

Bethel

Fish & Game Advisory Committee

MEETING PACKET

Tuesday February 13, 2018
Bethel ADF&G Office, 6:00pm

Teleconference: 1-800-504-8071 code: 5432709



For information on the Western Region Fish and Game Advisory Committees, contact:

Jen Peeks

1-855-933-2433 (Toll Free)

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Bethel Advisory Committee Roster

Chair: **Jaimie Kassman**
 Vice Chair: Henry Kohl
 Secretary: Alissa Rogers

Member Elections: 10/24/2017

Officer Elections Held: 10/2017

AC Member Name <i>Interest</i>	Email	Term Started	Term Expires
Robert Lekander <i>Undesignated</i>		12/2016	6/2019
Thad Tikiun <i>Undesignated</i>	tjtikiun@yahoo.com	10/2017	6/2020
VACANT <i>*Completing G. Roczicka's term Subsistence</i>		4/2014	6/2018
VACANT <i>Undesignated</i>		6/2017	6/2020
Jaimie Kassman <i>*Completing K. Carter's term</i>	jaimiekass@gmail.com	10/2017	6/2020
Henry Hunter <i>Undesignated</i>		12/2016	6/2019
Jon LaValle <i>Trapping</i>	jonjla valle@gmail.com	12/2016	6/2019
Henry Kohl <i>Watchable Wildlife</i>	hkohl@kusko.net	4/2014	6/2018
Alissa Rogers <i>Commercial</i>	ajoseph@nativecouncil.org anadinej@hotmail.com	12/2016	6/2019
Jerry White	jerrywhite99559@gmail.com	11/2015	6/2018
Mike Riley <i>*Completing G. Vanasse's term</i>		02/2017	6/2018
Rafe Johnson <i>Alternate</i>	rafejohnson@hotmail.com	12/2016	6/2019
Robert Hoffman <i>Alternate</i>		01/2017	6/2018

Bethel Advisory Committee seats: 11, 2 alternates

Quorum: 6

Updated: 10/24/2017

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Alaska Department of Fish and Game
Board of Fisheries
 P.O. Box 115526
 Juneau, AK 99811-5526
 (907) 465-4110
 www.adfg.alaska.gov

ALASKA BOARD OF FISHERIES
2017/2018 MEETING SCHEDULE

Prince William Sound Finfish; Southeast and Yakutat Finfish and Shellfish; Statewide
 Dungeness Crab, Shrimp and other Miscellaneous Shellfish (Except Southeast and Yakutat)

Proposal deadline: Tuesday, April 11, 2017

Meeting Dates	Topics	Location	Comment Deadline
October 17–19, 2017 [3 days]	Work Session ACRs, cycle organization, Stocks of Concern	Anchorage Egan Center	October 3, 2017
December 1–5, 2017 [5 days]	Prince William Sound/Upper Copper and Upper Susitna Rivers Finfish	Valdez Valdez Convention & Civic Center	November 17, 2017
January 11–23, 2018 [13 days]	Southeast and Yakutat Finfish and Shellfish	Sitka Harrigan Centennial Hall	December 28, 2017
March 6–9, 2018 [4 days]	Statewide Dungeness Crab, Shrimp and other Miscellaneous Shellfish (Except Southeast and Yakutat)	Anchorage Egan Center	February 23, 2018

Total Meeting Days: 25

Agenda Change Request Deadline: August 17, 2017 [60 days prior to fall work session]

Meeting schedule is tentative and may change.

Rev. July 2017



ADF&G • Boards Support Section

www.boards.adfg.state.ak.us

ALASKA BOARD OF FISHERIES 2018/2019 Cycle Tentative Meeting Schedule

Bristol Bay Finfish; Arctic, Yukon, and Kuskokwim Finfish; Alaska Peninsula, Aleutian Island, and Chignik Finfish; Statewide Finfish and Supplemental Issues

PROPOSAL DEADLINE: Tuesday, April 10, 2018

Meeting Dates	Topics	Location	Comment Deadline
October 17-18, 2018 [2 days]	Work Session ACRs, cycle organization, Stocks of Concern	Anchorage The Lakefront	Oct. 3, 2018
November 28- December 4, 2018 [7 days]	Bristol Bay Finfish	Dillingham TBD	Nov. 14, 2018
January 15-19, 2019 [5 days]	Arctic / Yukon / Kuskokwim Finfish	Anchorage Sheraton Hotel	Jan. 2, 2019
February 21-27, 2019 [7 days]	Alaska Peninsula / Aleutian Island / Chignik Finfish	Anchorage Sheraton Hotel	Feb. 7, 2019
March 8-11, 2019 [4 days]	Statewide Finfish and Supplemental Issues	Anchorage Sheraton Hotel	February 20, 2019

Total Meeting Days: 25

Agenda Change Request Deadline: August 17, 2018 [60 days prior to fall worksession]

Amended August 28, 2017



Alaska Board of Game

P.O. Box 115526
 Juneau, AK 99811-5526
 (907) 465-4110

www.boardofgame.adfg.alaska.gov

**ALASKA BOARD OF GAME
 2017/2018 Cycle
 Tentative Meeting Dates & Locations**

Meeting Dates	Topic	Location	Comment Deadline
November 9, 2017 (1 day)	Work Session	Anchorage Lake Front Anchorage	October 27, 2017
November 10-17, 2017 (8 days)	Statewide Regulations Statewide Provisions (5 AAC Chapter 92) and Areas of Jurisdiction for Antlerless Moose (5 AAC Chapter 98)	Anchorage Lake Front Anchorage	October 27, 2017
February 16-23, 2018 (8 days)	Central/Southwest Region Game Management Units 9, 10, 11, 13, 14A, 14B, 16 & 17.	Dillingham To be announced	February 2, 2018

Total Meeting Days: 17

Agenda Change Request Deadline: Monday, September 11, 2017

(The Board of Game will meet via teleconference to consider Agenda Change Requests.)

Proposal Deadline: Monday, May 1, 2017



Alaska Board of Game

P.O. Box 115526

Juneau, AK 99811-5526

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www.boardofgame.adfg.alaska.gov

Long-Term Meeting Cycle

The Board of Game (board) meetings generally occur from January through March. The board considers changes to regulations on a region-based schedule that cycle every three years. When the regional regulations are before the board, the following regulations are open for consideration within that region:

- Trapping Seasons and Bag Limits -- All species
- General and Subsistence Hunting Seasons and Bag Limits -- All species
(Except antlerless moose hunts as noted below)
- Intensive Management Plans
- Closures and Restrictions in State Game Refuges
- Management Areas, Controlled Use Areas, and Areas Closed to Hunting and Trapping
- Changes specific to Units or Regions under 5 AAC Chapter 92

Proposals pertaining to reauthorization of all antlerless moose hunts, 5 AAC 85.045, and all brown bear tag fee exemptions, 5 AAC 92.015, are taken up annually. Changes having statewide applicability to 5 AAC Chapters 92 and 98.005 listed on the following page are considered once every three years at Statewide Regulations meetings.

The proposal deadline is May 1 every preceding year. If May 1 falls on a weekend, the deadline is the Friday before. Boards Support issues a “Call for Proposals” generally in December or January prior to the May 1 deadline which will also specify which regulations are open for proposed changes.

Topic & Meeting Schedule
<p>Southeast Region – Game Management Units: 1, 2, 3, 4, 5 <i>Meeting Cycle: 2018/2019 2021/2022 2024/2025</i></p>
<p>Southcentral Region – Game Management Units: 6, 7, 8, 14C, 15 <i>Meeting Cycle: 2018/2019 2021/2022 2024/2025</i></p>
<p>Central and Southwest Region – Game Management Units: 9, 10, 11, 13, 14A, 14B, 16, & 17 <i>Meeting Cycle: 2017/2018 2020/2021 2023/2024</i></p>
<p>Arctic and Western Region – Game Management Units: 18, 22, 23, 26A <i>Meeting Cycle: 2019/2020 2022/2023 2025/2026</i></p>
<p>Interior and Northeast Region – Game Management Units: 12, 19, 20, 21, 24, 25, 26B, 26C <i>Meeting Cycle: 2019/2020 2022/2023 2025/2026</i></p>
<p>Statewide Regulations (see next page) <i>Meeting Cycle: 2017/2018 2020/2021 2023/2024</i></p>

The three-year schedule was adopted at the January 2015 Work Session.

BETHEL MEETING MINUTES: 10/24/2017

Bethel Advisory Committee Meeting

October 24, 2017

ADF&G Office, 7:00 p.m.

Teleconference: 1.800.504.8071 Code: 5432709

CALL TO ORDER: 7:02

ROLL CALL/ ESTABLISH QUORUM: Quorum established: Yes

Present: Mike Riley, Robert Lekander, Thad Tikiun, Jaimie Kassman, Henry Hunter, Jon Lavalle, Henry Kohl, Alissa Rogers, Jerry White

INVOCATION: Robert Lekandar

INTRODUCTION OF GUESTS:

Patrick Jones Area Biologist, Dave Renfola subsistence division

MEMBER ELECTIONS:

Jaimie Kassman re-elected

Thad Tikiun re-elected

Leaving two empty seats

Alissa Rogers is the new subsistence seat on the board

Jerry White, clarification for title: Guides

OFFICER ELECTIONS: *Chair, Vice-Chair, Secretary*

Secretary- Alissa Nadine Rogers M- John Lavallve 2nd-Thad Tikiun , Unanimous Decision

Chairman- Jamie Motion- Mike Riley 2nd- Henry Kohl, Unanimous Decision

Vice Chairman- Henry Kohl M- 2nd-Thad Tikiun, Unanimous 5- vote

COMMENTS:

- CONCERNS/COMMENTS OF **PUBLIC**: (None)
- CONCERNS/COMMENTS OF **AC MEMBERS**: (None at this time.)

APPROVAL OF AGENDA: M/M-Jerry 2nd- Thad

APPROVAL OF MINUTES: *October 03, 2017 M/M- Thad 2nd - Rogers, Unanimous*

Changes: *Add Mike Riley, Change Alyssa to Alissa*

OLD BUSINESS:

- BOARD OF GAME STATEWIDE PROPOSALS (*Comments due October 27, 2017*)
 - **PROPOSAL 13** – 5 AAC92.080(7): Clarify the regulation that prohibits the use of a “cellular or satellite telephone” to take game. (*Tabled from Oct. 3, 2017*)
Introduction given by Jones, ADFG comments from AK Wildlife Troopers on the proposal. The use of cellphone and satellite technology.

Bethel Advisory Committee Meeting

October 24, 2017

ADF&G Office, 7:00 p.m.

Teleconference: 1.800.504.8071 Code: 5432709

Lavallve- I don't see anything wrong with calling a buddy to plan a hunt. I have a problem with someone being airborne on a commercial flight then calling a buddy detailing the location of it for a kill. Currently there is already two-way radios.

Hunter- My concern is when you have a group of hunters and drive the caribou to a bunch of hunters by using a spotter on a hill.

Kassman- Clarification: One person said that they don't think that they should use them to aid when in airplanes not to use communication devices to locate wildlife. No hunting while hunting or flying or using by 2am the next day. No use of cellphone or satellite phone to contact someone else to use by 2am the next day. Not using the final stock for taking of any game.

Recommendation to clarify the regulation as is: Prohibit the use of cellphone and satellite technology in pursuit, in aid, during hunting, and/or taking of any game. Cellphone and satellites are to use any forms of any communication shall not be used to aid in of taking of any game. You can't use any communication device to assist in while actively taking of game in the field. You can take your cellphone into the field in use of non-hunting communication is allowed. No form of any communication shall be used at all times in the aid of taking any game.

Tikiun- **We are just getting down to the nitty gritty and we are starting to over regulate ourselves. Communication devises we are always going to be around.**

- **PROPOSAL 16** – 5 AAC 92.085: Allow the use of high-powered air guns during regular firearms and muzzleloader big game hunting seasons as follows

M/M Support- White 2nd- Rogers

Discussion/ Question:

Introduction and Neutral recommendation by ADFG for proposal given by Jones, ADFG.

There was a discussion of air gun, description of caliber, history of air gun, and exposure of air guns such as television shows.

Reason for Opposition: There needs to be more research done before we can get into this.

Opposed, 1-White in Support (because of his seat.)

- **PROPOSAL 32** – 5 AAC 92.050: Establish a bonus point system for bison and muskox drawing hunts.

Bethel Advisory Committee Meeting

October 24, 2017

ADF&G Office, 7:00 p.m.

Teleconference: 1.800.504.8071 Code: 5432709

M/M Support- Kohl 2nd-

Introduced by Jones, ADFG with department recommendation. I don't think we have the money to pay for this or it is practical for our states capabilities. Kassaman said, I don't think we have enough programmers for this type of technology.

Hunter- Residents have a priority 1 every 10 years? If you live in Nunivak island and you want to hunt a muskox? It wasn't clearly defined for bison or muskox? I would like to see the residence to have preference over non residence?

Opposed- There isn't enough resources and money to pay for the practical use for our states capabilities.

- **PROPOSAL 147** – 5 AAC 85.025: Open a nonresident draw hunt for caribou in Units 18 and 19

M/M to Support: Kohl 2nd- Lavallve

Discussion:

In that proposal, there is not enough for subsistence. Yet, he wants to open for nonresident.

Pat- Opposed, the herds are hovering right around 300 or take. It just has been in access. We are still trying to grown that herd. It's just not a right time to open it.

Lavallve- Have an increase of the population before we open it up to non-residence.

Kohl- Entertain the idea to charge a drawing ticket price of 2,500.00 a piece.

Oppose, 1-White in Support, because it opens up the possibility for tourist hunter to harvest caribou.

NEW BUSINESS:

- BOARD OF FISH ACR UPDATE- Against all fishery proposals for this cycle. Proposals did not meet the criteria, but will be taken up as fish proposals.

2019 Fish Proposal due April 2017

Hunter- Discuss the disaster fishing that we had this last summer. Come up with solutions with ADFG Board. Why wont they take discussion for amendments before the fishing season starts. They should tae them in beginning of the winter and have meetings when they are open.

Jen- Clarifies Cycles of Board of Fish & Game for Western Region Cycle.

- FISHING PERMIT UPDATE (above Aniak)

Bethel Advisory Committee Meeting

October 24, 2017

ADF&G Office, 7:00 p.m.

Teleconference: 1.800.504.8071 Code: 5432709

Dave Runfolda, ADFG Subsistence Division- In general what we are talking about a permit for all Alaska residents and will be effective upriver from Aniak and fishing can start as no earlier than June 20th 1 per household up to 10 king salmon. We are still working on exactly how this is going to be ruled out, 1.

Write the permit. 2 decide how and where 3.

Jan 2016: A lot of people feel like this is going to happen when this is going to be a federal takeover of the river. This can happen at any time.

Additional opportunity to get some king salmon in times when salmon fishing with lethal gear is closed.

Hunter- if they are allowing permit holders to catch 10 king salmon. How many permit holders are going. Below Aniak, we have fisherman that are abiding by the king salmon role. Yet you are bringing up the King Salmon and yet you allow fisherman above Aniak for 1-1000 people to catch 10 king salmon.

Ideas came out. There was a proposal that came out to catch a few kings.

LAW- Discussion BOF/ Subsistence, AVCP, the AC voted on permits. "Any state waters" Middle Kuskokwim that permits were going to be ok. Lower Kuskokwim didn't want permits. Conservation 1: In the past several years they have felt like when there were opening the had shorter time periods that were close to down river opening and felt like they needed to use set nets they had to use 6 hours or more, because we are not as efficient in catching King salmon.

There is a threshold by the manager to close this fishery.

Lavalle- What happens if a family that catches 20 kings?

ADFG- allows for proxy fishing, like the same thing for hunting.

Needs to have a 24 hour reporting system.

ADFG Dave- 907-322-8737

OTHER/MISCELLANEOUS BUSINESS:

NEXT MEETING DATE: Tentative: Feb 13th, 2018

ADJOURN m- Thad 2nd –kohl

Electronic Signature by Jon Lavallve, 8:30PM, 10/27/2017

Bethel Advisory Committee Meeting

October 24, 2017

ADF&G Office, 7:00 p.m.

Teleconference: 1.800.504.8071 Code: 5432709

Alaska Board of Game Statewide Regulations Meeting

November 10 – 17, 2017 | Anchorage

Proposal Number	Proposal Description		
Support, Support as Amended, Oppose, No Action	Number Support	Number Oppose	Comments, Discussion (list Pros and Cons), Amendments to Proposal
13	Clarify the regulation that prohibits the use of a “cellular or satellite telephone” to take game		
Take Action by giving Recommendation To The Board Not in support or oppose or no action	Kassman Hunter, Lavallve Rogers White Riley	Tikiun Lekander Kohl	<p><u>Recommendation to clarify the regulation as is:</u> Prohibit the use of cellphone and satellite technology in pursuit, in aid, during hunting, and/or taking of any game. Cellphone and satellites are to use any forms of any communication shall not be used to aid in of taking of any game. You can’t use any communication device to assist in while actively taking of game in the field. You can take your cellphone and satellite into the field for non-hunting communication to be allowed. <u>No form of any communication shall be used at all times in the aid of taking any game.</u></p> <p>Tikiun- We are just getting down to the nitty gritty and we are starting to over regulate ourselves. Communication devises we are always going to be around.</p>
16	Allow the use of high-powered air guns during regular firearms and muzzleloader big game hunting seasons		
Oppose	8	White	There needs to be more research conducted before these items can be used in taking of big game.
35	Allow nonresidents and residents to apply as a party for hunts having separate permits for residents and nonresidents		
Oppose	6	3	There isn’t enough resources to carry out such a demanding technology system.
147	Open a nonresident draw hunt for caribou in Units 18 and 19		
Oppose			There isn’t enough resources to open up a nonresidential draw hunt for Caribou in Unit 8.

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Legend


 19A Bear Control Focus Area


 19A Wolf Control Focus Area

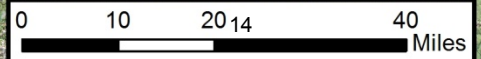
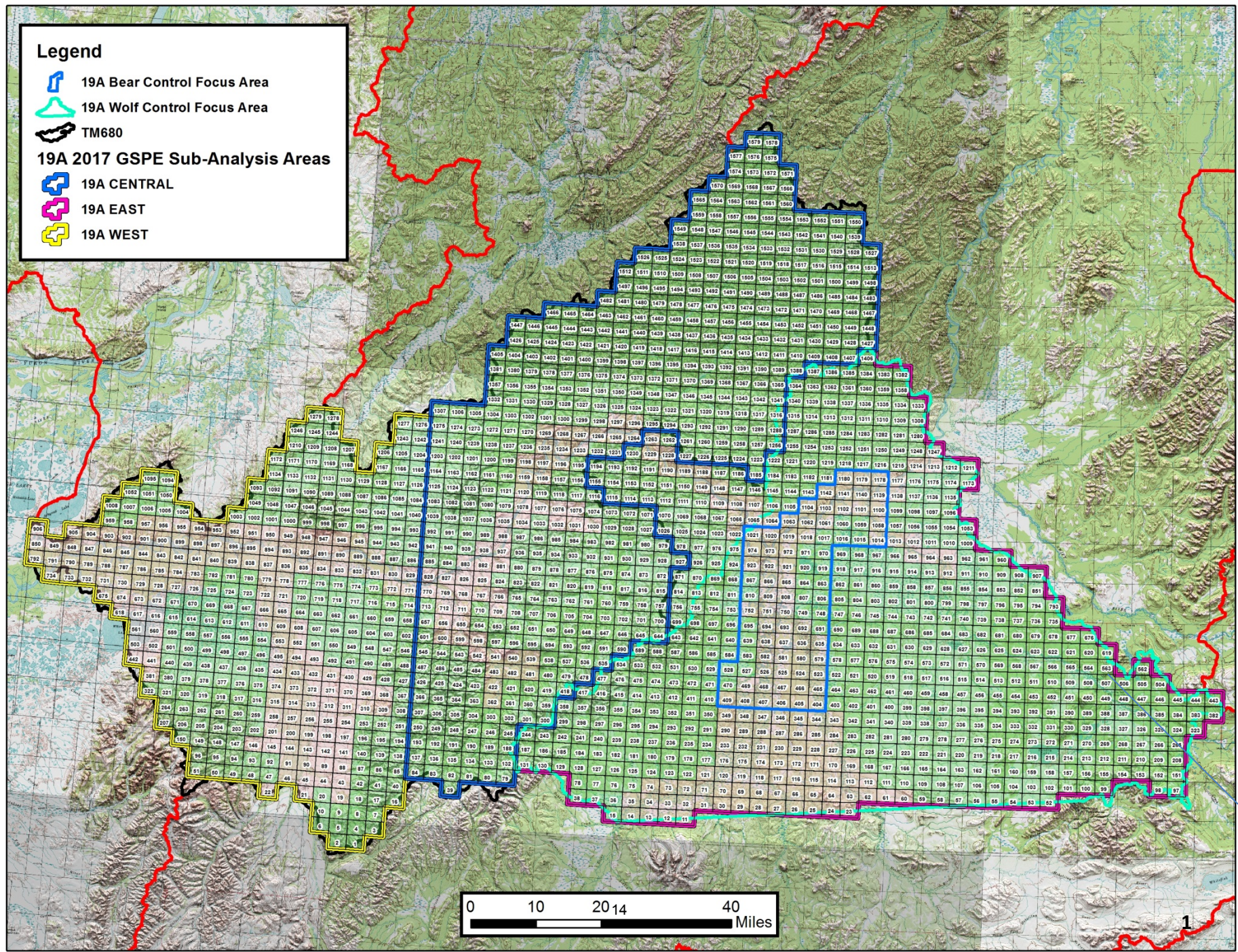
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19A 2017 GSPE Sub-Analysis Areas

 19A CENTRAL

 19A EAST

 19A WEST



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Board of Game: Proposal 165

Note: Proposal 165 was accepted by the Board of Game as an Agenda Change Request for consideration at the Central/Southwest Region Meeting in February 2018.

PROPOSAL 165 – 5 AAC 85.045. **Hunting seasons and bag limits for moose.** Open a registration hunt for moose in Unit 19A as follows:

Replace the closed area of Unit 19A with a registration Tier I permit hunt. Permits would be available at the store in Sleetmute. Permit application would be for one week, one month before opening season. Anyone acquiring this permit can have no other hunting permits in the Kuskokwim drainage.

What is the issue you would like the board to address and why? The closure of Unit 19A above the George River to moose hunting. The fish and game survey of spring 2017 showed there is a harvestable population for the first time since the closure in 2006.

This hunting season should have been available in the 2017 cycle of the Board of Game for Interior-Northeast Arctic Region, however weather conditions did not allow for aerial surveys to validate this opening until the board cycle was past. The advisory committee was not able to put an agenda change request together because of all the summer activities of its members.

If the problem is not solved prior to the regular cycle, the local people will not have an opportunity to take moose in close proximity of their communities.

This will be a Tier I registration permit hunt available to all Alaskans.

PROPOSED BY: Henry Hill

(HQ-F17-ACR1)

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Stony-Holitna AC Minutes: 09/19-20/2017

Minutes

Stony Holitna Fish & Game Advisory Committee Meeting Tuesday, Sept. 19 & 20

Call to Order - The meeting was called to order by Chairman Doug Carney at 2pm

The Roll Call & Quorum

- Lime Village – Rick Breckheimer attended by telephone/ Faron Bobby was absent.
- Stony River – David Bobby & Charlie Gusty were absent
- Sleetmute – Doug Carney was present / Terence Morgan was absent
- Red Devil – Barb Carlson & John Zeller were present

Sleetmute rep /chair Doug Carney Appointed Frank Egnaty to serve in Terence Morgan's place.
The 5 members present establishes a quorum.

Others Attending -

- Josh Peirce, Area Biologist
- 17 community members, besides the SHAC members, attended the meeting –a large turnout for any meeting in Sleetmute.

Members' Concerns - Chair

- Any agenda additions to Other Business for this meeting? *Besides comments on the statewide proposals, SHAC will address the ACR1 that was submitted by Henry Hill.*
- Any proposals besides the ones listed - *None*
- Anything for future meetings? *Nothing brought up.*

Approval of Agenda –Approved

Reading & Approval of Minutes - from the Dec.8, 2016 teleconference meeting. The minutes were approved as read, with one change pointed out by Josh Peirce. It is the **McGrath Native Village** that pays \$150 for each wolf & bear brought in – **not** the McGrath City Council.

Fred Bobby - Bear control program needed in Lime Village area

Freddy was absent, so the Chair gave a short narrative of Fred's concerns. He wants to see bear control occur in the Lime Village area. Folks up there are having bear trouble. Fred's smokehouse had the whole back torn off by a bear, and fish eaten. Fred's wife had run into a brown bear as she was entering the washeteria in Lime.

Chair –

- *The next Region III meeting is in spring, 2020*
- *Reviewed handouts for SHAC members and community members to use during the meeting.*
- *Discussed the possibility of splitting 19A into 2 subunits*

Josh Peirce

Stony-Holitna AC Minutes: 09/19-20/2017

- Had some handouts, including printed versions of his power point presentation.
- Josh gave a short history of the moose closure.

Nov. & Feb Moose counts moose surveys

As Josh went through his power point SHAC and community members asked questions and took part in the discussion.

Some of the points made, and discussion involved the following -

- He started with a map of 19A, explaining the different hunt areas and where predator control occurs
- Went over the Nov. 2016 and Feb. 2017 moose surveys
- Spoke of the \$150 bounty the McGrath Native Village Council offers for bear and wolves
- Explained that a harvestable surplus is generally considered to be 4% of extrapolated # of moose.
- ANS and harvestable surplus were explained and discussed
- Spoke of Tier II – explained conditions / younger folks can't get points for a permit
- Spoke of twinning rates and what they indicate –good feed = fat & healthy cows = more twins
- 20% calf survival is at the low end of maintaining a population, but don't want it any lower
- 40% of a wolf population can be killed every year, and wolf numbers will have bounced back by the next year
- 19A Intensive Management goals / 7600-9300 in 19A - presently at 6300
- Drawing hunts pros & cons were discussed

BOG Statewide Meeting / Nov. 10-17 / ACR 1 Discussion, proposals & comments

Discussion was led by the Chair-

Chair - Before addressing the proposals in the book, we'll discuss **ACR1** submitted by Henry Hill.

The BOG changed from a 2-year cycle to a 3-year cycle.

We are in Region 3 – the Interior – we were in cycle in 2017 – Region 3 meeting was last Feb.

The next Region 3 meeting is in 2020.

So this ACR is an attempt to get the BOG to consider an opening before 2020.

Oct. 4 - BOG will have a teleconference to decide whether or not they will accept this ACR.

Sept 29 is the comment deadline – The public, including SHAC has the opportunity to comment on this, urging BOG to accept or not accept the ACR.

SHAC voted to OPPOSE ACR1, urging BOG NOT to accept the ACR - or if accepted - to table it for an opening no earlier than fall, 2019.

It is clear that although people in our area would like to see a hunt, they are cautious about having an opening, when numbers are still so low in the closed area of 19A.

The Chair asked for and was given approval by SHAC members to write and send comments on the ACR by the deadline of Sept. 29 to BOG for the Oct 4 teleconference, and to address a possible registration hunt opening as needed at any future BOG meeting, including making SHAC's hunt recommendations available to BOG if ACR 1 is accepted OR when it is appropriate for a hunt opening that would occur not before fall, 2019.

Comments on ACR 1 were sent to BOG before the Sept. 29th Deadline.

BOG accepted ACR 1, and put it on the Feb. 2018 meeting schedule as Proposal 165

SHAC comments on Proposal 165 for that meeting are at the end of these minutes.

Discussion went on for 2-3 hours, and was both thorough and productive.

Stony-Holitna AC Minutes: 09/19-20/2017

The committee allowed the public to take part all the way through, to make sure all were clear on several points – How registration permits work, ANS, harvestable surplus were all important topics for those unfamiliar with them.

Gail Vanderpool suggested that SHAC learn how McGrath and GASH control hunting in their areas – Hunters must register in villages, fly in & out with scheduled airlines to state maintained strips, and their meat must stay with them.

Sandra Derendy – We need to be conservative and not open too soon or allow too much hunting. Maybe hunters should be required to bring the meat out on the bones.

Doug Carney – Without law enforcement, with an opening even more abuse will occur in 19A, since with the new registration hunt there will be some legitimate hunting going on in 19A.

No one present wanted to see the herd lose the little ground it has gained, and would rather see the area remain closed, rather than risk a hunt that would destroy that.

From this discussion, SHAC used its list of hunt options, added others, and came up with conditions SHAC believes would contribute to a cautious, prudent, and limited registration hunt opening.

Using the list of options for a hunt, the latest survey information, and through discussion of this list and other issues, SHAC agreed on a list of conditions for a registration hunt. SHAC believes these conditions would offer a hunt in the area that would possibly allow the herd to continue to grow, as well as limit the ability of some forms of hunt abuse and possibly over-harvest of moose in the area. This list follows SHAC comments on Proposal 165 at the end of these minutes.

Half hour break for dinner at 6pm.

Resumption of meeting at 7 p.m.

- BOG proposals for the statewide meeting were considered and voted on- (1-17) 4, 5, 10,11, 12,13, 14, 15 / 41, 42, 52, 54
- If any members have other proposals for BOG or BOF meetings that you want to discuss, say so now and we'll add them. *Josh suggested a couple.*
- Proposal discussion & comments

Barb Carlson - Fisheries update

- Barb went over 5 ACRs for BOF – 3,4,5,6,7. SHAC voted unanimously to allow Barb to write comments and testify –reflecting the support or opposition that SHAC gave these ACRs- if they become proposals.
- **Following discussion, she asked for and got approval from SHAC to make comments on the ACRs as well as to submit a proposal for SHAC to allow dip netting in the Kuskokwim drainage.**
- A short discussion on how BOF proposal 276 /RC46 will go into effect the summer of 2018, if we are again in times of Chinook conservation. This will allow some limited harvest of Chinook with a permit, if fishing above Aniak.

BOF ACRs Discussed & voted on -

ACR 3 – Oppose – Will make the possibility of targeting Chinook in times of conservation even worse than what was seen with 4” mesh nets.

ACR 4 – No Action –only affects communities below the Kolmokoff River – the locals there need to decide this one.

Stony-Holitna AC Minutes: 09/19-20/2017

ACR 5 – Oppose – This is already being done very well through Emergency Order with lots of lead time to let people know about the coming closure.

ACR 6 – Oppose – This is already being done well by Emergency order. Making it a regulation may limit managers' options in unforeseen ways.

ACR 7 – Oppose – This may be needed in the non-salmon spawning tributaries down in the tidally influenced part of the Kuskokwim Drainage, but serves no purpose above the tide area, except to limit ability to catch non-salmon species during Chinook closures.

The meeting adjourned at 9pm on Sept.19, and reconvened at 9am on Sept.20.

There were additions and changes made to SHAC's recommendation list for the registration hunt that the committee approved. The hunt opening was changed from 7 to 5 days, and the permit cap wording was changed to "Up to 75 permits." Also the trigger for a closure was added – "when bull: cow ratio drops to 35 bulls: 100 cows."

Other Business – none

SHAC comments on Proposal 165 (ACR 1) for Feb. 2018 BOG Meeting

SHAC OPPOSES Proposal 165 - (as it did ACR 1)

In ACR 1 the author claims to be a subsistence hunter and though he has lived in Sleetmute 31 years, ADF&G records show that between 1993 and 2017 this "subsistence hunter" had a hunting license only in 2004 and 2005, and got a permanent ID card in 2009. (ADF&G records only go back to 1993.) The above statements are the only ones in the ACR, which are not repeated in Proposal 165.

Issues to address in both the ACR and Proposal 165- (Proposal text excerpts are in quotes – ***comments are bold & in italics***)

- "Permits would be available at the store in Sleetmute." ***The author could have said "My store", where he sells gasoline, groceries, and has a B&B. It would be financially profitable for the permits to be available in his store.***
- "The fish and game survey of spring 2017 showed there is a harvestable population for the first time since the closure in 2006." ***'Harvestable surplus' is what he must be thinking of.***
- "This hunting season should have been available in the 2017 cycle of the Board of Game for Interior-Northeast Arctic Region, however weather conditions did not allow for aerial surveys to validate this opening until the board cycle was past." ***SHAC had its meeting Dec.8, 2016, after the Nov. 2016 composition count, and did not put in an ACR then. The Feb. 2017 GSPE survey shows a rather low density. A harvestable surplus does not mandate an opening, and neither does an aerial survey. A Tier II hunt has always been available. It was considered by the 4 communities in the area, and rejected in 2006.***
- "The advisory committee was not able to put an agenda change request together because of all the summer activities of its members." ***SHAC had no intention of making an Agenda Change Request, but summer activities do make meetings difficult, as does the hunting season. The area biologist had also decided that rather than hurrying a meeting before the Sept 11 ACR deadline with the purpose of putting in an ACR for an opening, he wanted to have***

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a face-to-face AC meeting to explain in detail what a limited opening could be like, so folks in the area could get a good picture of it. To ensure people showed up for the meeting, the biologist and SHAC chair planned on a meeting in October, and then had to make it earlier due to Josh's schedule, and PFDs coming out.

- *Later, on September 19-20, 2017, the SHAC meeting in Sleetmute, went as planned. The biologist gave the latest moose survey information. The biologist and SHAC Chair explained how the registration hunts could have conditions to limit the take of animals.*

Feb. 2017 Survey power point

Some things to be aware of when studying page 2 of the Area Biologist's survey power point –

- Do not confuse the label "West" at the top of the table to mean all of what we have been calling the Tier II portion of 19A - TM680 containing 5735 sq. miles. The "West" of this table contains only a portion of what we call 19A West.
- The label "East" does mean all 4289 sq. miles of 19A East –the closure area we are discussing in Prop 165.
- Those composition surveys that have been done in 19A East -the closure area - have been done in the best habitat area, as the map shows. This applies to the Nov. 2016 survey as well. This survey area is within the Wolf Control Focus area,(WCFA), and also the Bear Control Focus Area (BCFA).
- **In the Nov, 2016 comp. survey - the high 58 bulls:100cows and 55 calves:100 cow ratios** were found within the Bear Control Focus Area, which contains 534 square miles. This area is about 12% of 19A East, and 15% of 19A East, (less the LVMA.) **Keep in mind, that this is where the composition counts have been done in recent years – yet the hunt opening would be in all of 19A East.** The 1.4 moose per square mile is comparatively high within 19A East, but is not unimpressive when considering what the habitat could and did support until the late 1990s.
- The other 84 or 88% of 19A East has extremely low moose concentrations of 0.5 per square mile.
- **The Nov, 2017 comp. survey - 36 bulls:100 cows, and 34 calves:100 cows** shows much lower ratios compared to last year.
- **The table below**, (included in the Nov. 2016 comp count memo), shows comp counts from previous years, with the Nov.2017 comp count added

Regulatory year	Moose	Cows	Calves	Calves: 100 cows	Bulls	Bulls:100 cows
2007–2008	200	111	50	45	39	35
2008–2009	124	77	21	27	26	34
2009–2010	129	69	25	36	35	51
2010–2011	212	127	24	19	61	48
2011–2012	164	97	30	31	37	38
2013–2014	244	119	59	50	66	55
2016–2017	273	128	71	55	74	58
2017-2018	300	176	60	34	64	36

The bull:cow ratio is almost exactly what SHAC has recommended, (35bulls:100 cows), for a trigger to close any hunt that BOG may choose to open.

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There is now a harvestable surplus in 19A that is greater than the ANS for the GMU. By regulation, the Tier II hunt will have to be changed to another sort of hunt at the Region 3 BOG meeting cycle in 2020. There is however, no regulation that forces a hunt opening in the closure area, and no particular need to open a season out of cycle.

- The Feb. 2017 ADF&G survey shows 0.5 animals per square mile in the closure area, which is a very low concentration of moose.
- There are 2 separate, identified herds in 19A that have been managed separately since 2006.
- There are several legitimate reasons / differences for separating GMU 19A into 2 subunits, and this also bears serious consideration. As things stand now, with one ANS and one harvestable surplus for all of 19A, along with other issues, a separation would make sense.

Some background on the 19A hunt closure

The 2006 moose closure originated with the four village councils in the area, (Lime Village, Stony River, Sleetmute, and Red Devil), and some members of the “Old” Central Kuskokwim Advisory Committee, (CKAC). This course was taken after watching the continuing moose population dive during the two, (2004-2005), registration hunt seasons. At the 2006 Region 3 BOG meeting, BOG voted to make eastern 19A a closure area, and western 19A was put into Tier II. There was no harvestable surplus in the closure area at that time.

CKAC members from Stony River and Sleetmute wanted a closure on moose hunting, with any future harvestable surplus to be used to build the herd rather than having a Tier II hunt. These 4 village traditional councils made resolutions in support of this.

Since the closure went into effect in Fall, 2006, the SHAC Chair and the last 2 biologists have been making a list of hunt condition options to include in any future hunt opening.

The Nov. 2016 & Feb, 2017 survey results have not led to any movement in these villages for an opening. The only proponent of an opening that SHAC is aware of is this proposal’s author, and one of his employees.

The timing, conditions, and decision of whether or not to open a moose hunt in this closure area is of great importance to the communities that SHAC represents, so members of the public were encouraged to take full part in the discussion with the committee much more than usual, while surveys were explained, and hunt conditions were considered.

At this meeting SHAC discussed possible hunt options if/ when a hunt is approved by BOG, and agreed on what should be included in the list of recommendations. These recommendations are made to help ensure the possibility of continued herd growth, while allowing a limited take of animals. SHAC believes each of these recommendations is vital for these considerations.

Three Primary issues of importance to SHAC and area residents concern hunt opening and closing–

- There is no compelling reason to consider an opening out of cycle.
- When/if survey numbers show a lowering moose population, at a specified point, (such as a low bull-cow or calf-cow ratio), the area would return to a closure, rather than going into Tier II.
- That permits **NOT** be made available at the Hill Enterprises Store, but at the Sleetmute Traditional Council office.

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SHAC , STC, and community members oppose an opening earlier than fall, 2019.

The rationale for this is that 2019 would be 5 years after the Bear Control program ended in 2014, and this would give an extra generation of cows the opportunity to have calves.

This is similar to what was done in McGrath, where there was a 5-year moratorium on hunting moose after the Bear Removal Program was done in that area.

- In its comments, SHAC made clear its opposition to ACR1, and asked the Board not to accept it at the Oct.4 BOG teleconference.
- STC also sent BOG its comments of opposition to both ACR1 and Proposal 165.
- The Sleetmute Traditional Council comments made it clear that SHAC represents the people of Sleetmute and the area, and that the author of ACR1/ 165 does not.

Since BOG did vote to accept ACR 1, and also to address it at the Feb, 2018 BOG meeting as Proposal 165, SHAC urges the Board not open a hunt out of cycle.

Whenever an opening is approved, SHAC urges the implementation of its list of hunt opening recommendations printed below.

SHAC's Hunt Recommendations for an Experimental Tier I / Subsistence Registration Hunt in 19A/East

Considerations -

- **Moose herd #s are very low in the Closea Area / 0.6 moose/sq. mile**
- **There is a lack of law enforcement in the area**
- **Most likely will not get a checkpoint installed.**
- **Boat hunters claiming they killed moose in 19B, but actually killed in 19A will continue & increase.**

Conditions -

- On the Kuskokwim River, (GMUs 18 & 19), **only one permit hunt can be applied for in a season.** This presents enforcement difficulties, (There is no Wildlife Protection Trooper in Aniak). It may be difficult to verify that persons getting permits for this hunt don't already have permits elsewhere. **Make it a large and presumptive penalty for having more than one permit, or other violations of the hunt restrictions.**
- Hunters accessing the Holitna Watershed by boat, (at least within the Holitna Hoholitna CUA), can hunt moose in 19A and 19B only if they possess this 19A registration permit. (2008Region 3 BOG Meeting / SHAC Prop13)
- **5- day hunt opening /Sept. 1-5.** Have the hunt coincide with other permit hunts in GMUs 18 & 19 / Have 19A east hunt opening occur at same time as 19A Tier II , GMU 18 reg hunt, 19D registration hunts.
- **Permits will be issued in July, and issue dates will be determined by the area biologist.**
- **The area biologist should be authorized to issue as many as 75 permits , and adjust the number issued up or down, according to moose survey results**
- **The 1st hunting season should not occur before Fall, 2019.** After the McGrath Bear Removal Program, there was a 5-year moratorium on moose hunting in that area, so that there would be another generation of cows mature enough to bare calves. SHAC would like to see the same delay for a hunt happen in 19A.
- **In the 1st hunt season, 30 permits will be issued for 1 antlered bull.**
- **10 permits will be issued in Stony River, and 20 in Sleetmute**
- **Permits will be issued in July at the Traditional council offices on 2 successive days - 1 day in Sleetmute, and 1 day in Stony River.** (Dates in July are to be decided by the area biologist)Wording should be, "permits available within the hunt area- **in person only**"
- **Only one permit will be issued to a household.**

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- **Proxy hunters for elders will be allowed for this hunt.**
 - **Hunt reporting must be done within 15 days of hunt closure.** Failure to turn in a report will result in no permit eligibility for the next season.
 - **It is understood that if or when moose #s in 19A East become low – the area will return to a closure, rather than going into Tier II.**
 - **The trigger for return to a closure is - *If/when the bull:cow ratio drops to 35 bulls : 100 cows, the area returns to a closure.***
 - Composition counts should be done each year to see how population is doing –(Bull:cow/ calf:cow)
 - Law enforcement is low in the area –have it increased during the reg. hunt and during the 19B season.
- Other conditions considered - but not agreed on or recommended -**
- No commercial services allowed – no guiding, outfitting, transporting services to be used
 - Access for hunt only by scheduled commercial aircraft to publicly maintained strips in one of the villages, (SLQ, Stony, RD)
 - A checkpoint @ mouth of Holitna.
 - Make this hunt a winter subsistence hunt – open in Nov. or Feb.
 - Cap on the number of moose taken (20), with 1 or 2 days to report success.

Adjournment: 10am, Sept.20

Minutes Recorded By: Nissa Pilcher & Barb Carlson
Minutes Approved By: Doug Carney
Date: 01/10/18

BETHEL Fish and Game Advisory Committee

October 3, 2017
ADF&G Office, Bethel

CALL TO ORDER: 6:02 PM

ROLL CALL/ ESTABLISH QUORUM: *(6 for Quorum)*

Lekander

Tikiun

Kassman

Hunter

Lavalle

Kohl

Rodgers

Hunter excused at 7:30pm

ELECT OFFICERS:

Chair: Jamie Kassman

Vice Chair:

Secretary: Jon LaValle

INVOCATION:

MOMENT OF SILENCE: *In honor of Greg Roczicka*

INTRODUCTION OF GUESTS: *(List)*

Sara Mutter resource specialist AVCP

Patrick Jones area bio

Ken Stahlnecker USFWS

Tim Andrew ONC

Jennifer Hooper AVCP

Dave Runfola Subsistence

COMMENTS:

- CONCERNS/COMMENTS OF **PUBLIC**: None
- CONCERNS/COMMENTS OF **AC MEMBERS**:
- Henry Hunter- Concerns about the fishing in the summer of 17, wanted to make sure we take up concerns on the next meeting.
(Note: If concern/comment needs more than 5 minutes, item should be placed on the agenda to be presented later in the meeting)

Alaska Board of Game Central/ Southwest Region Meeting
February 16–23, 2018, Dillingham

Proposal Number	Proposal Description		
Support, Support as Amended, Oppose, No Action	Number Support	Number Oppose	Comments, Discussion (List Pros and Cons), Amendments to Proposal
157	Reauthorize the nonresident antlerless moose season in the Remainder of Unit 18		
Support	7	0	LaValle motion to support, 2 nd Kohl
163	Reauthorize the current resident tag fee exemptions for brown bear in Units 18, 22, 23 and 26A		
Support	7	0	LaValle motion to support, 2 nd Tikiun
164	Allow the use of crossbows in archery hunts for hunters 60 years of age and older.		
NO ACTION			Kohl Motion to support, 2 nd Tikiun Kohl rescinds motion Kohl motion to take no action
ACR 1	Open a registration hunt for moose in 19a		
Support as Amended	6	0	Kohl Motion to support, 2 nd Tikiun LaValle motion to amend, 2 nd Kohl Amend to say: Registration permits should be made available at all license vendors in the Kuskokwim drainage. We want them available at all vendors in the Kuskokwim drainage because of the long history of tradition use from downriver villages hunting in this area.

Adjournment:

Minutes Recorded By: [Signature]

Minutes Approved By: [Signature]

Date: 10/24/17

February 13, 2018

VIA ELECTRONIC MAIL

Tim Pilon, PE
Alaska Department of Environmental Conservation
Division of Water - Wastewater Discharge Authorization Program
610 University Avenue
Fairbanks, AK 99709-3643
E: Tim.Pilon@alaska.gov

Re: Waste Management Permit for Donlin Gold, LLC – Draft 2017DB0001

Dear Mr. Pilon,

Earthjustice submits these comments on behalf of [groups].¹ The Draft Waste Management Permit (WMP) for the Donlin Gold Project raises several concerns that the Alaska Department of Environmental Conservation (ADEC) must address before deciding whether to issue the permit. These concerns relate to the WMP itself and the documents it incorporates by reference,² including Donlin Gold's plans for managing solid waste, wastewater, tailings, and waste rock, as well as for monitoring the environment during operations and beyond.

Waste Management Permit

A waste management permit is required for every facility in Alaska that will dispose of solid waste on land³ or discharge wastewater into waters of the United States.⁴ When evaluating permit applications, ADEC should consider its responsibility to “minimize health and safety threats, pollution, and nuisances” from solid waste⁵ and to “protect the environment and water quality from degradation by discharge of wastewater.”⁶ Legal requirements applicable to—and potential problems with—various aspects of Donlin Gold's plans are discussed below. This

¹ This letter incorporates comments by the Center for Science in Public Participation on the Draft Waste Management Permit and associated documents. [forthcoming]

² ADEC, Draft Waste Management Permit for Donlin Gold, LLC at 1 (Dec. 2017) (WMP).

³ 18 AAC 60.200(a).

⁴ *Id.* § 72.500(a).

⁵ *Id.* § 60.200(a).

⁶ *Id.* § 72.005(a)(2).

section identifies issues specific to the WMP, including allowing degradation of water quality in waters of the United States and permitting a mine without adequate financial assurances for closure and post-closure monitoring.

The WMP asserts that “[t]he Lewis and ACMA mine pits, along with the [tailings storage facility], and Lower and Upper [contact water dams] are parts of the wastewater treatment works. Under 18 AAC 70.010(c), [water quality standards] do not apply to a treatment works.”⁷ ADEC makes this assertion despite the fact that the pits and the waste rock facility would occupy the American Creek drainage, and the tailings storage facility would sit in the Anaconda Creek drainage,⁸ which, as tributaries of Crook Creek and the Kuskokwim River, both qualify as “waters of the United States.”⁹ Thus, the permit only requires Donlin Gold to prevent *off-site* water quality exceedances.¹⁰ This rationale is flawed, for the following reasons.

There is no basis for the assertion that water within the mine facilities is not “waters of the United States” and is exempt from the federal Clean Water Act, as administered by ADEC. Nothing in the statute, the regulations, or any agency policies exempts mines from the Act. The only exception that could be applicable to some mine components is one for “waste treatment systems.”¹¹ While, for example, the U.S. Army Corps of Engineers (“the Corps”) and the U.S. Environmental Protection Agency (EPA) might make a determination that a properly designed tailings storage facility would qualify as a “waste treatment system” under the rule defining “waters of the United States,” the entire mine plainly would not.

As a general rule, it should not be permissible to deem an existing jurisdictional water to be a waste treatment system. To do so defeats the purposes of the Clean Water Act. The legislative history of the Act observes that “[t]he use of any river, lake, stream or ocean as a waste treatment system is unacceptable.”¹² The exemption for waste treatment systems in the

⁷ WMP at 5.

⁸ See Donlin Gold, Water Resources Management Plan at 2-5, Fig. 2-1 (Feb. 2017, Rev. 1) (Water Management Plan).

⁹ See 40 C.F.R. § 122.2.

¹⁰ See WMP at 5; see also *id.* at 6 (“Wastewater may be disposed to the mine pit at closure provided that [ADEC] determines that there will not be a detrimental impact on long term, offsite, water quality.”); *id.* at 10 (“The permittee shall control and treat surface water, groundwater, and seepage from the mining and milling areas as necessary to prevent causing downgradient, offsite, water quality exceedances in water of the State.”).

¹¹ 40 C.F.R. § 122.2, *Waters of the United States or Waters of the U.S.*, (2)(i).

¹² S. Rep. No. 92-414, at 7 (1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3674.

current definition of “waters of the United States” is not consistent with the Clean Water Act and was not properly adopted.¹³

The original exclusion for waste treatment systems made clear, appropriately, that this exception applied only to manmade systems not originally created in or from impoundment of waters of the United States.¹⁴ Shortly thereafter, in 1980, EPA temporarily suspended this sentence due to concerns about its effect on existing systems, but explained:

EPA intends promptly to develop a revised definition and to publish it as a proposed rule for public comment. At the conclusion of that rulemaking, EPA will amend the rule, or terminate the suspension.¹⁵

That was 38 years ago, but neither EPA nor the Corps has completed the promised rulemaking. In light of the dubious legal underpinnings of this temporary suspension, ADEC should consider the inevitable violations of water quality standards in the American Creek and Anaconda Creek valleys when evaluating Donlin Gold’s permit application.

Even were it appropriate to convert pristine streams into waste dumps, Donlin Gold’s plan raises serious concerns about the company’s future financial solvency and ability to ensure the continued quality of offsite waters such as Crooked Creek and the Kuskokwim River. Post-closure, the lake that forms in the mining pit will require water treatment in perpetuity.¹⁶ Yet the operator of a mining waste disposal facility must supply “proof of financial responsibility to manage and close the facility in a manner that [ADEC] finds will control or minimize the risk of the release of unauthorized levels of pollutants from the facility to waters.”¹⁷ It is unclear from the draft permit what the form and amount of the financial assurance would be.¹⁸

The Corps’ draft environmental impact statement (DEIS) for the project states that Donlin Gold would establish a “Post-Reclamation and Closure Maintenance Trust Fund” to

¹³ See Br. of Pet’rs, *In re U.S. Dep’t of Def. & U.S. Env’tl. Prot. Agency Final Rule: Clean Water Rule: Definition of “Waters of the United States,”* 80 Fed. Reg. 37,054 (June 29, 2015), Case Nos. 15-3751, 15-3817, 15-3820, 15-3839 & 15-3948 at 28–39 (6th Cir., filed Nov. 1, 2016).

¹⁴ See 45 Fed. Reg. 33,290, 33,424 (May 19, 1980); see also 40 C.F.R. § 122.2, *Waters of the United States or Water of the U.S.*, (2)(i).

¹⁵ 45 Fed. Reg. 48,620 (July 21, 1980).

¹⁶ See Water Management Plan at 4-11.

¹⁷ AS 46.03.100(f). Likewise, the owner or operator of a landfill must supply proof of financial responsibility covering the costs of closure and post-closure monitoring. 18 AAC 60.265.

¹⁸ See WMP at 20.

provide adequate funding for perpetual treatment and post-closure monitoring of pit-lake water.¹⁹ It does not discuss this issue further, instead appending a memorandum by Donlin Gold regarding the company's proposed financial assurances.²⁰

According to Donlin Gold's memorandum, a draft integrated waste management plan may include a range of cost estimates for long-term post-closure water treatment²¹—although that does not appear to be the case here.²² The memorandum offers no accounting of the amount of funding needed to guarantee perpetual water treatment at the pit lake. It states that, “[t]o make the trust fund self-sustaining and able to cover annual post-closure costs, a total of approximately \$73 million dollars [*sic*] is required to be in place at the time of mine closure.”²³ The memorandum provides no breakdown of costs or any other explanation as to how it arrived at that amount.²⁴ This omission is particularly concerning because, as the memorandum acknowledges, regulations or guidelines implementing Alaska's statutory trust fund language have not been developed.²⁵ Additionally, estimating future replacement and operating costs can be difficult.²⁶ Without knowing the basis for Donlin Gold's cost estimate, it is impossible for ADEC or the public to evaluate the possible long-term environmental consequences of the project.

Donlin Gold's memorandum does mention a few assumptions underlying the amount of initial funding required for the trust fund at mine closure, but these assumptions only heighten the need to disclose detailed cost calculations. For example, it states that “[c]osts for long-term post closure activities were estimated out to 200 years after closure,” a time period “sufficient to demonstrate that the post-closure trust fund can be self-sustaining in perpetuity.”²⁷ This assumption is plainly invalid because water treatment will be required in perpetuity. The memorandum also indicates that the trust fund's post-closure growth was calculated using

¹⁹ S. Army Corps of Engineers, Donlin Gold Project Draft Environmental Impact Statement at 2-40 (Nov. 2015) (DEIS).

²⁰ *See generally id.* App. A.

²¹ DEIS App. A at 2, 3.

²² *See generally* Donlin Gold, Integrated Waste Management Plan (Dec. 2016) (IWMP).

²³ DEIS App. A at 7. This amount is astonishingly low, compared to the \$558 million that the Red Dog mine had to guarantee for reclamation as of 2016. *See* Alaska Department of Natural Resources, Red Dog Mine Reclamation Plan Approval at 3 (Sept. 2016). Whatever the final amount, Donlin Gold must cover the unfunded part with traditional financial assurances, even if it makes regular contributions during the operating life of the mine.

²⁴ *See id.*

²⁵ *See id.* App. A at 3.

²⁶ *See* D. M. Chambers, A Position Paper on Perpetual Water Treatment for Mines at 1 (June 2007) (Chambers Position Paper).

²⁷ DEIS App. A at 7.

targeted returns for the Alaska Permanent Fund, and that annual cost inflation was calculated using a five-year average of the Anchorage consumer price index.²⁸ It is unclear how those metrics will be directly relevant to the growth of the trust fund and the costs of operating a water treatment plant in southwest Alaska. Inflation rates in Alaska, including in Anchorage, have hit historic lows in recent years,²⁹ potentially leading to an underestimate of the dollars needed to close the mine decades from now. Indeed, “changing either the inflation rate or the rate for return-on-investment by a single percentage point will cause a huge change on the required” amount of initial funding.³⁰ A buffer for steep economic declines, dramatic changes in energy costs, unexpected impacts from climate change or weather events, lake overturn, and other unforeseen challenges inherent in a large, complex system should also be built into the estimate. ADEC should not issue a waste management permit before it has deemed sufficient—and the public has had an opportunity to assess—Donlin Gold’s proposed financial assurances.

Integrated Waste Management Plan

Donlin Gold’s Integrated Waste Management Plan (IWMP) involves the disposal of nonhazardous solid waste at the mine site and the temporary storage of hazardous wastes until they can be shipped to offsite facilities.³¹ ADEC’s regulations governing solid-waste management apply to the former and require that landfills be designed, built, and operated to minimize health and safety threats, pollution, and nuisances.³² The agency must deny a permit if the proposed landfill would lead to a violation of water quality standards or is unstable, and it must impose conditions on a permit to ensure that safety hazards are minimized.³³ ADEC cannot approve a landfill at a site underlain by permafrost unless the owner or operator demonstrates that there is no practical alternative and the design and operation of the landfill protect permafrost.³⁴ Regarding hazardous wastes, federal regulations dictate that both small- and large-quantity generators take measures to ensure containment before shipping the waste off-site.³⁵ Donlin Gold’s proposed IWMP does not satisfy these requirements, and improvements or additional protective conditions are necessary.

The company intends to dispose of inert wastes in landfills constructed as trenches within the waste rock facility. The waste rock facility will sit atop permafrost,³⁶ and Donlin Gold does

²⁸ *Id.*

²⁹ See N. Fried, *The Cost of Living: Inflation Lowest Since 1988, Mainly Due to Falling Energy Costs* at 4 (July 2017).

³⁰ Chambers Position Paper at 1.

³¹ IWMP at 2-1.

³² 18 AAC 60.005(a).

³³ *Id.* § 60.215(a)(3), (8), (b)(3).

³⁴ *Id.* § 60.227(a), (b).

³⁵ See 40 C.F.R. §§ 262.16, 262.17.

³⁶ See DEIS at 3.2-11, Fig. 3.2-2.

not explain why it is infeasible to place inert waste elsewhere.³⁷ The company intends to design and operate landfills to prevent water from reaching solid wastes.³⁸ For instance, it speculates that it would apply “an appropriate intermediate cover of soil or rock” “[w]hen needed,” and eventually cover each landfill with a layer of rock as the waste rock facility takes shape.³⁹ Donlin Gold should commit to more-specific corrective actions—including identifying what would trigger them—in order to prevent water from contacting exposed refuse and compromising water quality standards.

The IWMP indicates that the company would attempt to reduce, reuse, and recycle materials during operations.⁴⁰ Mine plans are well developed enough to allow Donlin Gold to identify such opportunities and commit to implementing them in a permit condition. Indeed, it lists materials that could be salvageable but retains the option of discarding them if recycling is not “economically feasible.”⁴¹ It also promises to “look for offsite facilities that recycle [hazardous] [light] bulbs whenever possible.”⁴² Even scrap metal, a seemingly versatile material, would only be recycled “[t]o the extent practical.”⁴³ ADEC should mandate reasonable recycling through concrete permit conditions.⁴⁴

As for hazardous waste, Donlin Gold acknowledges that EPA regulates “large quantity generators” more stringently than it does “small quantity generators,”⁴⁵ but it defers making this determination for mine operations and suggests that its status might vary from month to month.⁴⁶ Enough information is available to make a conservative prediction now,⁴⁷ and the company

³⁷ See 18 AAC 60.227(a).

³⁸ IWMP at 2-11.

³⁹ *Id.* at 2-11 to 2-12.

⁴⁰ See IWMP at 2-6; see also *id.* at 2-8 (“Donlin Gold would evaluate the cost/benefit of its recycling program on a regular basis. Recycling opportunities would vary based on the need for recycled materials, vendors available to handle recycled materials, costs, economic factors, etc. Donlin Gold would adjust its recycling practices to respond to these changes.”).

⁴¹ *Id.* at 2-8.

⁴² *Id.* at 3-8.

⁴³ *Id.* at 3-12.

⁴⁴ To take one example, it is unclear why small-vehicle tires could be returned to the vendor but heavy-equipment tires could not. See *id.* at 2-12.

⁴⁵ See *id.* at 2-14 to 2-15 & Tbl. 2-2.

⁴⁶ See *id.* at 2-14.

⁴⁷ Cf. *id.* at 2-16 (concluding that the mine would be a small-quantity handler of “universal waste”).

should do so, as the distinction matters for up-front work such as contingency planning.⁴⁸ Donlin Gold should also publish its contingency plans for releases of hazardous waste before ADEC issues a permit. Rather than wait to see which category it falls within in a given month, it should commit to shipping waste off-site more frequently⁴⁹ and should fully comply with more-stringent container-management requirements.⁵⁰

Several key omissions prevent the public from evaluating and meaningfully commenting on the permit application. The IWMP does not describe or depict the planned locations of satellite accumulation areas for hazardous waste, nor the central hazardous-waste accumulation area.⁵¹ It refers to secondary containment for hazardous waste but does not outline designs.⁵² It lists a number of potentially hazardous chemicals or reagents to be used in ore-processing but does not specify which ones will have to be shipped off-site.⁵³ Along the same lines, it notes the possibility of spills of caustic or acidic compounds without identifying potential sources at the mine.⁵⁴ Although sodium cyanide is an “extremely hazardous substance,” methods for cleaning up spills are absent from the plan.⁵⁵ There are apparently no measures to ensure that petroleum-contaminated materials, which are considered non-hazardous waste, moved from the pit to the waste rock pile would not pollute the surroundings through runoff.⁵⁶ All of this information is essential for the public and ADEC to assess the risks of disposal of non-hazardous wastes and temporary storage of hazardous wastes on-site, and the agency should not approve Donlin Gold’s proposal until it is made available.

Other important documents have yet to be finalized. The company’s mercury management plan was still in development as of December 2016⁵⁷ and is not incorporated into the draft permit. Similarly, the federally required oil spill prevention, control, and countermeasures plan has yet to be prepared.⁵⁸ ADEC should not issue a permit until the mercury plan is finalized and has been provided to the public for review and comment.

⁴⁸ *See id.* at 2-15, Tbl. 2-2; *see also id.* App. A (comparing contingency-planning requirements for small-quantity and large-quantity generators of hazardous waste).

⁴⁹ *See id.* at 2-14.

⁵⁰ *See id.* at 2-15, Tbl. 2-2.

⁵¹ *See id.* at 2-14.

⁵² *See id.* at 2-18; *see also id.* at 2-20 (mentioning a “secure storage area with secondary containment” for sodium cyanide).

⁵³ *See id.* at 3-3.

⁵⁴ *See id.* at 3-6.

⁵⁵ *See id.* at 3-5.

⁵⁶ *See id.* at 3-6.

⁵⁷ *Id.* at 2-9; *see also id.* at 2-10, 2-18.

⁵⁸ *See id.* at 4-1 & Tbl. 4-1.

Water Resources Management Plan

There are no legal requirements in ADEC’s regulations that apply specifically to a water resources management plan. Nonetheless, to the extent that a plan indicates potential violations of water quality standards⁵⁹ and involves a nondomestic wastewater treatment works or disposal system,⁶⁰ as with the Donlin Gold Project, the information it contains is critical to ADEC’s decision whether to issue a permit. Among other things, the agency must determine whether the plan inadequately protects public health and the environment and, if so, attach corrective terms and conditions.⁶¹ ADEC should do so here.

Excess precipitation could upset the mine’s water balance and overwhelm diversion channels, retention structures, and the water treatment plant. For example, the overburden stockpiles and their sediment ponds would only accommodate rainwater from the 10-year return-period, 24-hour storm.⁶² Meanwhile, the water treatment plant’s maximum design capacity (4,750 gpm) is only slightly higher than the anticipated maximum treatment rate (4,441 gpm). Donlin Gold uses precipitation data from 1940 to 2010 in its water balance models without making any attempt to account for projected changes due to climate change.⁶³ Although trends are not pronounced, there is some evidence that precipitation anomalies have increased in central

⁵⁹ See 18 AAC 70.010(a) (prohibiting operations that cause or contribute to violations of water quality standards).

⁶⁰ See *id.* § 72.600(a) (requiring ADEC’s prior approval of a nondomestic wastewater treatment works or disposal system); see also *id.* § 72.990(41)(C) (defining “nondomestic wastewater” as “liquid or water-carried wastes other than domestic wastewater,” including wastes resulting from the development of natural resources); *id.* § 72.990(42) (defining “nondomestic wastewater disposal system” as “a device or structure designed to dilute, dispose, or discharge nondomestic wastewater”); *id.* § 72.990(43) (defining “nondomestic wastewater treatment works” as “a plant, device, structure, or other works designed to treat, neutralize, or stabilize nondomestic wastewater or sludges”).

⁶¹ See 18 AAC 72.600(d).

⁶² See Water Management Plan at 3-9; see also *id.* at 3-15 (noting that there would be no spillway for the lower contact water dam because it would be designed to contain 24-hour probable maximum precipitation).

⁶³ See *id.* at 2-1; see also *id.* at 2-3 (noting a similar data set for snowfall).

interior Alaska over the past few decades.⁶⁴ The company should consider the possibility of more-frequent and heavier rainfall and snowfall over the life of the mine and adjust its plans accordingly.

Baseline water quality measurements, or lack thereof, raise further concerns. The Water Management Plan indicates that monitoring of conditions on the Kuskokwim River, both above and below Crooked Creek, ended in 2004, with no explanation for the discontinuation.⁶⁵ There are similar data gaps in the observations of existing groundwater quality, with very few groundwater monitoring wells located outside the vicinity of the mine site.⁶⁶ Measurements at the mine site indicate significant exceedances of water quality standards in the bedrock for arsenic, manganese, and other metals;⁶⁷ the same is true for alluvium.⁶⁸ Any contamination from the mine would only exacerbate these conditions.

Of particular concern, the effectiveness of the ore stockpile berm during construction and the first year of mine operations is crucial, as it would intercept arsenic-laden seepage from the lower contact water dam.⁶⁹ Donlin Gold's plan does not explain how the berm would contain this seepage and prevent infiltration of groundwater, and there is a serious risk that a shallow aquifer would conduct water from areas near the waste rock pile to Crooked Creek.⁷⁰ If contaminated water flowed from the ore stockpile berm, through groundwater, and into Crooked Creek, that outcome would arguably be an unauthorized discharge into waters of the United

⁶⁴ P. A. Bieniek *et al.*, *Using Climate Divisions to Analyze Variations and Trends in Alaska Temperature and Precipitation*, 27 *J. Climate* 2800, 2814, Fig. 12(d) (2014) (suggesting an increase in precipitation anomalies in central interior Alaska from 1981 to 2012) (Bieniek, *Using Climate Divisions*); *see also* H. Letient, Message from the General Manager, Red Dog-Suvisi at 2 (2013 Q1) (noting a 1,000-year storm event in August 2012 that increased stored water at the Red Dog mine by 170 percent); N. Tracy, Mine Technical 2013 Projects, Red Dog-Suvisi at 3 (2013 Q4) (noting that the mine raised its tailings impoundment to respond to the same 1,000-year event).

⁶⁵ *See* Water Management Plan at 2-12, Tbl. 2-6; *see also id.* at 2-10, Tbl. 2-5 (describing the monitoring stations).

⁶⁶ *See id.* at 2-20, Fig. 2-6; *see also id.* at 2-24 (noting monitoring wells in Snow Creek and Crevice Creek).

⁶⁷ *Id.* at 2-24.

⁶⁸ *See id.* at 2-25.

⁶⁹ *Id.* at 3-2, 3-6.

⁷⁰ T. Myers, Technical Memorandum: Review of the Draft Environmental Impact Statement for the Donlin Gold Project at 4, 5, 24-26 (May 11, 2016) (Myers Memorandum).

States, violating the Clean Water Act (CWA).⁷¹ Even after the ACMA pit intrudes into the American Creek drainage,⁷² migration of contaminants via groundwater could prove problematic.

Broader questions remain as to the usefulness of the groundwater-conductivity measurements presented in the Water Management Plan, for both overburden and bedrock. Donlin Gold's analysis examines conductivity of bedrock too simplistically in areas not adjacent to the pit, possibly understating drawdown by pit-dewatering wells.⁷³ Low estimates of conductivity in colluvium and alluvium could also inappropriately minimize the effects of pit dewatering on Crooked Creek.⁷⁴ Underestimating conductivity could also cause the water treatment plant to be undersized. If mine construction and operations dramatically reduce flow in Crooked Creek, discharges of waste water into the stream would have more-acute effects on water quality.

ADEC could require, as permit conditions, simple design changes that would reduce the risk of violating water quality standards. For example, Donlin Gold could line and move overburden stockpiles and associated collection ponds to areas that would drain into contact water ponds, lessening the risk of metal-leaching and seepage.⁷⁵ It should also consider diverting water around the tailings storage facility and away from laydown areas that could contain mining equipment.⁷⁶ It could line the seepage recovery system pond (intended to receive water from the lined tailings storage facility) and provide backup pumping in case the primary pumps fail for longer than three days.⁷⁷ ADEC might also require a suspension of operations as soon as seepage signature is detected in the compliance monitoring wells below the seepage recovery system.⁷⁸ The agency must consider these and other permit conditions before approving Donlin Gold's scheme for managing wastewater.

⁷¹ See *Hawai'i Wildlife Fund v. Cty. of Maui*, No. 15-17447, 2018 WL 650973, at *5–6 (9th Cir. Feb. 1, 2018) (holding that an “indirect discharge” of pollutants into the ocean through groundwater requires a permit under the CWA); see also *Sierra Club v. Abston Constr. Co.*, 620 F.2d 41, 43, 45 (5th Cir. 1980) (concluding that sediment basins designed to collect runoff from coal-mine overburden that sometimes overflowed were point sources subject to regulation under the CWA); *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 374 (10th Cir. 1979) (finding that a sump intended to collect excess leachate or runoff from gold-mining operations was a point source).

⁷² Water Management Plan at 3-6.

⁷³ Myers Memorandum at 29.

⁷⁴ *Id.* at 29-30.

⁷⁵ See Water Management Plan at 3-8 to 3-9.

⁷⁶ See *id.* at 3-11, Fig. 3-4.

⁷⁷ See *id.* at 3-18.

⁷⁸ See *id.*

Tailings Management Plan

Facilities accepting tailings—*i.e.*, mining wastes that result from ore processing—are subject to the specific regulatory requirements for “monofills.”⁷⁹ Thus, a tailings dump cannot be located in wetlands unless there is no practical alternative site, construction and operation of the facility would not cause or contribute to the violation of water quality standards or to the significant degradation of wetlands, and steps have been taken to achieve no net loss of wetlands.⁸⁰ Construction is also impermissible in a seismic impact zone⁸¹ unless the owner or operator demonstrates that all containment structures, liners, and leachate collection systems will resist maximum horizontal acceleration.⁸² Monofills must not pose a hazard to the health, safety, or property of persons outside the boundary of the facility.⁸³ For the reasons below, Donlin Gold’s Tailings Management Plan does not satisfy these requirements, and ADEC cannot issue a permit without changes to the plan or additional permit conditions.

As an initial matter, the plan does not address the tailings storage facility’s embankment or dam safety requirements, which have yet to be developed.⁸⁴ Without this information, ADEC has no basis on which to determine that the structure would withstand an earthquake and therefore cannot conclude that it meets the regulatory requirements for monofills.

The company’s proposal also does not ensure that contaminants will not escape the tailings facility, degrading water quality and wetlands and potentially harming public health. It indicates that the facility would not overflow even with a 200-year return period snowmelt, the 24-hour probable maximum rainfall, and “excess water accumulation under average conditions in the site water balance,” with emergency freeboard to spare.⁸⁵ In light of the nearly 30-year mine life,⁸⁶ the potential for mine expansion upriver,⁸⁷ the potential for increased precipitation

⁷⁹ See 18 AAC 60.400(a), 60.455.

⁸⁰ 18 AAC 60.410(a)(2)(A); *id.* § 60.315.

⁸¹ The mine site appears to lie within a seismic impact zone, defined as an area with 10 percent or greater probability that the maximum horizontal acceleration will exceed .10g in 250 years, *id.* § 60.990(123). See DEIS at 3.3-8 (indicating that there is a 10 percent probability of equaling or exceeding .10g at the mine site in 50 years).

⁸² 18 AAC 60.410(a)(2)(B)

⁸³ *Id.* § 60.420(a)(1).

⁸⁴ Donlin Gold, Tailings Management Plan at 1-1 (Dec. 2016, Rev.1) (“Tailings Management Plan”).

⁸⁵ *Id.* at 2-2.

⁸⁶ *Id.* at 3-2.

⁸⁷ In a presentation for investors Donlin Gold co-owner NOVAGOLD noted that there are “[g]ood prospects to discover meaningful deposits outside [the] current mine footprint,” and that “[r]eserves and resources are contained within just 3 km of an 8 km long trend.” NOVAGOLD, 2016 First Quarter & Project Update at 12 (Apr. 2016).

with climate change,⁸⁸ and the possibility of wetter-than-average conditions at the mine site, it is far from clear that the unspecified emergency freeboard would suffice.⁸⁹

Loss of integrity of the tailings storage facility's liner would likewise harm waters and wetlands and jeopardize public health. Donlin Gold admits that, should the operating pond inundate the entire operating beach, ice formation could tear the liner; it does not estimate the risk of this outcome or provide any mitigation measures other than designing the facility so as to avoid inundation.⁹⁰ Confusingly, the plan earlier states that "operating pond water is predicted to come in contact with exposed liner over substantial lengths"⁹¹ and lists as an objective "[i]mplement[ing] actions that protect exposed liner areas from ice."⁹² It also suggests that movements of the barge that would pump reclaimed water back to the processing plant could damage the liner, without explaining how this damage might happen or proposing mitigation measures.⁹³ Further, while the plan characterizes the risk as low, there is some potential for acid rock drainage,⁹⁴ and it remains unclear whether acidic tailings would compromise or weaken the liner over time. Thaw-induced settlement of the ground beneath the tailings storage facility could also tear the liner and allow contaminants to escape.⁹⁵

Monitoring of groundwater below the seepage recovery system and the proposed corrective actions do not suffice to protect water quality. The company intends to sample groundwater quarterly at monitoring/interceptor wells, and, upon detecting leachate from the tailings storage facility, to install production pumps that will intercept groundwater flows.⁹⁶ Yet, as the DEIS observes, it would take only two weeks for leachate containing a wide range of contaminants to enter Anaconda Creek and then flow into Crook Creek, resulting in high-

⁸⁸ Bieniek, *Using Climate Divisions* at 2814, Fig. 12(d) (suggesting an increase in precipitation anomalies in central interior Alaska from 1981 to 2012).

⁸⁹ The same is true for the diversion channels, which direct runoff from undisturbed ground away from the tailings storage facility and are only designed to accommodate 200-year-return-period peak flows. *See* Tailings Management Plan at 3-12. For the collection pond below the tailings storage facility, the plan takes into account the 100-year, 34-hour rain-on-snow event, *id.* at 3-11, which is similarly inadequate.

⁹⁰ *Id.* at 3-7.

⁹¹ *Id.* at 3-2.

⁹² *Id.* at 3-1.

⁹³ *Id.* at 3-1.

⁹⁴ *Id.* at 2-7.

⁹⁵ *See* DEIS at 3.2-80 ("Continued and/or permanent degradation of frozen soils are accounted for in stability analyses and thaw settlement design at mine facilities of critical importance, such as the [tailings storage facility] and [waste rock facility], which would reduce most permafrost impacts during operations to low to medium intensity levels.").

⁹⁶ Tailings Management Plan at 3-11.

intensity impacts.⁹⁷ Donlin Gold should commit to monitoring groundwater below the tailings storage facility more frequently and to pre-installing pumps that could completely intercept seepage. Until the company does so, ADEC cannot permit the facility under the monofill regulations.

Waste Rock Management Plan

Mining waste such as waste rock is subject to the general permitting requirements for solid waste disposal.⁹⁸ The permit applicant must show that the facility receiving the waste will not cause a violation of water quality standards,⁹⁹ will be able to withstand catastrophic events such as earthquakes and permafrost-melting,¹⁰⁰ and will have enough funds for closure and ongoing monitoring.¹⁰¹ Donlin Gold's Waste Rock Management Plan falls short of these requirements.

The company's proposal fails to protect surface water and groundwater from contamination. It identifies two main threats to water quality: (1) acid generation from the oxidation of sulfide minerals, leading to acid rock drainage (ARD); and (2) leaching of contaminants such as arsenic and sulfate.¹⁰² To mitigate ARD, the company intends to mix alkaline (basic) rock with acid-generating rock, in order to neutralize the acid.¹⁰³ This approach would not solve the latter problem, however, as arsenic can leach even in non-acidic

⁹⁷ DEIS at 3.7-158.

⁹⁸ See AS 46.03.100(a) (requiring prior authorization for the disposal of solid waste); *id.* § 46.03.900 (defining "solid waste" to include "discarded solid or semi-solid material" and "mining waste" as "solid waste from the extraction . . . of ores and minerals"); 18 AAC 60.200(a) (requiring permits for solid waste facilities). The regulations exempt "drilling, trenching, and other activities described in AS 46.03.100(f) that are not subject to the permit requirements of AS 46.03.100." 18 AAC 60.200(a)(11). This exemption appears mistakenly to refer to AS 46.03.100(f), which imposes the *additional* requirement of proof of financial responsibility for mining waste disposal facilities. Subsection (e), which does not apply here, exempts from permitting incidental discharges of solid waste from "mineral drilling, trenching, ditching, and similar activities." See AS 46.03.100(e)(4)(A).

⁹⁹ 18 AAC 60.215(a)(3).

¹⁰⁰ *Id.* § 60.215(a)(8).

¹⁰¹ *Id.* § 60.265. The draft permit notes the general requirement for financial assurances but does not indicate the specific instruments that Donlin Gold would use. See WMP at 20-21.

¹⁰² Donlin Gold, Waste Rock Management Plan at 2-3 (Dec. 2016, Rev. 1) ("Waste Rock Management Plan").

¹⁰³ *Id.* at 3-4, 3-5 to 3-7.

conditions¹⁰⁴ and is “a potentially significant concern for almost all waste rock, due to widespread elevated concentrations in the rock and leachability indicated by testwork.”¹⁰⁵

Donlin Gold’s plan to counteract acid generation with less acidic waste rock does not ensure that ARD will not occur. The company has rejected the more conservative ratios of alkaline-to-acidic rock used by other jurisdictions, such as California and British Columbia, in favor of a ratio indicated by site-specific test results.¹⁰⁶ This approach leaves little margin for error. Compounding the problem, the company intends to test excavated materials for acidity monthly¹⁰⁷ even though the testing is supposed to inform the “short-term mine planning process”¹⁰⁸ and 422,000 tons of rock would be removed from the pit daily.¹⁰⁹ In the long term, the plan identifies a need for sufficient neutralizing materials to cap the waste rock pile upon closure, but it does not indicate how much rock might be needed or how the company would hold it in reserve, other than to remove it from the pit last or place it in unidentified stockpiles.¹¹⁰

Donlin Gold proposes different management for waste rock that could generate acid especially quickly. Potentially acid-generating level-6 rock would be stored in “isolated cells” with a non-acid-generating rock drain beneath during construction and a gravel cap above upon completion.¹¹¹ Level-7 rock would be placed in a stockpile area and eventually moved to one of the mine pits.¹¹² In year 22 of the mine life, all level-6 and level-7 rock will go to the pit.¹¹³ The Waste Rock Management Plan does not explain where drainage from the isolated cells would flow (presumably to a contact-water pond below the waste rock pile¹¹⁴), nor does it indicate how seepage from the temporary stockpiles would be intercepted.¹¹⁵ ADEC cannot issue a permit without greater assurances that high-risk waste rock will not produce ARD. Further, ADEC should consider requiring Donlin Gold to move level-6, not merely level-7, rock to the pit as soon as the pit becomes available.

¹⁰⁴ *Id.* at 3-2.

¹⁰⁵ *Id.* at 3-4.

¹⁰⁶ *See id.* at 3-4 n.1.

¹⁰⁷ *Id.* at 6-1.

¹⁰⁸ *Id.* at 4-2.

¹⁰⁹ *Id.* at 1-1.

¹¹⁰ *Id.* at 4-4 to 4-5.

¹¹¹ *Id.* at 4-5.

¹¹² *Id.*

¹¹³ *Id.* at 4-7.

¹¹⁴ *Id.* at 5-2.

¹¹⁵ *Id.* at 4-5.

There is also concern about contamination of groundwater from an unlined waste rock pile. Donlin Gold predicts that surface water and groundwater would flow to the lower contact water pond and, from there, toward the pit.¹¹⁶ According to a technical memorandum prepared by hydrologist Tom Myers, however, there is a “significant probability” that a shallow aquifer will “short circuit seepage from the waste rock dump to Crooked Creek.”¹¹⁷ The memorandum concludes that the “only effective mitigation would be to avoid [waste rock facility] seepage by having a liner under the waste rock.”¹¹⁸ EPA has also recommended that “all [waste rock facilities] containing acid-generating rock be lined to prevent infiltration into groundwater.”¹¹⁹ ADEC should take these expert opinions into account when deciding whether to authorize the proposed activities, and it should at the very least include the installation of a liner as a permit condition.

The collapse of a waste rock pile more than 1,000 feet tall¹²⁰ could cause catastrophic harm to nearby waters and wetlands. The Waste Rock Management Plan notes that slope-stability designs were completed in 2011,¹²¹ yet serious questions remain about the facility’s structural integrity. The DEIS observes that areas upslope of the waste rock facility situated on ice-rich soils could become unstable, especially if hydraulic erosion occurs.¹²² Seismic events could also cause deformation or slope failure if ice-rich soils remain under the waste rock facility after construction.¹²³ Donlin Gold’s engineering consultant concluded in 2011 that excess ice in soils was not pervasive at the mine site even though about a third of the samples tested contained excess ice.¹²⁴ The consultant recognized that, where excess ice is present, thaw-induced settlement could compromise the integrity of the waste rock facility.¹²⁵ Yet neither the feasibility study nor the DEIS considers the impacts of climate change on the waste rock facility’s stability,¹²⁶ and the DEIS’s assertion that areas of permafrost underneath structures would largely be shielded from warming is unsupported.¹²⁷

¹¹⁶ *Id.* at 5-2.

¹¹⁷ Myers Memorandum at 4, 5, 24-26.

¹¹⁸ *Id.* at 26.

¹¹⁹ U.S. Army Corps of Engineers, Donlin PDEIS – Agency and Applicant Comments Elevated to the Corps at 3, 4 (July 30, 2015).

¹²⁰ Waste Rock Management Plan at 5-1.

¹²¹ *Id.*

¹²² DEIS at 3.2-81.

¹²³ *Id.* at 3.2-79; *id.* at 3.3-41 to 3.3-42.

¹²⁴ BGC Engineering, Inc., Donlin Creek Gold Project Feasibility Study Update II: Waste Rock Facility Design at 14-15 (2011).

¹²⁵ *See id.* at 46.

¹²⁶ *See id.*; DEIS at 3.2-79, 3.2-81.

¹²⁷ *See* DEIS at 3.26-41.

There is also the threat of flooding from unusually significant precipitation. During operations, the waste rock pile will rest on a rock drain designed to contain peak instantaneous flow from the 100-year, 24-hour duration rainfall.¹²⁸ Given the nearly 30-year life of the mine¹²⁹ and the potential for increased precipitation with climate change,¹³⁰ Donlin Gold's design leaves too much to chance. Just as problematically, it is unclear what consequences would follow were flooding to overwhelm the waste rock pile's underdrain, and whether mitigation for such an event would be different in early stages of mining from that in late stages.

Routine monitoring and corrective actions, both during operations and after mine closure, are inadequate as proposed. The company plans to inspect the slopes of the waste rock pile for evidence of ARD, but it is unclear what those inspections would entail or how effective they would prove.¹³¹ Upon discovering acid-generating rock on the sides of the pile, it would dump alkaline rock on top—apparently without determining whether the acidic rock is level-6 or level-7, requiring isolation or removal to the pit.¹³² The only water-quality monitoring in the current plan would occur if employees notice seepage at the toes of the waste rock pile, and even then only of surface water quality.¹³³ After closure, the company would continue to inspect the facility only once a year for a minimum of five years, and after significant storms.¹³⁴ The plan does not provide for monitoring beyond this limited period, or for inspections following seismic events. ADEC must require commitments to monitor more thoroughly the waste rock facility's structural integrity and nearby water quality before issuing a permit.

Monitoring Plan

ADEC's regulations set forth detailed requirements for surface-water and groundwater monitoring where activities threaten water quality.¹³⁵ These requirements include corrective action when monitoring indicates violations of water quality standards.¹³⁶ Monitoring must continue through the entire post-closure period.¹³⁷ Donlin Gold's Monitoring Plan does not sufficiently protect water quality during and after operations at the mine site.

¹²⁸ Waste Rock Management Plan at 5-2.

¹²⁹ *Id.* at 1-1.

¹³⁰ Bieniek, *Using Climate Divisions* at 2814, Fig. 12(d) (suggesting an increase in precipitation anomalies in central interior Alaska from 1981 to 2012).

¹³¹ *See* Waste Rock Management Plan at 6-1.

¹³² *See id.*

¹³³ *See id.*

¹³⁴ *See od.*

¹³⁵ 18 AAC 60.810(a), (e); *id.* §§ 60.820(b), 60.850(a)–(b).

¹³⁶ *Id.* § 60.815(b); *id.* § 60.820(b)(2).

¹³⁷ *Id.* § 60.810(g); *id.* § 60.850(b)(4).

The company intends not to monitor surface-water or groundwater quality at the solid waste landfills located in trenches at the waste rock pile because the waste would be inert, runoff would be diverted from the landfills, and they would be at least 100 feet away from surface water bodies and 10 feet about the groundwater table.¹³⁸ The fact that the waste is inert does not eliminate the possibility that it will pollute water, and the preventive measures and margins for error are inadequate. ADEC should require some monitoring of water quality near the landfills if it decides to issue a permit.

Post-closure monitoring plans are especially concerning given the need for perpetual treatment of water at the pit lake. Donlin Gold proposes to monitor water quality by depth at the pit lake every five years, ending when analyses indicate a stable condition.¹³⁹ Testing should occur more frequently because, when the water in a mine pit lake mixes partially or completely, fish kills and other catastrophic events may result.¹⁴⁰ “[M]aintaining a permanently stratified pit lake” will be “importan[t] to treatment costs.”¹⁴¹ It is therefore important to detect and correct problems with stratification before they occur.¹⁴² Moreover, it is unclear why monitoring would ever cease when the company expects that the pit lake would never meet water quality standards. Donlin Gold should commit to additional, ongoing monitoring of pit-lake water quality before ADEC takes action on its application.

Monitoring issues pertaining to the tailings storage facility and the waste rock facility are discussed in the relevant sections above.

* * *

The Donlin Gold project is a massive undertaking, involving numerous waste facilities of unprecedented scale and operating timeframes. The destruction of pristine streams, the disposal and storage of mining wastes, hazardous substances, and refuse, and the risk of catastrophic failure—all without adequate financial assurances—threaten the environment and traditional ways of life in the Kuskokwim region. ADEC must require more information from the company, seek improvements to its waste management plans, and develop appropriate conditions before it can issue a permit. It should also provide an additional opportunity for the public to review and comment on any new information or changed circumstances.

Thank you for your consideration of these comments.

¹³⁸ Donlin Gold, Monitoring Plan at 2-5 (Dec. 2016, Rev. 1) (“Monitoring Plan”).

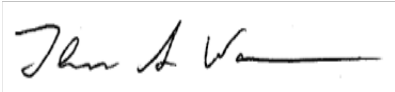
¹³⁹ *Id.* at 4-1.

¹⁴⁰ See B. Boehrer & M. Schultze, *On the Relevance of Meromixis in Mine Pit Lakes*, 7th Int’l Conference on Acid Rock Drainage 200 (2006).

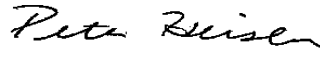
¹⁴¹ DEIS at 3.7-127.

¹⁴² Indeed, Donlin Gold predicts that “the pit lake model would be re-calibrated as data become available.” Monitoring Plan at 4-2.

Sincerely,



Thomas S. Waldo



Peter Heisler

Attorneys for [groups]

**DOCUMENTS CITED IN EARTHJUSTICE COMMENTS ON THE DRAFT WASTE
MANAGEMENT PERMIT FOR THE DONLIN GOLD PROJECT (FEBRUARY 13, 2018)**

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February 13, 2018

VIA ELECTRONIC MAIL

Allan S. Nakanishi, PE
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Re: APDES Draft Individual Permit, AK0055867 – Donlin Gold Project

Dear Mr. Nakanishi,

Earthjustice submits these comments on behalf of [groups].¹ The draft Alaska Pollutant Discharge Elimination System (APDES) permit for the Donlin Gold Project raises several concerns that the Alaska Department of Environmental Conservation (ADEC) must address before deciding whether to issue the permit. These concerns relate to (1) the potential degradation of water quality in Crooked Creek; and (2) Donlin Gold's ability to comply with the proposed limitations and responsibility to monitor water quality.

1. ADEC's analysis does not protect existing uses in Crooked Creek and inappropriately allows degradation of water quality.

The draft permit does not ensure the protection of existing uses of surface waters in the Crooked Creek basin, as required by the federal Clean Water Act (CWA) and the U.S. Environmental Protection Agency's (EPA) and ADEC's implementing regulations.² Salmon species spawn and rear in Crooked Creek and its tributaries³ and are sensitive to contaminants such as sediment, mercury, and other metals.⁴ In the village of Crooked Creek, 70 percent of households have reported relying on both chum and coho salmon for subsistence.⁵ Downstream

¹ This letter incorporates comments by the Center for Science in Public Participation, dated January 9, 2018, on the draft APDES permit and associated documents.

² See 40 C.F.R. § 131.12(a)(2); 18 AAC 70.015(a)(2).

³ U.S. Army Corps of Engineers, Donlin Gold Project: Draft Environmental Impact Statement at 3.13-25 to 3.13-26 (Nov. 2015) (DEIS).

⁴ *Id.* at 3.13-127.

⁵ *Id.* at 3.21-48 & Tbl. 3.21-6.

communities also depend on these resources for food.⁶ It is therefore essential that any permit ADEC issues contains provisions that will safeguard aquatic life, as well as human health, by preserving water quality.

The permit only requires *monitoring* of certain parameters downstream of the water treatment plant's outfall, without numerical criteria that specify limits on contamination above baseline levels or permit conditions that prompt corrective actions.⁷ Samples from the creek would be taken quarterly and test results reported to ADEC annually.⁸ These requirements are inadequate. Crooked Creek is a corridor traveled by fish to reach productive areas such as Bell Creek and Getmuna Creek,⁹ which do not appear in maps in the permit documents.¹⁰ ADEC should fully disclose the potential impacts of pollution from the mine on aquatic resources and impose stringent requirements for monitoring and maintaining in-stream water quality.

Regarding discharges from the water treatment plant, ADEC avoids its responsibility to limit whole effluent toxicity (WET) to aquatic organisms¹¹ by observing that “no effluent monitoring data for WET are currently available” and suggesting that it might impose a limit once it has the results of Donlin Gold's testing on aquatic organisms, conducted during mine operations.¹² This approach inverts the proper order of analysis and allows harm to species that ADEC's regulations are designed to protect.¹³

It is also inappropriate for the agency to consider the supposed benefits to aquatic life of adding minerals to streams¹⁴ when the need for supplemental minerals in Crooked Creek, which supports fish in its natural state, is purely speculative and assumes the only water in the creek, or

⁶ See, e.g., *id.* at 3.21-55 (Aniak); *id.* at 3.21-61 (Chuathbaluk); *id.* at 3.21-70 (Bethel).

⁷ ADEC, Alaska Pollutant Discharge Elimination System Permit – Draft at 9–11 (Dec. 2017) (Draft Permit).

⁸ *Id.* at 10–11 & Tbl. 5.

⁹ See DEIS at 3.13-8, Fig. 3.13-1.

¹⁰ See ADEC, Alaska Pollutant Discharge Elimination System Permit Fact Sheet – Draft at 25–30 (Dec. 2017) (Fact Sheet).

¹¹ 18 AAC 83.435(c), (e); see also *id.* § 70.030 (describing WET).

¹² Fact Sheet at 13–14.

¹³ The agency asserts that “[c]ompliance with applicable [water quality standards] are [*sic*] protective of aquatic life uses . . . and will ensure that these WET limits will be met.” *Id.* at 19. If water quality criteria necessarily protected aquatic organisms from the harms of toxic pollution, however, there would be no need for WET limits or testing in the first place. We agree with the Center for Science in Public Participation (CSP2) that WET testing should use coho salmon as a test fish, rather than the resilient fathead minnow. CSP2, Comments on Draft APDES Permit #AK0055867 for Donlin at 5 (Jan. 9, 2018) (CSP2 Comments).

¹⁴ Fact Sheet at 19.

the vast majority of water, comes from the treated mine discharge.¹⁵ This assumption is at odds with schematics showing that freshwater flow from Anaconda Creek just downstream of the water treatment plant's outfall would be equivalent to, or four times greater than, the discharge flow.¹⁶ Realistically, the degree to which effluent makes up the volume of water in reaches immediately below the outfall will be seasonal. At any rate, the enhancement of some biological conditions is irrelevant to the determination whether the mine's discharges would change ambient water quality, violate water quality criteria,¹⁷ or cause toxicity such that they would degrade water quality.¹⁸

Some pollution of Crooked Creek from effluent discharges will inevitably occur, yet ADEC and the state of Alaska have failed to comply with the CWA's antidegradation requirements. EPA's implementing regulations mandate that, where water quality exceeds the levels necessary to protect fish, shellfish, wildlife, and recreation, water quality must be protected unless the state finds that degradation is necessary to accommodate important economic or social development.¹⁹ ADEC's determination in this regard is based solely on the economic benefits of the mine to regional corporation shareholders and to mine employees; it does not take into account the significant environmental risks and disruptions that mining will impose on local residents and their traditional ways of life.²⁰ ADEC asserts that its analysis is conservative in that it assumes that Crooked Creek is a Tier 2 water body entitled to heightened protections, while simultaneously admitting that no Tier 3 water bodies—"outstanding national resource[s]" that in no circumstances can be degraded²¹—have yet been designated in Alaska.²² The agency cannot issue a permit to discharge pollutants into Crooked Creek until it has conducted a comprehensive antidegradation analysis.

¹⁵ As CSP2 points out, some forms of these minerals can in fact harm aquatic life. *See* CSP2 Comments at 3.

¹⁶ *See* Fact Sheet at 26, Fig. 2 (showing a minimum discharge rate from the water treatment plant of 1,593 gallons per minute (gpm) during construction); *id.* (showing flow from Anaconda Creek into Crooked Creek of 5,072 gpm during construction); *id.* at 27, Fig. 3 (showing a minimum discharge rate from the water treatment plant of 1,293 gpm during operations); *id.* (showing flow from Anaconda Creek into Crooked Creek of 1,048 gpm during operations).

¹⁷ 18 AAC 70.020.

¹⁸ *Id.* § 70.030.

¹⁹ 40 C.F.R. § 131.12(a)(2); *see also* 18 AAC 70.015(a)(2) (listing additional findings that ADEC requires).

²⁰ *See* Fact Sheet at 18. The closest that the agency comes to considering these impacts is in its conclusion that "reasonable and effective pollution prevention, control, and treatment methods are being used," *id.*, which is a separate finding within the antidegradation analysis.

²¹ 40 C.F.R. § 131.12(a)(3); 18 AAC 70.015(a)(3).

²² *See* Fact Sheet at 17.

As part of its antidegradation analysis, ADEC must find that the worsened water quality resulting from its approval will nonetheless be adequate to protect existing uses of the water.²³ When making this determination, the agency should consider all the ways in which a project might degrade water quality—not just the project’s discharges of pollutants.²⁴ ADEC has overlooked several important concerns regarding the mine’s effects on water quality in Crooked Creek.

Mercury deposition could be a major problem for a facility that will be grinding and heating ore in a region with above-average baseline mercury concentrations.²⁵ In the background section of its fact sheet, ADEC notes that “[s]tate of the art mercury abatement controls would be installed at each of the major thermal sources, including the autoclave, carbon kiln, gold furnaces, and retort,”²⁶ but it does not discuss the issue further. The draft environmental impact statement (DEIS) for the project, however, discloses that mercury deposition in nearby watersheds could increase by about 42 percent due to mining operations.²⁷ Increases to biologically available methylmercury could be similarly substantial.²⁸ The DEIS acknowledges that this pollution might push surface water above the applicable chronic criterion but dismisses that concern because some existing concentrations already exceed the limit.²⁹ ADEC cannot ignore the potential consequences of increased mercury deposition for existing uses of Crooked Creek when deciding whether to issue a permit.³⁰

Temperature changes resulting from mining could also affect aquatic life in this water body. The DEIS downplays the issue by suggesting that surface-water inputs would counteract

²³ 18 AAC 70.015(a)(2)(C); *see also* 40 C.F.R. § 131.12(a)(2) (“In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully.”).

²⁴ *Cf. Islander E. Pipeline Co. v. McCarthy*, 525 F.3d 141, 154–164 (2d Cir. 2008) (upholding an agency’s denial of a water quality certification for a natural gas pipeline proposed for Long Island Sound based on anchor strikes and cable sweeps, engineered backfill, and sedimentation and drilling fluid releases).

²⁵ *See* DEIS at 3.1-8 (“The rock is categorized as hydrothermal mercury-antimony-gold intrusion.”); *id.* at 3.2-123, Table 3.2-13 (listing mercury deposition in soil post-mining).

²⁶ Fact Sheet at 7.

²⁷ DEIS at 3.7-151.

²⁸ *Id.* at 3.7-153 (predicting an increase of 42 percent over baseline levels of methylmercury due to the proposed action).

²⁹ *See id.* at 3.7-152.

³⁰ Although it would be difficult to quantify the mercury deposition specifically from mining-related activities on water quality in Crooked Creek, ADEC could conservatively lower the concentration of mercury allowed in effluent, particularly the maximum daily limit, in order to ensure that deposition does not exacerbate already elevated levels of this pollutant and thereby degrade water quality.

any warming from treated groundwater discharged into Crook Creek.³¹ Yet the DEIS also notes that, during mining operations in the summer, “reductions in groundwater inputs to Crooked Creek could cause stream temperatures in reaches near the mine to be close to or above the State of Alaska’s water quality temperature standard . . . for egg/fry incubation and spawning and . . . migration and rearing.”³² Indeed, temperature is included among the state of Alaska’s water quality criteria, with stricter standards for areas fish use for migration and spawning.³³ ADEC must specify a temperature limit for Donlin Gold’s proposed discharges in order to protect existing uses;³⁴ it makes little sense to require monitoring of this parameter without explicitly stating a limit in the permit.³⁵

The agency must also consider the effects of reduced flow in Crooked Creek on water quality.³⁶ Although the amount of water in the stream would not affect concentrations of pollutants in the effluent released from the water treatment system, less water would mean that the resulting concentrations in Crooked Creek would be higher. Furthermore, reductions in streamflow could have significant effects on salmon habitat,³⁷ which would be compounded with the harms from pollution. ADEC does not address either of these concerns, simply noting that, as a state agency, it is not required to consult with the National Marine Fisheries Service about essential fish habitat.³⁸ Nevertheless, ADEC does have an obligation to ensure that degradation of a Tier 2 water body will not impair existing uses, so it must consider the effects of reduced flow when deciding whether to grant a permit.

2. ADEC must address concerns about compliance and monitoring before issuing a permit.

Serious questions remain about Donlin Gold’s ability to comply with the effluent limitations proposed in ADEC’s draft permit, or even in its own environmental analysis. As an initial matter, Donlin Gold’s Water Management Plan and the DEIS do not list expected levels of

³¹ *Id.* at 3.7-143; *see also id.* at 3.13-113 (noting the same diluting effect in the context of impacts on aquatic organisms).

³² *Id.* at 3.13-114.

³³ *See* 18 AAC 70.020(b), Table at (10)(A)(iii), (10)(C).

³⁴ More basically, APDES permits must include conditions reflecting applicable water quality standards. *See* 18 AAC 83.430(a)(2); *see also* 33 U.S.C. § 1313(c)(2)(A).

³⁵ *Compare* Fact Sheet at 14, Table 4 (listing temperature as a parameter to be monitored in Crooked Creek), *with id.* at 10–11, Table 2 (not listing temperature as a parameter to be limited in the permit).

³⁶ *See* DEIS at 3.7-147 (“Regardless of their final use or consumption, the diversion and storage of waters in the Crooked Creek watershed would result in reduced rates of runoff and base flow that would normally reach surface waters in the proposed project area.”).

³⁷ *Id.* at 3.13-101.

³⁸ Fact Sheet at 22.

nitrate in the effluent from the water treatment system, even though ADEC's draft permit limits it.³⁹ The Water Management Plan provides few reassurances regarding several parameters, as it simply lists the projected maximum concentrations in effluent as less than the applicable water quality standard (which in every case differs from that calculated in the draft permit).⁴⁰ CSP2 observes that water from the pit wells, which will not undergo treatment by reverse osmosis, will contain unacceptable levels of aluminum, arsenic, and total suspended solids.⁴¹ ADEC must address these issues before it issues a permit.

Even assuming the water treatment system would bring the mine's discharges within parameters under normal operating conditions, its maximum design capacity (4,750 gallons per minute) is troublingly close to the anticipated maximum treatment rate (4,500 gallons per minute).⁴² Should an unexpected influx of water occur, as during a large storm,⁴³ large rain-on-snow event,⁴⁴ or if mining intercepts a deep bedrock aquifer, Donlin Gold's water balance model—on which ADEC relies⁴⁵—might not accurately predict the amount of water needing treatment. The DEIS discusses the potential for above-average precipitation during operations,⁴⁶ but, unlike with post-closure,⁴⁷ it does not disclose the effects of a once-in-a-century flooding event on water balance. ADEC should take into account the unlikely but potentially significant water quality effects of a 100-year storm, which could more than double the amount of rainfall over 24 hours from the largest storm expected every two years⁴⁸ and overwhelm the water treatment system.

Further, the monitoring requirements proposed in the draft permit are not adequate to ensure that discharges from the mine will comply with effluent limitations. EPA recommends that state agencies consider a number of factors when setting monitoring frequency, including the

³⁹ Compare Donlin Gold, Water Management Plan at 4-10, Tbl. 4-6 (Feb. 2017) (Water Management Plan), and DEIS at 3.7-139, Tbl. 3.7-39, with Fact Sheet at 11, Tbl. 2.

⁴⁰ Compare Water Management Plan at 4-10, Tbl. 4-6, with Fact Sheet at 33–34, Tbl. B-2.

⁴¹ CSP2 Comments at 2.

⁴² Fact Sheet at 8.

⁴³ See, e.g., H. Letient, Message from the General Manager, Red Dog-Suvisi at 2 (2013 Q1) (noting a 1,000-year storm event in August 2012 that increased stored water at the Red Dog mine by 170 percent); N. Tracy, Mine Technical 2013 Projects, Red Dog-Suvisi at 3 (2013 Q4) (noting that the mine raised its tailings impoundment to respond to the same 1,000-year event).

⁴⁴ See, e.g., H. Angeloff *et al.*, Alaska Climate Dispatch: A State-wide Seasonal Summary & Outlook at 6 (winter 2012–13) (reporting a 48 percent positive departure from normal precipitation conditions in McGrath in autumn of 2012).

⁴⁵ *Id.*

⁴⁶ See DEIS at 3.5-78 to 3.5-79, 3.5-80, Figure 3.5-22.

⁴⁷ See *id.* at 3.5-88.

⁴⁸ Water Management Plan at 2-3, Tbl. 2-3.

capacity of the treatment facility, the treatment method used, the sensitivity of waters affected, and the toxicity of pollutants, among others.⁴⁹ At the very least, the agency should explain its choices as to monitoring frequency in the fact sheet accompanying its draft permit.⁵⁰ ADEC has set mostly weekly sample frequencies, with no explanation.⁵¹ The agency must include some rationale for its decision as to monitoring frequency, addressing each of the factors that EPA has identified as relevant. Doing so is all the more important here, as Donlin Gold would be discharging toxic substances such as mercury and cyanide into a pristine, anadromous stream. Moreover, ADEC should not allow the company to monitor water quality less frequently simply because it has been in compliance for a year.⁵²

As noted above, we share CSP2's concern that the permit does not define violations of water quality standards downstream of the outfall and does not prompt corrective action when monitoring results there indicate an increase in concentrations of contaminants over baseline levels.⁵³ ADEC must remedy this shortcoming before it can issue a permit.

* * *

The APDES permit that Donlin Gold has requested is not a routine authorization. The mine would generate huge quantities of contact water loaded with dangerous chemicals and contaminants, and, although the company would treat the water before releasing it, it would nonetheless pollute an anadromous stream that is a tributary to one of the most important subsistence rivers in the state, the Kuskokwim. ADEC must preserve existing uses of the stream, address whether the project is economically and socially justified before allowing any degradation, and assure compliance with appropriate effluent limitations. To do otherwise would be to violate the CWA and abdicate the agency's role in protecting Alaska's waters.

ADEC should also inform residents and the public that water treatment will be needed in perpetuity, with permits granted every five years, forever. It should acknowledge that it has never before knowingly permitted a project that would need permits well beyond its operating life. The unprecedented scale—both spatial and temporal—of this project calls for an especially careful, transparent process shaped by input from a fully informed public.

Thank you for your consideration of these comments.

⁴⁹ See EPA, NPDES Permit Writers' Manual at 8-5 (Sept. 2010).

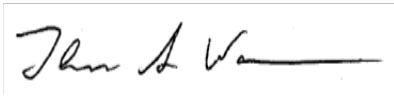
⁵⁰ *Id.*

⁵¹ See Fact Sheet at 11–12, Table 2.

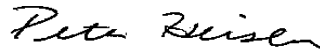
⁵² See Draft Permit at 6.

⁵³ See CSP2 Comments at 3–4; see also Draft Permit at 9–11 (requiring only monitoring of receiving water quality).

Sincerely,

Handwritten signature of Thomas S. Waldo in black ink, enclosed in a thin black rectangular border.

Thomas S. Waldo

Handwritten signature of Peter Heisler in black ink.

Peter Heisler

Attorneys for [groups]

**DOCUMENTS CITED IN EARTHJUSTICE COMMENTS ON THE DRAFT APDES
PERMIT FOR THE DONLIN GOLD PROJECT (FEBRUARY 13, 2018)**

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**Boards Support Section
Board of Fisheries**
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PO Box 115526
Juneau, AK 99811-5526
(907) 465-4110



Alaska Department of Fish and Game
Sam Cotten, Commissioner
PO Box 115526
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CALL FOR PROPOSALS Alaska Board of Fisheries

**THE ALASKA BOARD OF FISHERIES CALLS FOR PROPOSED CHANGES
IN THE SUBSISTENCE, PERSONAL USE, SPORT, GUIDED SPORT, AND COMMERCIAL
FISHING REGULATIONS FOR THE
BRISTOL BAY FINFISH, ARCTIC / YUKON / KUSKOKWIM FINFISH, ALASKA
PENINSULA / ALEUTIAN ISLANDS / CHIGNIK FINFISH AREAS, and
STATEWIDE FINFISH AREAS.**

PROPOSAL DEADLINE – TUESDAY, APRIL 10, 2018

The Alaska Board of Fisheries (board) is accepting proposed changes to the subsistence, personal use, sport, guided sport, and commercial fishing regulations for the Bristol Bay, Arctic-Yukon-Kuskokwim, Alaska Peninsula-Aleutian Islands-Chignik, and Statewide finfish management areas. Finfish includes salmon, herring, trout, other freshwater finfishes, and groundfish, including Pacific cod, for consideration by the board in its 2018-19 meeting cycle. The board may also consider subsistence proposals for other topics (including other areas) under the subsistence proposal policy, 5 AAC 96.615, if proposals are submitted within this deadline and the board determines they meet the criteria in either 5 AAC 96.615(a)(1) or (2).

To ensure the proposal book is finished in advance of the board meetings, the board sets Tuesday, April 10, 2018, as the proposal deadline.

Proposals may be submitted online, email, mail or fax at:

Online: <http://www.adfg.alaska.gov/index.cfm?adfg=fisheriesboard.forms>

Email: dfg.bof.comments@alaska.gov (*Adobe PDF documents only*)

Mail: ADF&G, Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

Fax: (907) 465-6094

Proposals must be received by Tuesday, April 10, 2018 at the Boards Support Section office in Juneau. A postmark is NOT sufficient for timely receipt.

Interested parties are encouraged to submit proposals at the earliest possible date. The Board of Fisheries proposal form, including the on-line proposal form, is available at the Boards Support website, <http://www.adfg.alaska.gov/index.cfm?adfg=fisheriesboard.forms>. Proposal forms are also available at any Boards Support office. Proposals must be submitted on the current approved form. Any additional information provided with the form, such as tables, Internet web links, or charts, will not be included in the proposal book.

The completed proposal form must contain a contact telephone number and address. Email addresses are appreciated. Please print or type the individual's or organization's name as appropriate.

All proposals are reviewed prior to publication. Language that is emotionally charged detracts from the substance of the proposal and may draw opposition not germane to the element(s) of the proposal. Such language may be edited or deleted prior to publication. **Proposals that do not meet the call will not be accepted.** Proposals must pertain to the region, species, and uses in this call. If duplicative proposals are received by the same individual or group only one will be included in the proposal book.

Proposals published in the proposal book will be referenced with the appropriate Alaska Administrative Code citation and include a brief description of the action requested.

Proposal books are sent to advisory committees and the public for review and comment. Proposals are online at <http://www.adfg.alaska.gov/index.cfm?adfg=fisheriesboard.proposalbook>. Those submitting proposals are encouraged to review the proposal book at their earliest convenience to ensure proposals are included and accurate. Noted errors and omissions should be reported to Boards Support immediately. The public is encouraged to visit the Board of Fisheries website frequently for news and information regarding the upcoming cycle.

Responsive proposals received by the proposal deadline will be considered by the Board of Fisheries during the October 2018 through March 2019 meeting schedule.

For more information, please contact the Alaska Board of Fisheries Executive Director, (907) 465-4110.

INSTRUCTIONS FOR COMPLETING PROPOSAL FORM

(Revised 10/12/13)

Top of form check boxes:

- As appropriate, insert information about the fish or game management unit your regulation would change.
- Depending on the venue in which the regulation change will be heard, check the appropriate box(es) for the activities the regulation change would affect.
[Alaska Legislature Infobase, 5AAC.](#)

Fillable numbered boxes:

1. If known, enter the series of letter and numbers which identify the regulation to be changed. For example, 5 AAC 72.055. If it will be a new section or provision, then enter 5 AAC 72.XXX.
2. Write a short explanation about the issue your proposal addresses, or why you are proposing the regulation change. Address only one issue per proposal. State the issue clearly and concisely. The board will reject proposals that contain multiple or confusing issues.

State why the regulation change should be adopted or provide an explanation about what will happen if the regulation is not changed.

To assist you in development of your issue statement (#2 on the form), you may want to consider the following:

- What would happen if nothing is changed?
 - What are other solutions you considered? Why did you reject them?
3. Print or type your proposal as you would like to see it appear in the regulation book. The boards prefer that revised regulatory language is provided. **New or amended text should appear first and be in bold text and underlined.** [REGULATORY TEXT BEING DELETED SHOULD BE FULLY CAPITALIZED AND ENCLOSED IN BRACKETS]. It is not necessary to bold and underline text if entire change contains new language.

EXAMPLES: **5 AAC 27.810. Fishing seasons and periods.**

In the Togiak and Bay districts, herring may
be taken by purse seines and hand purse
seines from April 25 through **July 15** [JUNE 1]

5 AAC 85.025(3). Unit 9(B) Caribou.

NONRESIDENT HUNTERS: **2** [3] caribou; however,
no more than 1 bull may be taken.

Alternatively, you may state your changes in clear sentences. For example, “Extend the season to July 15 in the Togiak and Bay districts,” or “Reduce the bag limit for caribou in Unit 9(B) to two caribou.”

Bottom of form (submission block):

- Write the name of the group that voted to submit the proposal or your name if you are submitting the proposal. This name will be published in the proposal book. The boards of Fisheries and Game will not consider anonymous proposals.
- Fill in your address and zip code, and telephone number. These will NOT be published; it simply enables us to reach you if clarification is necessary.

Mail or fax the completed form to the address at the top of the form.

Alaska Board of Fisheries/Game
P.O. Box 115526
Juneau, AK 99811-5526
Fax: 907-465-6094

NOTE: Proposals must be received by the deadline in the call for proposals; there are no exceptions. A fax is considered an original. The form must be physically received by fax or mail; postmark is not adequate.

If you have any questions or need assistance, please consult staff at any Fish and Game office.

