that their inability to satisfy any "additional requirements" for implementation of the Program is a legitimate basis for their non-performance under the Agreement. Instead, the likelihood of the Project Owners being able to secure permits and property rights necessary for successful implementation of the Draft Program and reasonable alternatives is relevant to the alternatives analysis.

Based on our review, there are several issues related to the Project Owners' ability to secure permits for the Draft Program. The 15% design drawings included in the Draft Program show that the construction of the proposed AWWU Portal would include construction of above ground utility infrastructure as well as eight new bridges and road improvements for the AWWU water supply access road within Chugach State Park. Such construction within the State Park would be a "conversion" of Land and water Conservation Fund property requiring approval by the Department of Interior ("DOI").<sup>105</sup> Further, any DOI decision approving conversion would be a federal action requiring compliance with NEPA and ESA section 7.

Additional review of the 15% design drawings shows that the Draft Program includes the addition of riprap fill material directly into the Eklutna River channel at the location of the AWWU Portal discharge, which would be subject to compliance with Clean Water Act section

<sup>105</sup> See Eklutna Draft Fish and Wildlife Program at Appendix E; see also, 36 C.F.R. § 59.3; see also, Alaska Department of Natural Resources, Chugach State Park Management Plan at 31-32 (Feb. 2016) <u>https://dnr.alaska.gov/parks/plans/chugach/finalplan/cspmp\_2016\_complete\_text.pdf</u> ("All of Chugach State Park is considered an LWCF protected area and is subject to the program provisions. Any property within an LWCF protected area may not be wholly or partly converted to anything other than public outdoor recreation uses without the prior approval of the Secretary of the U.S. Department of the Interior." "Actions that may represent a conversion of use include installation of [...] above ground utilities, development of roads for primary purposes other than recreation [...]".)

<sup>&</sup>lt;sup>103</sup> See Eklutna Draft Fish and Wildlife Program at 81.

<sup>&</sup>lt;sup>104</sup> Id.

404 and may require an individual permit from U.S. Army Corps of Engineers. Such permitting decisions would also be a federal action subject to compliance with NEPA and ESA section 7.<sup>106</sup>

The Project Owners need to address these and any other permitting requirements and pathways for the proposed AWWU Portal as compared to dam removal and any other reasonable alternatives for the Parties, the public, and the Governor to make informed comments and decisions, respectively.

# IV. The Project Owners Failed to Provide Meaningful Consultation Regarding Impacts to Historical Resources as Would Be Required Under a Similar Federal Process

NVE was not consulted in the negotiation of the Agreement and is not a party to the Agreement.<sup>107</sup> Rather than rectify that historic injustice, the Project Owners denied our request to be formally recognized as a consulting government and for treatment as a party to the Agreement during this process.<sup>108</sup> The Project Owners' decision appears based on their preference and convenience rather than any legal or moral principle.

The Project Owners describe their voluntary efforts to meet with and consider information provided by NVE, but these efforts offer no substitute for party status or treatment of NVE as a consulting government.<sup>109</sup> For example, after explaining that NVE is not entitled to participate in the consultation process under the Agreement, the Project Owners promise that "if the process set forth in the Agreement bears out the release of water from Eklutna Lake and the addition of salmon into the Eklutna River as part of the Fish and Wildlife Program, we will be prepared to support it."<sup>110</sup> This is not a promise NVE can or should be asked to rely upon given that the Project Owners have substantially different interests than NVE, have exerted total control over the consultation process, and have excluded NVE from full participation in that process.

If the Project had not received a unique exemption from federal regulation, FERC, with assistance from the Project Owners, would be required to follow specific procedures in consulting with NVE under the National Historic Preservation Act ("NHPA") section 106 before deciding whether to continue or modify project facilities or operations over the next 30-year term.<sup>111</sup> In overseeing the Section 106 consultation process, FERC would be required to evaluate and reach agreement with NVE and other consulting parties on "ways to avoid, minimize or mitigate the adverse effects" of the Project.<sup>112</sup> In other words, the range of alternatives and alternative measures considered in a Section 106 process would not be limited to only those

<sup>&</sup>lt;sup>106</sup> See Eklutna Draft Fish and Wildlife Program at Appendix E; see also, 33 U.S.C. § 1344.

<sup>&</sup>lt;sup>107</sup> 36 C.F.R. § 800.5(a)(2)(vii) (The Advisory Council on Historic Preservation's regulations implementing Section 106 of the National Historic Preservation Act, now direct the federal government to consider the potential adverse effects of "[t]ransfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.") <sup>108</sup> Eklutna Draft Fish and Wildlife Program at 21.

<sup>&</sup>lt;sup>109</sup> *Id.* at 21-22.

<sup>&</sup>lt;sup>110</sup> *Id.* at 22.

<sup>&</sup>lt;sup>111</sup> 36 C.F.R. § 800.5(a).

<sup>&</sup>lt;sup>112</sup> 36 C.F.R. § 800.6(a)-(b).

advantageous to the Project Owners. Also, NVE would have a role in overseeing and enforcing the Project Owners' compliance with any agreement resolving the Project's adverse effects.<sup>113</sup>

# V. Interpretation of the Right to Judicial Review Limitation is Inappropriate and Unsupported

The Draft Program states that "Pursuant to the 1991 Agreement and APA Asset Sale Act, the Governor's decision regarding the provisions of the Final Fish and Wildlife Program is reviewable and enforceable *by the Parties* in the U.S. District Court for the District of Alaska."<sup>114</sup> We dispute this as a statement of the Project Owners' opinion, which has been misleadingly presented as a formal conclusion without any legal basis. Neither the APA Asset Sale Act nor the Agreement limit judicial review to the Parties, and any such limitation would appear to violate principles of due process given, separate and apart from the enforceability of the Agreement as a contract between the Parties, the Governor's final decision on the Fish and Wildlife Program would affect rights and interests far beyond those of the individual Parties.<sup>115</sup>

## VI. Request for Further Procedures

### A. Full Analysis of NVE's Proposed Alternative

To meet the purpose and requirements of the Agreement, we firmly believe that the Parties, the public, and the Governor must have the full range of options identified and analyzed for consideration. As we have previously requested, removing the Eklutna Lake dam within ten years when sufficient renewable power generation is available as an alternative that must be fully analyzed because it appears to be the only alternative that would effectively mitigate the Project's harms to fish and wildlife.<sup>116</sup> In preparing these comments, we have confirmed The Conservation Fund's commitment to fully fund the removal of the Eklutna Lake dam. We ask that any analysis of this alternative reflect that the actual capital expenditure (CAPEX) cost to remove the dam is \$0. The next schedule requirement per the Agreement is for the Governor to decide on the Final Program by Oct. 2, 2024, leaving plenty of time to fully analyze this alternative.<sup>117</sup> Without analyzing this reasonable alternative, the Program would fail to meet the intent and requirements stated in the Agreement and the Divestiture Report and the Governor cannot make a fully informed decision.<sup>118</sup>

#### B. Meaningful Dispute Resolution Process

NVE has serious concerns about the Project Owners' proposed dispute resolution procedures. The Agreement requires that "[i]f USFWS, NMFS, or the State Resource Management Agencies' comments or recommendations different from those of the [Project Owners], the [Project Owners] will attempt to resolve such differences, giving due weight to the

<sup>&</sup>lt;sup>113</sup> *Id.* at § 800.6(c).

<sup>&</sup>lt;sup>114</sup> Eklutna Draft Fish and Wildlife Program at 17 (emphasis added).

<sup>&</sup>lt;sup>115</sup> See Pub. L 104-58, title I § 104(c)(1); Fish and Wildlife Agreement at 5.

<sup>&</sup>lt;sup>116</sup> Native Village of Eklutna, Letter to Samantha Owen, McMillen Inc. (Oct. 5, 2023).

<sup>&</sup>lt;sup>117</sup> Eklutna Draft Fish and Wildlife Program at 18.

<sup>&</sup>lt;sup>118</sup> Fish and Wildlife Agreement at 2; Divestiture Report at 19.

recommendations, expertise, and statutory responsibilities of USFWS, NMFS, and the State Resource Management Agencies."<sup>119</sup> We recently received notice from the Project Owners that they are proposing a 1.5-hour dispute resolution meeting on December 15<sup>th</sup> to meet this requirement.

We have raised several dispute issues regarding the adequacy of the Project Owner's consultation process and the Draft Program in these comments. The Draft Program does not meet the express goals of the Agreement; more specifically, it will not mitigate the Project's impacts on fish and wildlife because it will not reconnect the lake and upper tributaries to the lower river, which is necessary to restore sockeye, Chinook, and coho salmon to the Eklutna. We expect the federal resource management agencies will also raise disputed issues regarding the AWWU Portal recommendation in the Draft Program. Furthermore, we have proposed an alternative – removing the dam within ten years – that should have been analyzed previously and must be analyzed now as part of the dispute resolution process. We struggle to see how such substantial divergence can be resolved in a single 1.5-hour meeting.

We request the Project Owners provide meaningful, not pro forma, procedures to resolve the significant disputed issues. For example, we request the Owners anticipate the need to schedule additional meetings and that they also provide for an independent dispute resolution specialist to facilitate the dispute resolution process.

### VII. Conclusion

The Eklutna Project is the limiting factor preventing the restoration of the Eklutna River that flows from its headwaters to its confluence with the Knik Arm. Plainly, the Project Owners' Draft Program to maintain a dead-end river is inadequate to mitigate the Project's harms to fish and wildlife. Adequate and equitable fish and wildlife protection, mitigation, and enhancement, as required by the Agreement, requires the lake and upper tributary streams to be connected to the lower river and adequate flows for salmon to thrive. As such, we request that the Project Owners consider our proposed dam alternative to comply with the Agreement's purposes and provide a myriad of public interest benefits, including the long-term benefit of affordable energy from truly renewable sources.

Łiq'a nagh qinqtudeł – We are hopeful the salmon will return to us.

# **Aaron Leggett**

Aaron Leggett Chair/President Native Village of Eklutna 26339 Eklutna Village Road Chugiak, AK 99567 (907) 688-6020 aleggett@anchoragemuseum.org

Signature: <u>Aaron Leggett</u> Aaron Leggett (Dec %, 2023 13:06 AKST) Email: aaronleggett@eklutna.org

<sup>&</sup>lt;sup>119</sup> Fish and Wildlife Agreement at 3.

From:	Nicole Watson - NOAA Affiliate		
То:	Maija DiSalvo; Theodore Eischeid Cook Inlet Salmon update		
Subject:			
Date:	Wednesday, January 3, 2024 2:19:34 PM		

**[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]** There will be an informational meeting for the SSC on January 19th. The SSC will meet to receive staff presentations on the Cook Inlet Salmon Stock Assessment and Fishery Evaluation (SAFE) report. In the presentation from NOAA, the SSC will receive proposed stock definitions, tier assignments, status determination criteria, and harvest specifications; which the SSC is tasked with recommending in February 2024 for the Federal fishery of Cook Inlet salmon stocks. The meeting is informational, to orient SSC members in their review of the SAFE report in advance of the February 2024 meeting. No decisions will be made at the informational meeting. The meeting will be recorded and a link to the recording will be posted on the eAgenda once the meeting concludes. There is an opportunity for the public to submit written comments (open until 5:00pm on 1/18/2024) on the January 19th eAgenda; there will not be oral public testimony at the January 19th meeting.

At the February NPFMC meeting in Seattle, WA, the SSC, AP, and Council will receive a staff presentation on the Cook Inlet salmon materials. The public will have the opportunity to provide both written and oral testimony at the February meeting. Please note, the comment period will open on January 12, 2024, and the deadline for written comments is Friday, February 2nd at 12pm AKT.

Thank you for your interest in this topic.

Kind regards, --Nicole M. Watson, PhD | Fishery Analyst <^))) >< <`}}} >< <\*||| >< <"\\\ >< >< \\\"> >< |||\*> >< {{{">> < (((^> North Pacific Fishery Management Council 907-271-2809 www.npfmc.org



Department of Natural Resources

DIVISION OF MINING, LAND & WATER Resource Assessment & Development Section

> 550 West 7<sup>th</sup> Avenue, Suite 1050 Anchorage, AK 99501-3579 Main: 907.269-8534 TTYL 711 or 800-770-8973 Fax: 907-269-8915

January 5, 2024

Subject: Susitna Basin Recreation Rivers Management Plan Issued for Public Review and Comment.

Dear Interested Community Members and Organizations,

The Department of Natural Resources (DNR) has released the Public Review Draft (PRD) of the Susitna Basin Recreation Rivers Management Plan for public review and comment. Following the public review period, DNR intends to adopt the plan with any changes that may result from the input received. Once adopted, this plan will serve as the basis for the management of these recreation rivers for the next 20 years. This plan affects approximately 241,000 acres of state-owned land and waters designated in 1988 by the Alaska legislature as recreation rivers under the Recreation Rivers Act (AS 41.23.400-41.23.510). The primary purpose for the establishment of the six recreation rivers is their maintenance and enhancement for recreation. The six rivers are:

- ✤ Little Susitna River
- Deshka River (Kroto Creek / Moose Creek)
- Talkeetna River
- Lake Creek
- Talachulitna River
- Alexander Creek

The original Susitna Basin Recreation Rivers Management Plan was completed in August of 1991. Much has changed in the 30+ years since the original plan was adopted that needs to be recognized and addressed. In response, DNR initiated a plan revision process. Through this planning process, DNR is working to find alternatives with the greatest benefits for all Alaskans. Public involvement is essential to ensure that future actions are not only consistent with the agency mission and the enabling legislation, but also present a shared vision for the future of the Susitna Basin Recreation Rivers. Your written comments are encouraged during this public comment period. The PRD is available online; on USB flash drive by request; and reference copies will be available in print format at public libraries in Talkeetna and Wasilla. **Comments on the PRD must be received by March 5, 2024 by mail, email or through the website provided below.** 

To review or download an electronic version of the PRD or to submit comments online, visit: <u>https://dnr.alaska.gov/mlw/planning/mgtplans/susitna-revision/</u>. Comments can also be emailed to <u>recreationrivers@alaska.gov</u> or mailed to:

Recreation Rivers Management Planning 550 West 7th Ave, Suite 1050 Anchorage, Alaska 99501-3579

Page 1 of 2



To facilitate your review, public meetings have been scheduled in the communities indicated below and virtually during this comment period. Representatives from the Division of Mining, Land & Water will be present at these meetings to answer questions you may have about the plan. You are welcome to attend any of the scheduled meetings.

Location	Date	Time
Talkeetna Public Library 24645 Talkeetna Spur Road Talkeetna, AK 99676	Tuesday, January 30, 2024	5:00 - 7:00 PM
Robert Atwood Conference Room (104) Robert B. Atwood Building 550 West 7 <sup>th</sup> Avenue Anchorage, AK 99501	Wednesday, January 31, 2024	12:00 - 2:00 PM
Virtual Meeting via Microsoft Teams (see project webpage for info on how to join)	Wednesday, January 31, 2024	5:30 -7:00 PM
Wasilla Library Large Multi-Purpose Room 500 North Crusey Street Wasilla, AK 99654	Thursday, February 1, 2024	5:15 - 6:45 PM

For additional information or to request a USB flash drive, contact:

Rob Earl, Land Use Planner Email: <u>recreationrivers@alaska.gov</u> Phone: 907-269-8533

Scan the QR code to be taken to the Susitna Basin Recreation Rivers Management Plan webpage:



The State of Alaska, Department of Natural Resources, complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who may need auxiliary aides, services, or special modifications to submit a comment or participate in a meeting, should contact a person indicated above or contact the state TDD number (907)269-8411 seven days (7) in advance of meetings to arrange accommodations.