



WESTERN INTERIOR ALASKA
SUBSISTENCE REGIONAL
ADVISORY COUNCIL
Meeting Materials

*April 4-5, 2023
Aniak*



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On the cover...

Koyukuk River near Wiseman



Photo by Anita Ritenour

WESTERN INTERIOR SUBSISTENCE REGIONAL ADVISORY COUNCIL

Aniak (tentative)
Arviiq Center (if in Aniak)
April 4-5, 2023
convening at 9:00 am daily

TELECONFERENCE: call the toll-free number: 1-866-617-1525, then when prompted enter the passcode: 54006314

PUBLIC COMMENTS: Public comments are welcome for each agenda item and for regional concerns not included on the agenda. The Council appreciates hearing your concerns and knowledge. The Chair will identify the opportunities to provide public comments. Please fill out a comment form to be recognized by the Council chair. Time limits may be set to provide opportunity for all to testify and keep the meeting on schedule.

PLEASE NOTE: These are estimated times and the agenda is subject to change. Contact staff for the current schedule. Evening sessions are at the call of the chair

AGENDA

*Asterisk identifies action item.

- 1. Invocation**
- 2. Call to Order** (*Chair*)
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 - Vice-Chair (*New Chair*)
 - Secretary (*New Chair*)
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- 9. Reports**
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11. Old Business (*Chair*)

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12. New Business (*Chair*)

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 - ii. Western Arctic Caribou Herd Working Group Proposal Discussion
- b. Wildlife Closure Reviews (*OSM, Wildlife Division*)
 - i. WCR24-20 – Unit 24, remainder (Kanuti Controlled Use Area): closed to moose hunting by non-Federally qualified users..... 30
 - ii. WCR24-43 – Unit 19A, remainder: closed to moose hunting except by residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek..... 48

Crossover

- iii. WCR24-38 – Unit 18 (Kuskokwim River hunt area): closed to moose hunting except by residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmoutlaur, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag and Kalskag 63
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- h. Hunter Liaison Program Information (*OSM*)
- i. Fisheries Resource Monitoring Program Presentation; Native Village of Napaimute Project
- j. Fisheries Resource Monitoring Program Update (*OSM, Fisheries and Anthropology Divisions*)
- k. Partners for Fisheries Monitoring Program
- l. Denali National Park and Preserve Individual C&T Analyses* (*NPS*)..... 102
- m. Fisheries Resource Monitoring Program Presentation; Native Village of Napaimute Project Update
- n. Regulatory Cycle Update (*OSM, Fisheries and Anthropology Divisions*)
- o. Fisheries Temporary Special Action Request
 - i. FSA23-01: Kanektok River Chinook and Chum Salmon Fishing Closures to Non-federally Qualified Users During June 2023 and June 2024* (*OSM, Fisheries and Anthropology Divisions*)..... 132

- p. Call for State of Alaska Board of Game Wildlife Proposals* (*Council Coordinator*)
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(Time limit of 15 minutes unless approved in advance)

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 - iii. Yukon Kuskokwim Delta National Wildlife Refuge Update 144
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 - i. Gates of the Arctic National Park and Preserve Update
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15. Closing Comments

16. Adjourn (*Chair*)

To teleconference into the meeting, call the toll-free number: 1-866-617-1525, then when prompted enter the passcode: 54006314

Reasonable Accommodations

The Federal Subsistence Board is committed to providing access to this meeting for all participants. Please direct all requests for sign language interpreting services, closed captioning, or other accommodation needs to Nissa Pilcher, 907-455-1847, nissa_batespilcher@fws.gov, or 800-877-8339 (TTY), by close of business on March 24, 2023.

REGION 6—WESTERN INTERIOR ALASKA REGIONAL ADVISORY COUNCIL

Seat	Year Appointed <i>Term Expires</i>	Member Name Community	Represents
1	2022	VACANT	
2	2022	VACANT	
3	1993 2025	Pollock Simon Sr. Allakaket	Subsistence
4	2021 2023	Kevin Whitworth McGrath	Subsistence
5	1993 2023	Jack Reakoff Wiseman	Chair Subsistence
6		VACANT	
7	2008 2023	Timothy Gervais Ruby	Comm/Sport
8	2021 2024	Darrell Vent Sr. Huslia	Secretary Subsistence
9	2006 2024	Jenny Pelkola Galena	Vice-Chair Subsistence
10	2021 2024	Tommy Kriska Nulato	Subsistence

WESTERN INTERIOR SUBSISTENCE REGIONAL ADVISORY COUNCIL

Meeting Minutes

Pikes Landing
Fairbanks
October 19-20, 2022

Invocation:

Don Honea provided an invocation.

Call to Order, Roll Call, and Quorum Establishment:

The meeting was called to order Wednesday, October 19, 2022, at 9:05 am. Council members Don Honea, Pollock Simon, Kevin Whitworth, Tim Gervais, Darrell Vent, and Jenny Pelkola were present in person, and Jack Reakoff was present telephonically. Member Pelkola acted as chair during the meeting as Chair Reakoff was unable to be present in person. Tommy Kriska was not present on the first day due to inclement weather and was excused. Darrel Vent was absent the second day and was excused. Rebecca Wilmarth was not present and was not excused. The Council has one vacant seat. Quorum was established with seven out of nine seated Council members present.

Attendees:

- Bureau of Indian Affairs (BIA): Dr. Glenn Chen
- Bureau of Land Management (BLM): Erin Julianus, Walker Gusse, Geoff Beyersdorf; Fairbanks, Paul (Chris) McKee*, Bruce Seppi; Anchorage
- National Park Service (NPS): Matt Cameron, Marcy Okada, Mark Dowdle; Fairbanks, Eva Patton*, Will Deacy*, Dillon Patterson*, Peter Christian*; Anchorage
- Office of Subsistence Management (OSM): Ann (Liz) Williams, Cory Graham, Brian Ubelaker, Brooke McDavid, Katerina (Katya) Wessels, Tom Kron, Nissa Pilcher, Robbin La Vine*, Kevin Foley*, Hannah Voorhees*, Scott Ayers*, Jason Roberts*
- U.S. Fish and Wildlife Service (USFWS): Jared Long, Gerald Maschmann, Joanna Fox*; Fairbanks, Jeremy Havener; Galena, Aaron Moses, Boyd Blihovde*, Emmit Nicori*; Bethel, Holly Carrol, Jill Klein*; Anchorage, Frank Harris*; Kenai
- U.S. Forest Service (USFS): Greg Risdahl*; Juneau
- Alaska Department of Fish and Game (ADF&G): Lisa Stuby, Deena Jallen, Christy Gleason, Jesse Coleman*, Sam Decker*, Klaus Wuttig*, John Chythlook*; Fairbanks
- North Pacific Fisheries Management Council (NPFMC): Diana Stram*
- Tanana Chiefs Conference Tribal Resource Stewardship Program; Nicole Farnham, Monica Gosslin; Fairbanks
- Yukon River Drainage Fisheries Association: Catherine Moncrieff*; Anchorage
- Public: Jim Simon, Mark Richards, Virgil Umphenour, Pollock (PJ) Simon Jr

* Denotes attended telephonically

Review and Adopt Agenda:

Motion by Member Honea, seconded by Member Vent, to adopt the agenda.

The motion passed on a unanimous vote.

Review and Approve Previous Meeting Minutes:

Motion by Member Reakoff, seconded by Member Vent, to approve the winter 2022 meeting minutes as presented.

The motion passed on a unanimous vote.

Council Member and Chair Reports:

Pollock Simon Sr. of Allakaket reported that it is different now from when he was younger with no fish in the rivers, no moose, and no black bears. He continued to say that there was no salmon last year in the Yukon River, so Allakaket is relying heavily on sheefish and whitefish, and dog teams are being fed pike (Northern Pike), suckers (Longnose Suckers), and small whitefish. Member Simon noted that it was good to see everyone again after the last few years of teleconferences, which were difficult to sit through. Member Simon was told by his elders that in the 1940's there was a few lean years with no salmon, and he remembers being in Hughes in the 1950's where there were plenty of salmon, but people would still only take what they needed. Now there is no fish, and there are no fish camps, and the fish drying racks are falling over. King (Chinook) Salmon is the main food for the people up and down the river, and even when the fish are there, they aren't present in the numbers they used to be. He concluded by stating "The elders always said to take care of the fish and the animals and show them respect".

Jenny Pelkola of Galena reported that she is also glad to be meeting together again, but that since the last time there was an in-person meeting the Western Interior Region has been facing hardships with salmon numbers. Member Pelkola stated that Galena received salmon that was flown in from somewhere else, but it was a different kind of salmon with no oil, so she had to learn how to dry it, but she was thankful to receive it. Member Pelkola noted that moose season was successful for many, although her family was unable to get out due to Covid. She reported that the Loudon Village Council has a bounty on wolves that is helping the moose populations rebound, and there have been reports of many cows with calves within five miles of Galena.

Jack Reakoff of Wiseman reported that after the Winter 2022 meeting he assisted in drafting Wildlife Special Action Request WSA22-02 concerning sheep closures for Unit 24A and 26B, as well as shepherding it through the Federal process. Jack also participated in the Wood Bison Planning Team meeting conducted by ADF&G representing the Council the previous week. He observed that the Council needs a member from Grayling, Anvik, Shaguluk, Holy Cross (GASH) area to serve on this

Council and the Wood Bison Planning Team, but he will continue to participate until such a time as that occurs, as the wood bison project is very worthwhile for future generations of people in the GASH area. He conveyed that there was two inches of snow, but very few caribou currently in the Central Brooks Range and Upper Koyukuk Drainage, and that there are very few hares, moose numbers are low with plenty of bear predation; the only animal there seems to be an abundance of is spruce grouse. Member Reakoff concluded by saying it was also a bad blueberry year.

Kevin Whitworth of McGrath reported that the Kuskokwim River is still experiencing a multi-year, multi-species salmon collapse. Chinook Salmon crashed a decade ago, which prompted Federal management of the river, and the fishery has still not recovered. Chum Salmon crashed three years ago, and while that stock is slowly rebuilding, people are still not able to meet their subsistence needs with either stock, much less support traditional dog teams. Coho Salmon collapsed this year, leading to an even larger hardship and food security issue for the people of the Kuskokwim, which was exacerbated by ADF&G not having the flexibility to allow sufficient subsistence fishing opportunities on nonsalmon species. He noted that this summer was depressing with all the fishing restrictions and people unable to meet their subsistence needs, while also trying to conserve these three salmon populations for the future. Member Whitworth noted that the Council voted for him to attend the June 2022 NPFMC meeting but due to the timing of the NPFMC meeting he was unable to attend. However, he relayed that the NPFMC took no action to reduce the current Chinook Salmon cap or to establish a Chum Salmon cap. He also reminded the Council that he represents the Council on the Kuskokwim River Salmon Management Working Group.

Don Honea of Ruby reported that he didn't even put a subsistence net in the Yukon River this summer. He stated that the Council was talking about the effects of commercial ocean fishing on Yukon and Kuskokwim River subsistence fishermen for more than the last decade, and still last year those fisheries took a huge amount of Chum Salmon as bycatch. Member Honea recalled a Council meeting in Galena where there was discussion to have a moratorium on Chinook Salmon fishing partly because the people could always depend on the fall and summer Chum Salmon, but those runs have now crashed and still nothing is being done about the salmon numbers. Member Honea expressed concern that some areas of the Western Interior Region are not represented on the Council, such as the GASH area and a large portion of the Kuskokwim River. In order to fully understand this region and make informed choices, the Council needs to hear from all areas. Member Honea concluded by saying that while he had let his membership on the Council expire, but will be reapplying during the current application period, and will continue to ensure his local Fish and Game Advisory Committee is functioning.

Tim Gervais of Ruby reported that there were a lot of frustrated people on the Yukon with the fisheries closures on the Yukon. People had to utilize whatever canned or dried fish they had from prior years, and he had heard that Sockeye Salmon was shipped into the community. Member Gervais said this was met with mixed feelings as Sockeye Salmon is unknown in the Western Interior Region and people weren't familiar to its taste or how to prepare and store it, but everyone appreciated the effort. Member Gervais noted that there were only a few families in Ruby that put out whitefish nets, and while he was also selected by the Council to attend the NPFMC meeting in June, he was also unable to do so because the meeting is held at an inopportune time for subsistence and commercial fishermen to participate. Member

Gervais noted that the NPFMC did not act at their last meeting to assist in rebuilding the salmon stocks in the Yukon and Kuskokwim Drainages, but they should be. He said that people have been eating salmon on these rivers for the last 12,000 years and this historical use should take preference over any other kind of fishery. He concluded his report by stating that moose hunting around Ruby went well, which was needed with the salmon closures that were enacted this summer.

Darrell Vent of Huslia reported that the salmon shortage is affecting subsistence users, people are not able to go out to summer camps to utilize traditional ways of harvesting fish. Member Vent commented that he was raised in an Iditarod racing family, so he grew up being very busy during the summer putting up fish, but now those traditions aren't being passed down. Member Vent relayed that on top of subsistence salmon fishing being closed, it was a bad berry year, the water was high this fall, and it was difficult moose hunting. The brown bears, wolves and sport hunters are all competing for moose that subsistence users are more dependent on now as there is no salmon. He expressed great concern of what the people of the Yukon will have available to them in ten or twenty years since it is nearly impossible to live a subsistence lifestyle currently. He concluded by saying he remembers listening to his elders and now he is halfway there himself.

Tommy Kriska from Nulato reported that it is getting tougher to live a subsistence lifestyle anymore. Member Kriska also reported there was a lack of berries to pick, and little game to be found, bad weather during the fall hunt, no salmon to harvest, and fuel prices are just going up. He relayed that while many state residents live a partial subsistence lifestyle, the people that actually live in the village truly need access to subsistence foods. Member Kriska relayed that he and others in his community have been trapping wolves to help increase moose numbers, and that while the State and Federal government are not assisting, those entities get to make the regulations that allow non-local people into these areas to get the benefits of his trapping activity; he should have a seat at the table when decisions are made about moose hunting in his area. He stated that the State issues hunting permits near Nulato without the consent of Nulato or the Nulato Village Council. He concluded by noting that deference needs to be given to the potlatches as they are sacred, have been conducted for eons, and are an integral part of this region's traditions.

Service Award:

Mr. Tom Kron presented Chair Pelkola with a 15-year Length of Service Award.

Public Comments:

- Jim Simon gave comments about the ongoing subsistence salmon crisis in the Kuskokwim and Yukon Rivers. Mr. Simon stressed the importance of nonsalmon subsistence harvest, accurate accounting, and the overall lack of any management plans on these species.
- Virgil Umphenour, representing the Fairbanks Fish and Game Advisory Committee, gave comments in support of the Board of Fisheries (BOF) Proposal 140, which will be taken up at the February 2023 BOF meeting and concerns the Area M Commercial Fishery.

- Member Kriska, on behalf of the Nulato Tribal Council, requested the Council support their Resolution 2022-22, which is a request to the State of Alaska to create the Kaiyuh Controlled Use Area.

Motion by Member Simon, seconded by Member Gervais, to support Nulato's Tribal Council's Resolution 2022-22.

Motion passed on a unanimous vote.

- PJ Simon Jr. spoke in support of the Council's decision to submit Special Action Request WSA22-02, which the Board adopted and closed Federal public lands in Unit 24A and a portion of Unit 26B to sheep hunting by all users for the 2022–2023 and 2023–2024 wildlife regulatory years.

Old Business:

The Council received presentations on the following topics:

- 805(c) Report summary
- Board FY-2021 Annual Report Replies summary
- Special Actions update
- Wood Bison Restoration and Working Group Update

New Business:

Joint meeting: North American Caribou Workshop and Arctic Ungulate Conference in May 2023

Mr. Brian Ubelaker informed the Council about the Caribou and Ungulate Conference that will take place in May of 2023 in Anchorage. Council members provided input on topics for a symposium, including concern with current caribou and sheep management, hunting pressure and wanton waste, and the effects climate change is having on their populations.

Motion by Member Whitworth, seconded by Member Simon, to nominate Member Reakoff and Member Vent to attend the Conference to represent the Council.

Motion passed on a unanimous vote.

Motion by Member Gervais, seconded by Member Vent, to nominate Chair Pelkola to be the alternate to attend the Conference to represent the Council if Member Reakoff or Vent are unable to attend.

Motion passed on a unanimous vote.

Fisheries Management Reports:

Ms. Diana Stram presented the NPFMC Update.

Motion by Member Reakoff, seconded by Member Vent, to draft a letter to the National Oceanic and Atmospheric Administration and the Chair of the NPFMC requesting a current and full National Environmental Policy Act Review Process be conducted for the combined marine and freshwater ecosystem of the Kuskokwim and Yukon Drainages.

Motion passed on a unanimous vote.

Ms. Holly Carroll presented the Yukon River salmon season summary with additional information provided by Ms. Deena Jallen and Ms. Christy Gleason.

Mr. Boyd Blihovde presented the Kuskokwim River season summary with additional information provided by Mr. Aaron Moses.

Mr. Frank Harris updated the Council on the Kuskokwim River Broad Whitefish subsistence harvest and spawning abundance project.

Fisheries Proposals and Closure Reviews:

Regional:

FP23-23-01: Rescind Jim River nonsalmon closure, institute Arctic Grayling harvest limit.

The Council considered OSM's analysis thorough and agreed freshwater stocks can support the proposed level of harvest.

Motion by Member Reakoff, seconded by Member Honea, to support fisheries proposal FP23-01.

The motion passed on a unanimous vote.

FCR23-02: Review closure to subsistence harvest of all fish in the Kanuti River.

The Council noted there was little concern for overharvest of nonsalmon fish given Arctic Grayling is the predominant species in the drainage and are targeted primarily with rod and reel. In addition, the system is distant from Wiseman and Coldfoot, which are the communities most likely to subsistence fish in the area.

Motion by Member Reakoff, seconded by Member Gervais, to support fisheries closure review FCR23-02 with the modification to rescind the closure to nonsalmon species only.

The motion as amended passed on a unanimous vote.

FCR23-03: Review closure to subsistence harvest of all fish in Bonanza Creek.

The Council noted there was little concern for overharvest of nonsalmon fish given that Arctic Grayling is the predominant species in the system and are harvested primarily by rod and reel. In addition, the

Council believes that Arctic Grayling will largely be harvested when engaging in other subsistence activities.

Motion by Member Reakoff, seconded by Member Whitworth, to support fisheries closure review FCR23-03 with the modification to rescind the closure to nonsalmon species only.

The motion as amended passed on a unanimous vote.

Crossover:

FP23-02: Revise customary and traditional use determination for Yukon River Salmon.

The Council agreed with OSM's analysis and noted that it would be natural for these coastal communities to harvest migrating salmon headed to the Yukon River. This is a fishery that has been occurring and the passage of this proposal would be recognizing that use.

Motion by Member Gervais, seconded by Member Simon, to support fisheries proposal FP23-02.

The Motion passed on a unanimous vote.

FCR23-05: Review closure to subsistence harvest of all fish in the Delta River.

The Council noted that the Eastern Interior Council is the home region and should make the decision.

Motion by Member Reakoff, seconded by Member Whitworth, to defer fisheries closure review FCR23-05 to the home region.

The motion passed on a unanimous vote.

Statewide:

The Council did not take up any Statewide fisheries proposals.

2024 Fisheries Resource Monitoring Program:

Ms. Liz Williams and Mr. Corey Graham presented the Council with the Fisheries Resource Monitoring Program Priority Information Needs (PINs).

Motion by Member Whitworth, seconded by Member Gervais, to support the Kuskokwim Drainage PIN's as presented, and to support the Yukon Drainage PIN's with the modification to change item Q to include interception to the marine component.

The motion as amended passed on a unanimous vote.

Partners for Fisheries Monitoring Program

Ms. Williams informed the Council of an upcoming competitive funding opportunity through the Partners for Fisheries Monitoring Program.

Identify Issues for FY-2022 Annual Report:

The Council identified the following topics for inclusion into the FY-2022 Annual Report:

- To request the Federal Subsistence Board (Board) initiate a sheep management plan outlining a management strategy in place for the current Federally closed area in Units 24 and 26 before that area reopens to non-Federally qualified users.
- To express concern over the failing sheep population in Unit 19C, teamed with a lack of response from managers.
- To express concern over the continuing declining population of the Mulchatna Caribou Herd.
- To inform the Board that harvest of Yukon or Kuskokwim bound salmon in any marine commercial fishery should not be occurring when escapement goals and subsistence needs are not being met for the Yukon or Kuskokwim Rivers.
- To inform the Board that severe subsistence restrictions were placed on subsistence users on the Kuskokwim River during the fall state managed Coho Salmon subsistence season.
- To inform the Board that the continued co-management of fish on the Kuskokwim River between the USFWS and the Kuskokwim Intertribal Fish Commission is working, and that the current administrations executive order for co-management of natural resources should extend to the Department of Interior as well as the Department of Commerce, and that co-management should be occurring for species that are of conservation concern and those not of conservation concern but that are important for rural users.
- To inform the Board that the Council is concerned about what effects the increased reliance on nonsalmon species for subsistence needs in the Yukon and Kuskokwim Drainages will have on those populations.
- To encourage the Board to assist in every possible way to understand the driving forces behind the current multi-species and multi-drainage salmon crash, and to assist in trying to find a way forward to regain these runs.
- To express concern over Alaska Industrial Development Authority's continuing to push for development of the Ambler Road when development of this road would have substantial negative impacts on the Arctic ecosystem and to subsistence users.
- To express concern with the lack of representation of all areas of the Western Interior Region on the current Council makeup.

Motion made by Member Pollock, seconded by Member Honea, to approve the Annual Report with these topics.

The motion passed on a unanimous vote.

Fall 2022 Council application/nomination open season:

Ms. Nissa Pilcher updated the Council on the current application and nomination open season for Council membership.

Council Member reimbursement for telephonic/internet expenses related to Council teleconference meetings

Ms. Pilcher informed the Council on how to get reimbursed for telephonic/internet expenses incurred during previous Council meetings held via teleconference. Council members discussed the difficulties of participating in a meeting via teleconference in rural Alaska.

Harvest of Wildlife for Sport Purposes in National Preserves

Mr. Peter Christian updated the Council on the intent of the NPS to enter regulations into the Federal Register on this subject, although this regulation had not hit the Federal Register at this time.

Motion made by Member Reakoff, seconded to Member Honea, to defer the issue to the Gates of the Arctic Subsistence Resource Commission.

The motion passed on a unanimous vote.

State of Alaska Board of Fisheries proposals:

Proposal: 140 Amend the South Unimak and Shumagin Islands June Salmon Management Plan to reduce commercial salmon fishing time.

The continued severe in-river subsistence restrictions and closures for multiple salmon species in both the Yukon and Kuskokwim River drainages, the failure of multiple salmon species to meet escapement goals in many tributaries in both drainages are of great concern. Genetics testing done on salmon caught in South Alaska Peninsula commercial salmon fishery demonstrate that a portion of the salmon harvested in this fishery are of Yukon or Kuskokwim origin. The State's constitution mandates sustained yield fishery management for all salmon stocks, with a statutory subsistence allocation priority over commercial harvest. Large by-catch of Chum Salmon in the mixed stock South Alaska Peninsula commercial needs to be addressed. The current management plan is not working to adequately protect future salmon runs in the suppressed drainages stocks of origin and should be changed to curtail the interception of Yukon and Kuskokwim bound salmon stocks.

Motion by Member Reakoff, seconded by Member Whitworth, to support Proposal 140.

The motion passed with 5 votes in favor with one member abstaining.

Proposal 91: Modify Kuskokwim Area lawful gear and gear specifications and operations to provide greater opportunity to harvest salmon other than king salmon during times of salmon conservation.

During the unprecedented collapse of the Coho Salmon run during the 2022 season, subsistence users on the Kuskokwim River were unable to fish with any gear type during a complete closure instituted by the

ADF&G. This closure was instituted after the salmon were already instream after the run strength was determined to be too weak for continued subsistence fishing opportunities. While this closure was to protect Coho Salmon, the lack of flexibility in current State regulations made it so that no gear types were allowed to target other healthy stocks of fish, leaving the entire river unable to subsistence fish for any species. Prior to the Coho Salmon collapse, severely depressed returns of Chinook and Chum salmon resulted in very limited subsistence opportunity. The inability for subsistence users to be able to deploy whitefish nets in the fall to supplement their diets with fresh fish or put up non-salmonid fish for the winter resulted in severe food insecurity for subsistence users. The Council fully supports giving ADF&G Kuskokwim River fisheries managers more options to allow selective harvest of other fish during times of any salmon species conservation.

Motion by Member Reakoff, seconded by Member Whitworth, to support Proposal 91.

The motion passed on a unanimous vote.

Motion made by Member Whitworth, seconded by Member Honea, to transmit a letter of concern to ADF&G's Commissioner Vincent-Lang about the lack of subsistence opportunities during the fall 2022 subsistence season.

The motion passed on a unanimous vote.

Proposal 79: Allow hook and line attached to a rod or pole when subsistence fishing upstream of the Nulato River mouth, to and including the Koyukuk River drainage up to the closed waters of the Koyukuk and the subsistence permit area.

The Council supports the ability of subsistence users to be able to harvest subsistence foods using readily available gear types.

Motion by Member Reakoff, seconded by Member Gervais, to support Proposal 79.

The motion passed on a unanimous vote.

Agency Reports:

- Tanana Chiefs Conference Tribal Resource Stewardship Program Fisheries project update presented by Nicole Farnham
- Kuskokwim Inter-Tribal Fish Commission update presented by Member Whitworth
- Yukon River Drainage Fisheries Association report presented by Catherine Moncrieff
- Koyukuk, Nowitna and Innoko National Wildlife Refuge update presented by Jeremy Havener, USFWS
- Yukon Delta National Wildlife Refuge Update presented by Aaron Moses, USFWS
- Kanuti National Wildlife Refuge Update presented by Joanna Fox, USFWS

Motion made by Member Gervais, seconded by Member Reakoff, to transmit a letter of concern to the FWS Regional Director and the Alaska Chief of Refuges regarding the current plan to complex the Kanuti and Yukon Flats National Wildlife Refuge.

The Motion passed on a unanimous vote.

- Bureau of Land Management Agency Report presented by Bruce Seppi, BLM
- Bureau of Land Management, Central Yukon report presented by Erin Julianus and Geoff Beyersdorf, BLM

Motion by Member Reakoff, seconded by Member Gervais, to submit previous Council comments to BLM regarding the Ambler Road during the current BLM public comment open period.

Motion passed on a unanimous vote.

- Gates of the Arctic National Park and Preserve Update presented by Marcy Okada, Matt Cameron, and Will Deacy, NPS
- ADF&G Subsistence Division Update presented by Jesse Coleman, ADF&G
- Office of Subsistence Management Update presented by Tom Kron, OSM

Future Meeting Dates:

Winter meeting dates confirmed for April 4-5, 2023, in Aniak

Fall meeting dates selected are October 11-12, 2023, in Fairbanks

Nissa Bates Pilcher, DFO
Office of Subsistence Management

Jack Reakoff, Chair
Western Interior Subsistence Regional Advisory Council

These minutes will be formally considered by the Western Interior Subsistence Regional Advisory Council at its April 4-5, 2023 meeting in Aniak, and any corrections or notations will be incorporated in the minutes at that meeting.

For a more detailed report of this meeting, copies of the transcript and meeting handouts are available upon request. Call Nissa Bates Pilcher at 1-800-478-1456 or 907-455-1847, or by email at nissa_batespilcher@fws.gov.



2023 NORTH AMERICAN CARIBOU WORKSHOP & ARCTIC UNGULATE CONFERENCE

Anchorage, Alaska ■ May 8-12, 2023

Come to the conference to share your knowledge and learn from others! Join an international group of managers, biologists, Indigenous and Local Knowledge holders, and others to share knowledge of caribou, muskoxen, Dall's sheep, moose, and reindeer. The meeting will provide opportunities for exchanging viewpoints, concerns, and recommendations regarding the health, stewardship, use, and study of these important species.

The theme for the joint meeting is *Crossing Boundaries*. Arctic ungulates regularly cross landscape boundaries, connecting ecosystems and peoples, necessitating partnerships and collaboration across management and political boundaries. A critical component of such partnerships involves crossing the boundaries of Western science and Indigenous knowledges to identify creative opportunities to sustain Arctic ungulate populations in a changing world. We will explore these themes across four days of research talks, storytelling, workshops and panel discussions. Join us!

For more information visit www.nacw-auc-2023.org or e-mail info@nacw-auc-2023.org.





Feedback from Regional Advisory Councils on the State and Federal Ungulate Management in Alaska Symposium

At the North American Caribou Workshop and
Arctic Ungulate Conference www.nacw-auc-2023.org

Description: This session is intended as a neutral forum for Federal Regional Advisory Council (Council) members, State Fish and Game Advisory Committee members, Federal and State agency staff, and any other interested parties to discuss ungulate management in Alaska, specifically regarding harvest regulations. The format will be facilitated discussion where participation by all attendees is encouraged. Specific topics will be determined after the Councils provide input during their fall 2022 and winter 2023 meetings.

Potential Topics

1. The effectiveness and impact of antler restrictions in moose harvest management (i.e. do spike-fork and brow-tine restrictions actually provide more subsistence harvest opportunity or is it just an easy way to manage moose populations).
2. How to manage young growth forests for moose
3. Regulations that conflict with each other and across user groups (e.g. State community hunts)
4. How biological data is collected (e.g. population surveys)
5. Habitat changes (natural, manmade, and from climate change) and their effects on ungulates
6. Predator Control
7. Identification, viability, and utilization of resident caribou herds (vs. migratory)
8. Effects of climate change, disease and overgrazing on ungulate populations
9. Summer vs. winter diet of caribou (e.g. protein intake)
10. Bull caribou harvest during the rut
11. Effects of hunting pressure on caribou movements and migration routes
12. Effects of roads/development on caribou distribution and movements
13. Population thresholds for caribou herd recovery
14. Wanton waste of meat
15. The importance of funding wildlife surveys and receiving timely reports
16. Muskox harvest management
17. Honoring and incorporating Traditional Ecological Knowledge into harvest management (i.e. letting the leaders pass and ensuring uninterrupted caribou migrations)
18. Harvest management strategies when caribou populations are too high (e.g. showing signs of nutritional stress).
19. Unsafe and disrespectful hunting practices; need for better hunter education
20. Food security
21. Climate change impacts on ungulates, particularly caribou migration routes
22. Caribou distribution patterns in relation to village harvest needs; and exploring new ways to address the needs of villages (e.g. village quota systems)
23. Sport hunter disturbance to caribou and law enforcement
24. Harvest reporting: how to improve

Western Interior Alaska Subsistence Regional Advisory Council

c/o Office of Subsistence Management
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Anchorage, Alaska 99503-6199
Phone: 907-786-3888 Fax: 1-907-786-3898
Toll Free: 1-800-478-1456

In Reply Refer To
WIRAC.22118.NP

Mr. Steve Cohn
Alaska State Director
Bureau of Land Management
222 West 7th Avenue
Anchorage, Alaska 99501

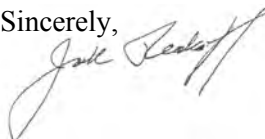
Dear Director Cohn:

I write to you on behalf of the Western Interior Alaska Subsistence Regional Advisory Council (Council) who requests that their previously submitted letters on the proposed Ambler Mining District Industrial Access Road be resubmitted during the Bureau of Land Management's current supplemental review.

The Council represents subsistence harvesters of fish and wildlife resources on Federal public lands and waters in the Western Interior Alaska Region. The Councils were established by the authority in Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) and chartered under the Federal Advisory Committee Act. Section 805 of ANILCA and the Council's charter establish the Council's authority to initiate, review and evaluate proposals for regulations, policies, management plans, and other matters related to subsistence uses of fish and wildlife within the region. The Council also reviews resource management actions occurring outside their regions that may impact subsistence resources critical to communities served by the Council. The Council provides a forum for the expression of opinions and recommendations regarding any matter related to the subsistence uses of fish and wildlife within the region.

Thank you for reviewing these documents during this supplemental review. Any questions regarding this letter can be addressed to me or through the Council's Subsistence Council Coordinator, Nissa Pilcher, at (907) 891-9054, nissa_batespilcher@fws.gov.

Sincerely,



Jack L. Reakoff
Chairman
Western Interior Regional Alaska Subsistence
Regional Advisory Council

Chair Mr. Cohn

2

Enclosures

cc: Federal Subsistence Board
Office of Subsistence Management
Western Interior Alaska Subsistence Regional Advisory Council
Interagency Staff Committee
Administrative Record

Western Interior Alaska Subsistence Regional Advisory Council

c/o Office of Subsistence Management
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RAC/WI 18001.ZS

JAN 16 2018

Karen Mouritsen
Bureau of Land Management
Acting State Director
222 West 7th Avenue #13
Anchorage, Alaska 99513

Dear Ms. Mouritsen:

I am writing on behalf of the Western Interior Alaska Subsistence Regional Advisory Council (Council) to provide written comments on the Ambler Road Project presently under public comment for the scoping phase under the National Environmental Policy Act (NEPA). The Council is opposed to development of this road.

The Council represents subsistence harvesters of fish and wildlife resources on Federal public lands in the Western Interior Region of Alaska. The Council was established by the authority in Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) and is chartered under the Federal Advisory Committee Act. Additionally, Section 805 of ANILCA and the Council's charter establish the Council's authority to initiate, review and evaluate proposals for regulations, policies, management plans, and other matters related to subsistence uses of fish and wildlife within the region. The Council also reviews resource management actions occurring outside the region that may impact subsistence resources critical to communities served by the Council. The Council also provides a forum for the expression of opinions and recommendations regarding any matter related to the subsistence uses of fish and wildlife within the region.

The Council held its fall public meeting on October 10-11, 2017 in Fairbanks to review wildlife proposals, the 2018 Fisheries Resource Monitoring Plan, and other issues related to subsistence in the Western Interior Region. At this meeting, the Council also received updates on the Ambler Road Project from the Bureau of Land Management (BLM), National Park Service (NPS), and Northern Alaska Environmental Center.

These presentations addressed the status of the Ambler Road NEPA process. Additionally, information was shared providing maps documenting geospatially explicit lifetime subsistence use in the vicinity of Gates of the Arctic National Park and Preserve. A presentation was also provided addressing community outreach associated with the BLM's NEPA process and NPS

Ms. Mouritsen

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Environmental and Economic Impact Analysis in response to a right-of-way application submitted by the Alaska Industrial Development and Export Authority as part of the Ambler Industrial Access Project (Ambler Road Project).

The people of the Western Interior Region are blessed with abundant fish and wildlife resources that have sustained families and defined cultural identity since time immemorial. Residents of the Western Interior Region of Alaska have a Customary and Traditional Use Determination for Sheefish (*Stenodus nelma*) and Chum Salmon (*Oncorhynchus keta*).

Additionally, the Federal Subsistence Board has recognized the customary and traditional use by residents of the Western Interior Region of the Western Arctic Caribou Herd in Unit 21D (encompassing numerous communities, including Huslia, Koyukuk, Galena, Nulato, Kaltag, and Ruby) and Unit 24 (encompassing numerous communities, including Wiseman, Coldfoot, Evansville, Bettles, Alatna, Allakaket, Hughes, Huslia, Galena, and Koyukuk).

The Council stated its opposition to the Ambler Road Project, citing numerous adverse impacts to subsistence resources and Federally qualified subsistence users in the Western Interior Region, specifically:

- Adverse impacts to migration of the Teshekpuk Caribou Herd and Western Arctic Caribou Herd due to habitat fragmentation resulting from development of the Ambler Road, road usage, and road maintenance;
- Adverse impacts to Sheefish and Chum Salmon spawning habitat in the Alatna River, Kobuk River, Henshaw Creek, and the Malmuit Fork of the John River due to changes in water quality and quantity resulting from development of the Ambler Road, road usage, and road maintenance;
- Adverse impacts to Federally qualified subsistence users resulting from the influx of non-Federally qualified users accessing the road to hunt for finite subsistence resources; and
- Adverse economic impacts to Federally qualified subsistence users who shoulder the burden of increased cost and competition for food while subsidizing private mining exploration.

Public concern for the impacts of large-scale road project development on Federally qualified subsistence users in the Western Interior Region is well-established through substantial oral testimony delivered on the record by Pollock (P.J.) Simon, Jr., First Chief of Allakaket Village at the Council's February 21-22, 2017 public meeting in Fairbanks. The Council amplified its concern for the impacts of large-scale road development on Federally qualified subsistence users in the Western Interior Region in its FY2017 Annual Report to the Federal Subsistence Board. In its report to the Federal Subsistence Board, the Council noted opposition to the modification of PLO 5150 to allow State selection of Federal public lands in the existing Dalton Utility Corridor under the BLM Central Yukon Resource Management Plan.

Ms. Mouritsen

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Additionally, scientific literature demonstrates a correlation between road development and adverse cumulative effects to wildlife habitat. Specifically, the development and operation of roads has been associated with wildlife habitat fragmentation;¹ decline in water quality and quantity;² changes in hydrology and increased sedimentation in stream networks;³ disruption to wildlife migration patterns;⁴ disturbance to the rearing of offspring;⁵ wildlife avoidance of areas effected by excessive habitat disturbance;⁶ and increased wildlife mortality due to roadkill, hunting, and habitat conversion.⁷ The materials presented in each of these resources need to be considered and analyzed in the forthcoming draft environmental impact statement.

The Council emphasizes that the impacts of developing the Ambler Road Project will have adverse and far reaching effects within at least 50 miles of each side of the road. These impacts include noise disturbance to terrestrial and aquatic wildlife resulting from increased motorized off-road vehicle traffic and boat use extending up the coast and into the Kobuk River Drainage. The increased motorized off-road vehicle traffic and boat use resulting from development of the Amber Road will also have significant adverse impacts up and down the Koyukuk River, John River, and Alatna River drainages. The Council emphasizes the environmental impact statement should include the analysis of non-road alternatives to access the proposed mining site, including though not limited to the use of rail to deliver ore to a Bering Sea port. These impacts need to be analyzed in the draft environmental impact statement.

¹ Ana Benítez-López, Rob Alkemade, and Pita A. Verweij, The impacts of roads and other infrastructure on mammal and bird populations: A meta-analysis, In *Biological Conservation*, Volume 143, Issue 6, 2010, Pages 1307-1316.

² Stephen C. Trombulak and Christopher A. Frissel, Review of Ecological Effects of Roads on Terrestrial and Aquatic Communities, In *Conservation Biology*, Volume 14, Issue 1, Pages 18-30.

³ Richard T.T. Forman and Lauren E. Alexander, Roads And Their Major Ecological Effects, In *Annual Review of Ecology and Systematics*, Volume 29, 1998, Pages 207-231.

⁴ Scott A. Wolfe, Brad Griffith, and Carrie A Gray Wolfe, Response of reindeer and caribou to human activities, In *Polar Research*, Volume 19, Issue, 1, 2000, Pages 63-73.

⁵ Ingunn Vistnes and Christian Nellemann, Avoidance of Cabins, Roads, and Power Lines by Reindeer during Calving, In *The Journal of Wildlife Management*, Volume 65, No. 4, 2001, Pages 915-925.

⁶ Ingunn Vistnes, Christian Nellemann, Per Jordhøy, and Olav Strand, Wild reindeer: impacts of progressive infrastructure development on distribution and range use, In *Polar Biology*, 2001, Volume 24, Issue 7, Pages 531-537.

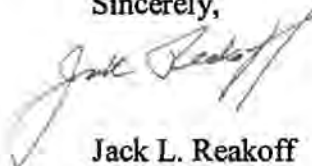
⁷ D. A. Walker and K. R. Everett, "Road Dust and Its Environmental Impact on Alaskan Taiga and Tundra," *Arctic and Alpine Research*, vol. 19, no. 4, 1987, Pages 479-489.

Ms. Mouritsen

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The Council requests a written response from BLM acknowledging the concerns specified in this letter and describing the alternatives the agency proposes to eliminate, minimize, and mitigate these concerns. Thank you for consideration of our request. Any questions regarding this letter can be addressed through our Subsistence Council Coordinator, Zach Stevenson, at 907-786-3674, zachary_stevenson@fws.gov.

Sincerely,



Jack L. Reakoff
Chair

cc: Federal Subsistence Board
Eugene R. Peltola, Jr., Assistant Regional Director, Office of Subsistence Management
Thomas Doolittle, Deputy Assistant Regional Director, Office of Subsistence Management
Jennifer Hardin, PhD, Subsistence Policy Coordinator, Office of Subsistence Management
Carl Johnson, Council Coordination Supervisor, Office of Subsistence Management
Northwest Arctic Subsistence Regional Advisory Council
Western Interior Alaska Subsistence Regional Advisory Council
Timothy La Marr, Field Manager, Central Yukon Field Office
Bureau of Land Management
Bruce Seppi, Wildlife Biologist, Division of Resources, Bureau of Land Management
Marcy Okada, Subsistence Coordinator, National Park Service
Jeffrey Rasic, Chief of Integrated Resources Management, National Park Service
Clarence Summers, Subsistence Manager, Alaska Region, National Park Service
Gates of the Arctic National Park and Preserve Subsistence Resource Commission
Dana Pruhs, Chair, Board of Directors
Alaska Industrial Development and Export Authority
Interagency Staff Committee
Administrative Record

Western Interior Alaska Subsistence Regional Advisory Council

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Toll-Free: 1-800-478-1456

RAC 19043.KD

OCT 28 2019

Mr. Chad Padgett
Alaska State Director
Bureau of Land Management
222 West 7th Avenue
Anchorage, Alaska 99501

Mr. Donald Striker
Acting Director, Alaska Region
National Park Service
240 West 5th Avenue
Anchorage, Alaska 99501

Dear Directors Padgett and Striker:

I write to you on behalf of the Western Interior Alaska Subsistence Regional Advisory Council (Council) who submits the following letter requesting clarification and amendment regarding uses stipulated for the Ambler Road Right of Way (ROW) in the Bureau of Land Management Draft Environmental Impact Statement (DEIS) and the National Park Service Draft Environmental and Economic Analysis (EEA). The Council discussed this issue on the record during its October 2019 public meeting held in McGrath.

The Council represents Federal subsistence harvesters of fish and wildlife resources on Federal public lands and waters of the Western Interior Region of Alaska. Alaska Regional Advisory Councils were established by the authority in Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) and chartered under the Federal Advisory Committee Act. Section 805 of ANILCA established the Council's authority to initiate, review, and evaluate proposals for regulations, policies, management plans, and other matters related to subsistence uses of fish and wildlife within the region. The Council also reviews resource management actions occurring outside its region that may impact subsistence resources critical to communities served by the Council. The Council provides a forum for the expression of opinions and recommendations regarding any matter related to the subsistence uses of fish and wildlife within the region.

Directors Padgett and Striker

2

On August 2, 2018, the Gates of the Arctic Subsistence Resource Commission (SRC) received a letter from the Assistant Secretary of the Interior Joseph R. Balash in response to its concerns submitted to the Department of the Interior about the Ambler Mining District Industrial Access Road. In this letter, Assistant Secretary Balash cites that "AIDEA's ROW application expressly requests the ROW for an 'industrial access road,' for which access would be controlled and primarily limited to mining-related industrial uses, although some commercial uses may be allowed under a permit process." The Council relies heavily on the SRC and its positions on projects impacting subsistence, and is gravely concerned about the statement in the letter "*although some commercial uses may be allowed under a permit process.*" The Council believes this critical statement represents a loophole where commercial users such as commercial hunting guides, and commercial hunting transporters could be permitted to use the road to access fish and wildlife resources in the region. Such use that excluded subsistence users would be in violation of Section 810 of ANILCA which gives rural subsistence users priority use over both commercial and sport uses of fish and wildlife resources on Federal public lands in Alaska.

The Council also believes that the potential issuance of permits for "*other commercial uses*" is insufficiently addressed in the 810 analysis of both the EEA and DEIS. If other commercial uses such as guided hunting or transporting were permitted now or in the future, there would undoubtedly be significant impacts to fish and wildlife resources that provide a critical source of food security for subsistence users in the region. Furthermore, the reference to "commercial uses" would exclude subsistence users from their mandated priority use of the fish and wildlife resources on Federal lands in Alaska.

The Council strongly believes it has a legitimate and verifiable concern with the uses of this proposed road and its impacts on subsistence. The Dalton Highway or "haul road" was originally intended for industrial purposes associated with the pipeline. When the State of Alaska took over the road in 1978, it was closed to the public. However, many hunters and trappers proceeded to heavily use wildlife resources along the Dalton Highway corridor under the guise of mining claims north of the Brooks Range. There were also industrial users with permits to travel the road and hunt under State hunting regulations. The Alaska Board of Game opened hunting and trapping along the Dalton Highway corridor in 1982 which both eliminated permit enforcement by the North Slope Borough and State, and subsequently brought hundreds of hunters with "mining claims" to travel the road for hunting purposes. As a result of this precedent, the Council firmly believes that if the Ambler Road is built, it will ultimately be opened to the public and pose major threats to residents of rural communities such as Allakaket, Alatna and others who have a customary and traditional dependence on fish and wildlife along the proposed route.

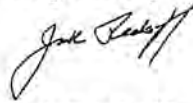
The Council is therefore requesting that: 1) BLM define "other commercial uses" in the ROW DEIS for the Ambler Road, and 2) BLM and NPS reference ANILCA, Title VIII, which states that subsistence will have a priority over the take of fish and wildlife for other purposes on Federal public lands on the route of the Ambler Road.

Directors Padgett and Striker

3

We sincerely appreciate your serious consideration of our concerns. Any questions regarding this letter can be addressed to me through our Subsistence Council Coordinator, Karen Deatherage at (907) 474-2270 or karen_deatherage@fws.gov

Respectfully



Jack Reakoff,
Chair

cc: Federal Subsistence Board

Thomas Doolittle, Acting Assistant Regional Director, Office of Subsistence Management

Suzanne Worker, Acting Subsistence Policy Coordinator

Office of Subsistence Management

Tom Kron, Acting Council Coordination Division Supervisor, Office of Subsistence Management

Karen Deatherage, Council Coordinator, Office of Subsistence Management

Western Interior Alaska Subsistence Regional Advisory Council

Tim LaMarr, Field Manager, Central Yukon Field Office, Bureau of Land Management

Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game

Interagency Staff Committee

Administrative Record

Western Interior Alaska Subsistence Regional Advisory Council

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Anchorage, Alaska 99503-6199
Phone: 907-786-3888 Fax: 1-907-786-3898
Toll Free: 1-800-478-1456

In Reply Refer to
OSM.22145.WI.NP

DEC 30 2022

Märit Carlson-Van Dort, Chair
Alaska Board of Fisheries
c/o Alaska Department of Fish and Game
Boards Support Section
1255 West 8th Street
Juneau, Alaska 99811-5526

Dear Chair Carlson-Van Dort:

During the Western Interior Alaska Subsistence Regional Advisory Council's (Council) fall 2022 public meeting held on October 19-20, the Council developed the following positions and comments on Proposals 79, 91, and 140 that will be taken up by the Alaska Board of Fisheries (BOF) at upcoming BOF meetings.

The Council represents subsistence harvesters of fish and wildlife resources on Federal public lands and waters in the Western Interior Alaska Region. The Councils were established by the authority in Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) and chartered under the Federal Advisory Committee Act. Section 805 of ANILCA and the Council's charter establishes the Council's authority to initiate, review and evaluate proposals for regulations, policies, management plans, and other matters related to subsistence uses of fish and wildlife within the region. The Council also reviews resource management actions occurring outside their regions that may impact subsistence resources critical to communities served by the Council. The Council provides a forum for the expression of opinions and recommendations regarding any matter related to the subsistence uses of fish and wildlife within the region.

Arctic Yukon Kuskokwim Finfish BOF meeting comments

Proposal 79

Allow hook and line attached to a rod or pole when subsistence fishing upstream of the Nulato River mouth, to and including the Koyukuk River drainage up to the closed waters of the Koyukuk and the subsistence permit area.

The Council **supports Proposal 79**. The Council supports the ability of subsistence users to be able to harvest subsistence foods using readily available gear types.

Proposal 91

Modify Kuskokwim Area lawful gear and gear specifications and operations to provide greater opportunity to harvest salmon other than king salmon during times of salmon conservation.

The Council **supports Proposal 91**. During the unprecedented collapse of the Coho Salmon run during the 2022 season, subsistence users on the Kuskokwim River were unable to fish with any gear type during a complete closure instituted by the Alaska Department of Fish and Game (ADF&G). This closure was instituted after the salmon were already instream after the run strength was determined to be too weak for continued subsistence fishing opportunities. While this closure was to protect Coho Salmon, the lack of flexibility in current state regulations made it so that no gear types were allowed to target other healthy stocks of fish, leaving the entire river unable to subsistence fish for any species. Prior to the Coho Salmon collapse, severely depressed returns of Chinook and Chum salmon resulted in very limited subsistence opportunity. The inability for subsistence users to be able to deploy whitefish nets in the fall to supplement their diets with fresh fish or put up non-salmonid fish for the winter resulted in severe food insecurity for subsistence users. The Council fully supports giving ADF&G Kuskokwim River fisheries managers more options to allow selective harvest of other fish during times of any salmon species conservation.

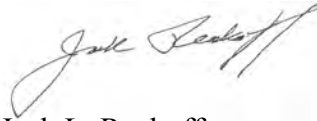
Alaska Peninsula/Aleutian Island/Chignik Finfish BOF meeting comments**Proposal 140**

Amend the South Unimak and Shumagin Islands June Salmon Management Plan to reduce commercial salmon fishing time.

The Council **supports Proposal 140**. The Continued severe in-river subsistence restrictions and closures for multiple salmon species in both the Yukon and Kuskokwim rivers drainages, the failure of multiple salmon species to meet escapement goals in many tributaries in both drainages are of great concern. Genetics testing done on salmon caught in South Alaska commercial fishery demonstrate that a portion of the salmon harvested in this fishery are of Yukon or Kuskokwim origin. The State's constitution mandates sustained yield fishery management for all salmon stocks, with a statutory subsistence allocation priority over commercial harvest. Large by-catch of Chum salmon in the mixed stock South Peninsula commercial needs to be addressed. The current management plan is not working to adequately protect future salmon runs in the suppressed drainages stocks of origin, and should be changed to curtail the interception of Yukon and Kuskokwim bound salmon stocks.

The Council shares this letter with the BOF and the Federal Subsistence Board, emphasizing these issues are of vital importance to the subsistence needs of the people of Western Interior Alaska. Thank you for your consideration of our positions and comments. Any questions regarding this letter can be addressed directly to me or through our Subsistence Council Coordinator Nissa Pilcher at (907) 455-8147 or nissa_batespilcher@fws.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Reakoff". The signature is written in a cursive style with a large initial "J".

Jack L. Reakoff
Chair, Regional Advisory Council
Yukon-Kuskokwim Region

cc: Federal Subsistence Board
Office of Subsistence Management
Interagency Staff Committee
Western Interior Alaska Subsistence Regional Advisory Council
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Projects Coordinator, Alaska Department of Fish and Game
Administrative Record

**FEDERAL WILDLIFE/FISHERIES CLOSURE REVIEW
WCR24-20**

Issue: Wildlife Closure Review WCR24-20 reviews the closure to moose hunting in the Kanuti Controlled Use Area (CUA) of Unit 24B, except by Federally qualified subsistence users.

Closure Location and Species: Unit 24B remainder, Kanuti CUA —Moose (**Map 1**)

Current Federal Regulation

Unit 24B–Moose

Unit 24B, remainder 1 bull by State harvest ticket *Aug. 25-Oct. 1*

OR

1 antlered bull by State registration permit *Dec. 15-Apr. 15*

Federal public lands in the Kanuti Controlled Use Area, as described in Federal regulations, are closed to taking of moose, except by Federally qualified subsistence users of Unit 24, Koyukuk, and Galena hunting under these regulations

Closure Dates: Year-round

Current State Regulation

Unit 24B–Moose

Resident: 24B, within the Kanuti Controlled Use Area - One bull *HT Sep. 1 – Oct. 1*

OR

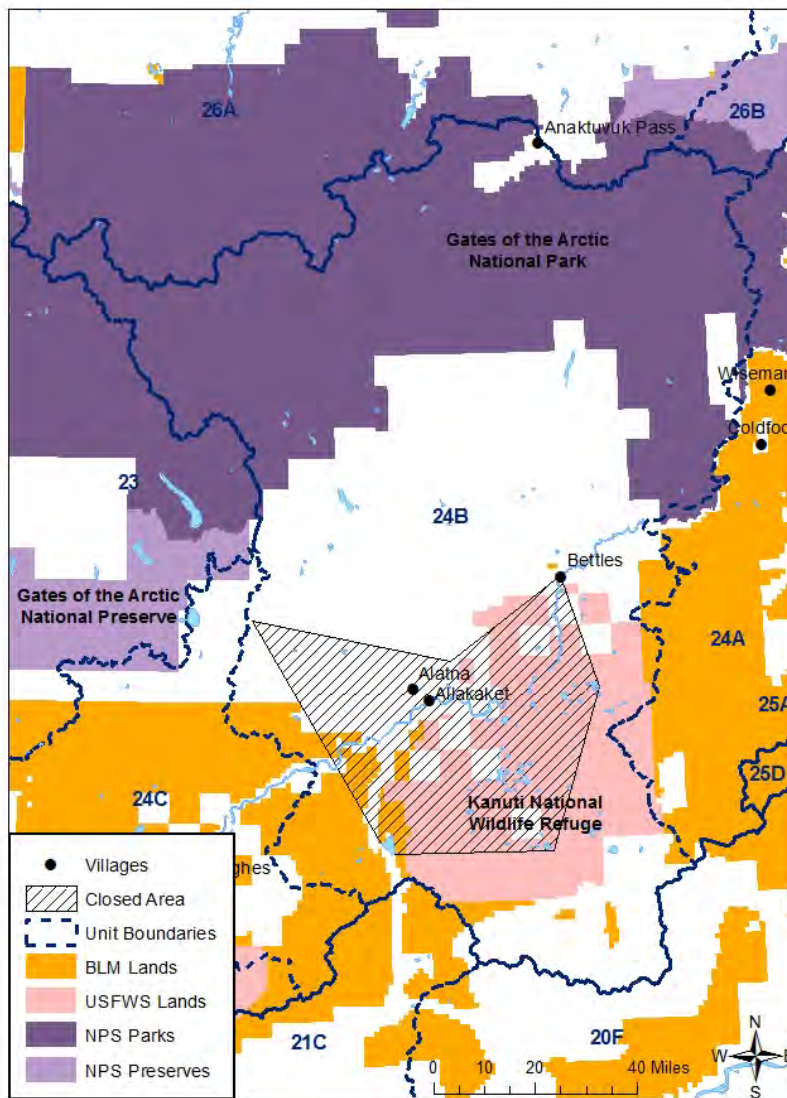
Resident: 24B, within the Kanuti Controlled Use Area - One antlered bull by permit available online at <http://huntalaska.gov> or in person in Hughes, Allakaket, and Fairbanks beginning Dec 1 *RM833 Dec. 15 – Apr. 15*

Nonresident: 24B within the Kanuti Controlled Use Area – one HT Sep. 5 – Sep. 25
bull with 50-inch antlers or antlers with 4 or more brow tines
on at least one side

Regulatory Year Initiated: 1992

Extent of Federal Public Lands

The Kanuti CUA is comprised of 56% Federal public lands. Of the Federal public lands, 49% are U.S. Fish and Wildlife Service (USFWS) managed lands and 7% are Bureau of Land Management (BLM) managed lands (**Map 1**).



Map 1. Federal closure area for moose in Unit 24B remainder, Kanuti Controlled Use Area.

Customary and Traditional Use Determination

Residents of Unit 24, Koyukuk, and Galena have a customary and traditional use determination for moose in Unit er.

Regulatory History

Under both State and Federal regulations, the Kanuti CUA is closed during moose hunting seasons to the use of aircraft for hunting moose, including transportation of any moose hunter or moose part. However, this does not apply to transportation of a moose hunter or moose part by aircraft between publicly owned airports in the CUA or between a publicly owned airport within the area and points outside the area. Under Federal regulations, the Kanuti CUA consists of that portion of Unit 24 bounded by a line from the Bettles Field VOR to the east side of Fish Creek Lake; to Old Dummy Lake; to the south end of Lake Todatonten (including all water of these lakes); to the northernmost headwaters of Siruk Creek; to the highest peak of Double Point Mountain; and then back to the Bettles Field VOR (**Map 1**).

The Kanuti CUA was created in 1979 under State regulations to address user conflicts and biological concerns and is important in maintaining reasonable opportunity for subsistence uses of moose (ADF&G 2010). In 1990, the Kanuti CUA was adopted into Federal subsistence regulations from State regulations and was part of Unit 24 remainder. The season was Aug. 25-Sep. 25 with a harvest limit of one bull.

In 1992, the Tanana Chiefs Conference (TCC) submitted Proposal P92-115, requesting the Kanuti CUA be closed to moose hunting except by residents of Alatna, Allakaket, Bettles, Evansville, and Hughes because subsistence needs were not being met. The Federal Subsistence Board (Board) adopted Proposal P92-115 with modification, closing the Kanuti CUA to moose hunting except by Federally qualified subsistence users to provide opportunity to all users with a customary and traditional use determination (C&T) for moose in Unit 24. Additionally, harvest met or exceeded the estimated harvestable surplus, recommending limiting harvest to conserve the moose population (FSB 1992).

In 2006, the Board adopted Proposal WP06-34 to change the closing date of the moose season in Unit 24 remainder from Sept. 25 to Oct. 1 and to require a Federal registration permit during the extended Federal season of Sept. 26-Oct. 1. An extended season provided additional subsistence hunting opportunity, and survey data indicated the Unit 24 remainder moose population could sustain a modest increase in harvest. The Board also adopted Proposal WP06-36 to divide Unit 24 into four subunits to maintain consistency with State regulations, which subdivided Unit 24 to improve manageability. The Kanuti CUA became part of Unit 24B remainder.

Between 2007 and 2010, the Board approved several special action requests (WSA06-08, WSA07-09, WSA07-10, and WSA09-15) for extensions or establishments of winter seasons in Unit 24B because of extreme cold weather and unmet subsistence needs.

In 2010, the Board adopted Proposal WP10-67 with modification to establish Kanuti National Wildlife Refuge (NWR) and BLM lands as a separate hunt area within Unit 24B, specify the harvest limit as one antlered bull to discourage inadvertent cow harvest, and add a winter season of Dec. 15-Apr. 15 to provide additional opportunity in an area with low harvest success rates. The Board also stipulated the winter season would sunset on June 30, 2014.

Also in 2010, the Alaska Board of Game (BOG) adopted Proposal 94, which reduced the size of the Kanuti CUA under State regulations to accommodate access to a private cabin. As a result, the boundary of the State CUA has been out of alignment with the Federal CUA boundary since 2010.

In 2012, the Board adopted Proposal WP12-57 to redefine the hunt areas in Unit 24B to reduce user confusion by aligning State and Federal hunt area boundaries (although State and Federal boundaries of the Kanuti CUA were still out of alignment). The Kanuti CUA became part of two hunt areas: Unit 24B, all drainages of the Koyukuk River downstream from and including the Henshaw Creek drainage and Unit 24B remainder. The Henshaw Creek hunt area had a winter season (Dec. 15-Apr. 15), whereas Unit 24B remainder did not. The Board also adopted Proposal WP12-58 with modification to clarify permit requirements by requiring one Federal registration permit for both fall and winter seasons.

In 2014, the Board adopted Proposal WP14-29, making the Dec. 15-Apr. 15 season indefinite to provide additional opportunity. No impacts to the moose population had been observed since the winter season was established in 2010.

In 2016, the Board adopted Proposal WP16-42, establishing a winter season upstream of the Henshaw Creek drainage to provide additional opportunity. This resulted in the Henshaw Creek hunt area and Unit 24B remainder being collapsed into one hunt area, meaning all of the Kanuti CUA was part of Unit 24B remainder again.

In 2018, the Board adopted Proposal WP18-35 to remove “antlered” from the harvest limit for the fall season and to require a State harvest ticket and State registration permit for the fall and winter seasons in Unit 24B remainder, respectively. This eliminated the Federal registration permit requirement, aligning State and Federal reporting requirements.

In August 2020, the Board approved a revised closure policy, which stipulated all closures will be reviewed every four years. The policy also specified that closures, similar to regulatory proposals, will be presented to the Councils for a recommendation and then to the Board for a final decision. Previously, closure reviews were only presented to Councils who then decided whether to maintain the closure or to submit a regulatory proposal to modify or eliminate the closure.

In 2020, the Board voted to maintain status quo on WCR20-20. While there was no conservation concern for moose at the time, the subsistence needs of Allakaket and Alatna were not being met. There were concerns about the hard winter and deep snow from the winter of 2018-2019 and potential negatives impacts to the moose population.

Closure last reviewed: 2020 – WCR20-20

Justification for Original Closure:

§815(3) of ANILCA states:

Nothing in this title shall be construed as – (3) authorizing a restriction on the taking of fish and wildlife for nonsubsistence uses on public lands (other than national parks and monuments) unless necessary for the conservation of healthy populations of fish and wildlife, for the reasons set forth in section 816, to continue subsistence uses of such populations, or pursuant to other applicable law...

In 1992, the Board closed the Kanuti CUA to moose hunting except by Federally qualified subsistence users via adoption of Proposal P92-115 with modification. As harvest met or exceeded the estimated harvestable surplus, the Board supported the closure to conserve the moose population and to provide continued opportunity for all users with C&T for moose in Unit 24.

Council Recommendation for Original Closure:

The Federal Subsistence Regional Advisory Councils were not yet established in 1992. However, the Interior Regional Council took no action on the original closure (Proposal P92-115) due to lack of input from the Koyukuk River Fish and Game Advisory Committee (FSB 1992).

State Recommendation for Original Closure:

The State opposed the original closure, stating the Kanuti CUA already restricted non-local use by prohibiting aircraft. Additionally, the State commented that local residents harvested the majority of moose in the Kanuti CUA, unlike other parts of Unit 24 where non-local harvest was greater (FSB 1992).

Biological Background

The Koyukuk River Moose Hunters' Working Group in cooperation with the Alaska Department of Fish and Game (ADF&G) developed the Koyukuk River Moose Management Plan (Management Plan) in 2001 to guide moose management in the Koyukuk River drainage in response to concerns about overharvest (ADF&G 2001). The Management Plan made many regulatory recommendations to conserve the Koyukuk River drainage moose population that were adopted by the BOG and the Board. Goals of the Management Plan include managing the moose population on a sustained yield basis, protecting and enhancing moose habitat, and managing predation on moose (ADF&G 2001). ADF&G has the additional population objectives of 10,000-12,000 moose for all of Unit 24 and 4,000-4,500 moose for Unit 24B, specifically (Stout 2018).

ADF&G, BLM, and USFWS cooperatively conduct aerial moose surveys in Kanuti NWR during November to estimate moose abundance and composition. Since 1999, the survey methodology (Geospatial Population Estimator technique) and area (Kanuti NWR) has remained the same, allowing direct comparisons between surveys (Julianus and Longson 2018).

Between 1989 and 2021 the moose population in Kanuti NWR ranged from 551 moose to 2,010 moose (**Figure 1**) (Stout 2014, 2018; Julianus and Longson 2018). The highest estimate was in 1993 and cannot be directly compared to later surveys due to changes in survey methodology. Poor survey conditions and low sample size may have influenced the lowest estimate in 2013 (Stout 2014). Since 1999, the highest population estimate was 1,311 moose in 2017. Most recently, the 2021 estimate was 952 moose, although confidence intervals overlap with the higher 2017 estimate. However, population models indicate no trend in the data, suggesting the Kanuti NWR moose population has been stable since 1999 (Julianus and Longson 2018; Stout and Longson 2022).

Moose density estimates parallel moose population estimates. Between 1989 and 2021, the moose density in Kanuti NWR ranged from a high of 0.76 moose/mi² in 1993 to a low of 0.20 moose/mi² in 2013 (Stout 2014, 2018, Julianus and Longson 2018). Since 1999, the highest density estimate was 0.48 moose/mi² in 2017. These density estimates are typical of Interior Alaska moose populations that are limited by predation and indicate the Kanuti NWR moose population persists at a low-density dynamic equilibrium (Julianus and Longson 2018). Habitat limitations also affect moose densities in the Kanuti CUA. Moose densities in the upper Koyukuk drainage (north of Hughes) are significantly less than densities in the lower Koyukuk drainage where broad areas of riparian habitat are found (ADF&G 2001).

In low density moose populations, a ratio of 30-40 bulls:100 cows may be necessary to ensure adequate breeding as cows are sparsely distributed (ADF&G 2001). Between 1989 and 2021, bull:cow ratios ranged from 46 bulls:100 cows in 2010 to 75 bulls:100 cows in 2017 (**Figure 2**) (Stout 2014, 2018; Julianus and Longson 2018; Stout and Longson 2022). These high bull:cow ratios indicate sufficient numbers for breeding and that bulls are not being overharvested.

Fall calf:cow ratios of < 20 calves:100 cows, 20-30 calves:100 cows, and > 30-40 calves:100 cows indicate declining, stable, and growing moose populations, respectively (ADF&G 2001). Between 1989 and 2021, fall calf:cow ratios in Kanuti NWR ranged from 17 calves:100 cows in 1989 to 58 calves:100 cows in 2008 (**Figure 2**) (Stout 2014, 2018, Julianus and Longson 2018). Since 2004, calf:cow ratios have exceeded 30 calves:100 cows in all years surveyed (except 2021) and 40 calves:100 cows in 7 out of 10 years surveyed. These high calf:cow ratios suggest adequate productivity for population growth. In 2021, the calf: cow ratio was 22 calves:100 cows, indicating a stable moose population. While this number is on the low side of the 20-30 calves:100 cows, two of the last three winters have been severe, which it thought to be a factor in this ratio decline (Stout and Longson 2022).

Predation by wolves and bears in Unit 24B is likely limiting growth of the moose population (ADF&G 2001; Stout 2014, 2018). The Management Plan lists black bear predation on calves and wolf predation on all moose as significant mortality factors (ADF&G 2001). During Board discussion on Proposal P92-115, 100 moose were estimated to be predated by wolves from the Kanuti CUA each year, decreasing the harvestable surplus from 156 moose/year to 56 moose/year (FSB 1992). While the

Kanuti NWR moose population has been statistically stable since 1999, the observed population increase in 2017 may be partially due to reduction in wolf numbers (Julianus and Longson 2018). From 2012-2018, ADF&G conducted wolf control in Unit 24B, including along the western boundary of Kanuti NWR (ADF&G 2018a; Julianus and Longson 2018). Mild winters since 2009 may also have enhanced overwinter calf survival, increasing recruitment, and contributing to population increases (Julianus and Longson 2018).

At the 2019 winter meeting of the Western Interior Alaska Subsistence Regional Advisory Council (Council), the Council Chair stated that 2018/19 was a very high snow year, raising concerns for this moose population. Deep snow increases moose mortality and has negative effects on moose production, survival and recruitment (WIRAC 2019). Based on the National Weather Service archived data, the winters of 2017/18 and 2018/19 were both considered severe. Even with two severe winters there has not been a significant decline in the moose population (Stout and Longson 2022).

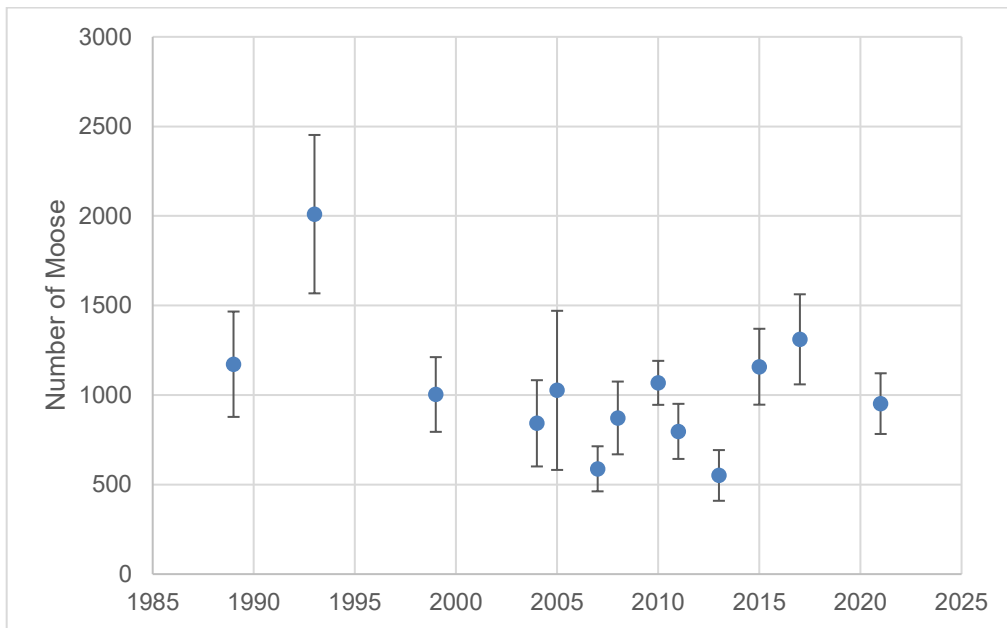


Figure 1. Population estimates for moose in Kanuti National Wildlife Refuge (Stout 2014, 2018, Julianus and Longson 2018).

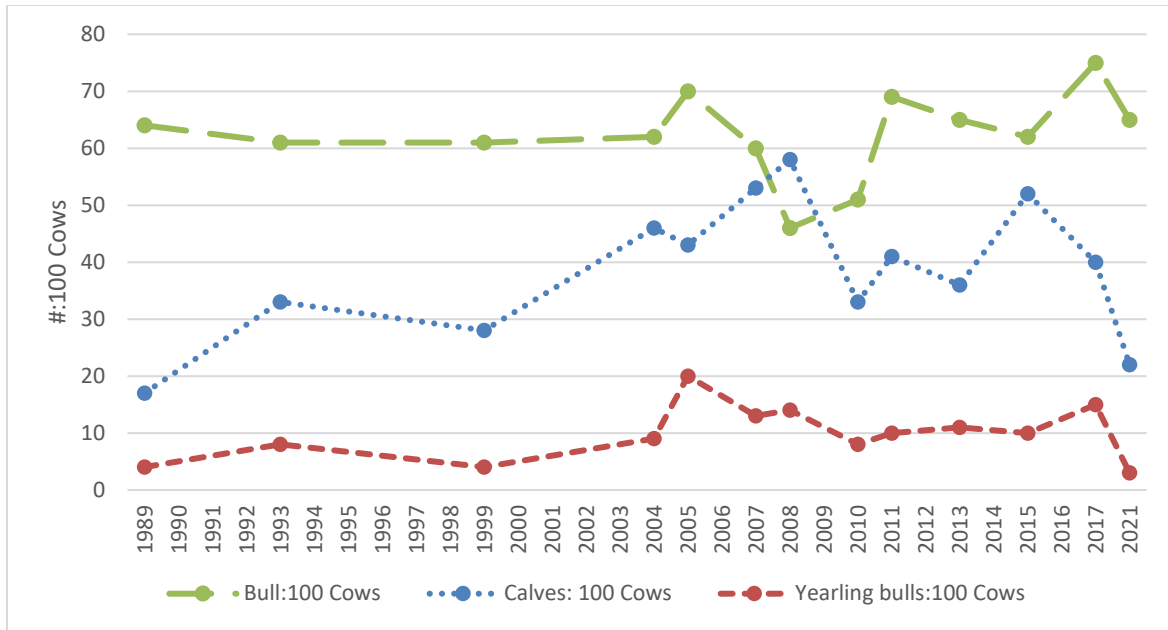


Figure 2. Bull:cow, calf:cow, and yearling bull:cow ratios for Kanuti National Wildlife Refuge (Stout 2014, 2018; Julianus and Longson 2018; Stout and Longson 2022).

Cultural Knowledge and Traditional Practices

The subsistence practices of the federally qualified subsistence users in Unit 24 reflect the cultural traditions of Koyukon Athabascans, Nunamiut Inupiat and Euro-American settlers. Subsistence culture is adaptive, opportunistic, and highly “flexible” (Nelson et al. 1978). It is based on broad knowledge of and dependence upon all available resources, which are affected by fluctuations of human and wildlife populations, migrations, and continuous environmental change (Nelson et al. 1978). The primary sources of protein in Upper Koyukuk subsistence harvests have shifted dramatically during living memory (Nelson et al. 1978). Prior to the availability of caribou and moose, Upper Koyukuk Elders described reliance on small land mammals and birds (mostly hare and ptarmigan), black bear harvest in the spring-fall, and fish (salmon and Sheefish/whitefish) in summer (Nelson et al. 1978; Marcotte and Haynes 1985). As caribou (late 19th early 20th century) and moose (early 20th century) became more numerous, populations of small land mammals began to decline and caribou and moose became the dietary staple (Nelson et al. 1978; Marcotte and Haynes 1985). The population of the Western Arctic Caribou Herd decreased dramatically in the early 1970s and the Alaska Board of Game (BOG) severely limited caribou hunting in the Upper Koyukuk area (Nelson et al. 1978). Some residents attributed this decline to the Trans-Alaska oil pipeline, forest fires, and disruption of caribou herds caused by harvesting caribou herd leaders (Nelson et al. 1978; Marcotte and Haynes 1985; Marchioni and Andersen 2012).

People depended largely on moose for subsistence for much of the late 20th century. In 1976-77, anthropologist Richard Nelson worked with Upper Koyukuk River communities Alatna, Allakaket, Hughes and Huslia. Nelson reported, “At the present time, moose is by far the most important mammal in the economy of all Koyukuk villages...”. Village residents told Nelson that moose slowly began to

arrive in the Upper Koyukuk approximately 100 years ago. They were first harvested locally in the 1930s and became established in the 1960s (Nelson 1978; Marcotte and Haynes 1985; FSB 1992). During the 1976-77 study, Upper Koyukuk residents said they were "...very protective of their moose, careful to husband the resource with prudence, concerned that it is the vital link holding them to their traditional livelihood" (Nelson et al. 1978). Nelson said, "The people are also deeply concerned today about conservation of moose in the face of growing pressure from outside hunters" (Nelson et al. 1978). At the 1992 Board meeting, participants expressed concerns about increased public access that might result after the opening of the Dalton Highway (FSB 1992).

The subsistence culture of the Upper Koyukuk continues because of the flexibility to adapt to shifting harvests. Both past and recent studies indicate; however, that residents have increasing concerns about decreases in fish and wildlife populations that are occurring at the same time and testing harvest flexibility (Nelson et al. 1978; Marcotte and Haynes 1985; Hutchinson-Scarborough et al. 2012; Wilson and Kostick 2016; Marchioni and Andersen 2012; FSB 1992).

During the most recent closure review in 2019, the Board maintained the closure because Allakaket and Alatna's subsistence needs were not being met and residents were concerned about increased moose mortality due to deep snow and changing winter weather patterns (WIRAC 2019). Concerns for subsistence practices in Allakaket and Alatna and the low abundance of Kanuti CUA moose were the primary reasons for the original closure in 1992.

The Kanuti CUA is Allakaket and Alatna's primary moose hunting area (Marcotte and Haynes 1992: 51). Tanana Chiefs Conference (TCC) submitted the original proposal to close the area, P92-115. They requested a moose hunting closure for all of Unit 24 except for five villages: Alatna, Allakaket, Bettles, Evansville and Hughes. Although TCC included these five villages: the Board discussion was focused on the unmet subsistence needs of Allakaket and Alatna. The TCC representative explained that Hughes would probably not hunt in the Kanuti CUA, because they hunt in an area with higher moose density compared to Allakaket and Alatna, which "...biologists have always recognized ... has been a really poor area. The moose density is low" (FSB 1992). The Chair of the Interior Regional Council stated "...in recent years, the subsistence needs for moose has not been satisfied in the upper part and especially in Allakaket and Alatna" (FSB 1992).

At the 1992 FSB meeting, the Board discussed reasons for the scarcity of moose in the Kanuti CUA. Factors included high wolf predation, competition from sport hunters and winters with long periods of deep cold after mid-winter with repeated thaws and freezing. These conditions increase moose mortality and decrease recruitment (Nelson et al. 1978). Alaska Department of Fish and Game (ADF&G) biologists said the harvest of cow moose was a contributing factor (FSB 1992). The winter harvest of cow moose is common in subsistence economies, including the Upper Koyukuk, because they have much more fat than bulls (Nelson et al. 1978). There are cultural rules about the winter cow hunt; residents are not allowed to harvest them close to the village or when they have a calf (Hutchinson-Scarborough et al. 2012).

The “harvestable surplus” of moose was discussed in detail. At that time, the estimated moose population in the Kanuti CUA was 1,200. Biologists reported that wolves take approximately 100 moose per year, which left a harvestable surplus of about 56 moose for subsistence hunters (FSB 1992: 56-61). Attempts to address these issues include the continued prohibition of hunting for moose by plane in the Kanuti CUA and ADF&G implementation of wolf control in the area. Residents continue to state that wolf predation affects both moose and caribou mortality (Hutchinson-Scarborough et al. 2012; Marchioni and Andersen 2012).

Although subsistence users in the area have harvested and consumed less moose over the decades, moose continues to be a critical subsistence resource, especially since other resources have also become scarce. As early as Nelson’s 1976 research, Upper Koyukuk residents expressed concerns about decreasing numbers of salmon, which they attributed to commercial fishing (Nelson 1978). In 2011, harvest surveys indicated that large land mammals were filling the space left by declining salmon runs (Hutchinson-Scarborough et al. 2012; Wilson and Kostick 2016). Table 2 of this document shows that Allakaket moose harvests have declined substantially between 1997 and 2011.

The most recent subsistence data is from studies conducted in Allakaket and Alatna in 2011 by the ADF&G Division of Subsistence. These studies were funded as planning and compliance documents for multiple proposed infrastructure projects in the area (Brown et al. 2016; Holen et al. 2012). These data, presented in the figure and tables below show the range of resource harvests over thirty years. **Figure 3** shows the pronounced decrease in salmon harvest and the increase in large land mammal harvest (Hutchinson-Scarborough et al. 2012).

Table 1 shows the pronounced decrease in the salmon harvest over 30 years; in 2011 the percentage of the salmon harvest is less than half of what it was in 1982 and in 2011, the large land mammal harvest is almost three times what it was in 1982 (Hutchinson-Scarborough et al. 2012).

Table 2 shows the numbers and types of large land mammals harvested from 1982-2011. The number of caribou harvested reflects the fluctuation in the migration routes of the caribou. The moose harvest in 2011 was less than half of what it was in 2002 (Hutchinson-Scarborough et al. 2012). Allakaket residents stated that the high caribou harvest in 2011 was unusual because the caribou were much closer than they had been for some time (Hutchinson-Scarborough et al. 2012). The community stated that their moose harvests were lower in 2011 because of the availability of caribou (Hutchinson-Scarborough et al. 2012). Some community residents expressed concerns that the moose population seems to be low and cited increasing numbers of predators as a problem (Hutchinson-Scarborough et al. 2012).

The most recent subsistence harvest data from household surveys for Allakaket and Alatna are more than ten years old. While it would be helpful to have updated information, these data indicate that moose and caribou harvests are more critical because salmon harvests have decreased substantially since 2011 due to fishery closures. These data show the importance of considering the entire subsistence harvest when reviewing the harvest closure of one species.

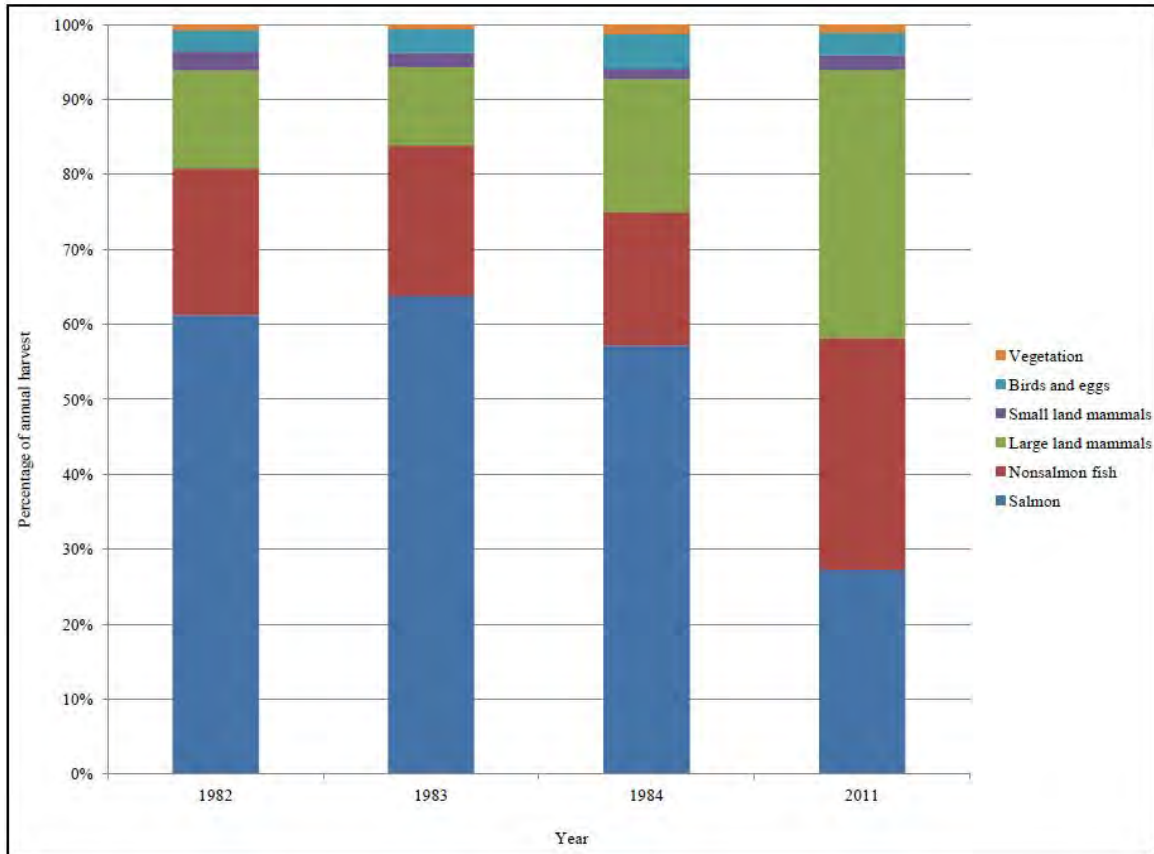


Figure 3. Percentage of harvests, Alatna and Allakaket, 1982, 1983, 1984, and 2011 (Hutchinson-Scarborough et al. 2012).

Table 1. Percentage of harvests, Alatna and Allakaket, 1982, 1983, 1984, and 2011 (Hutchinson-Scarborough et al. 2012).

Resource	Percent of total harvest			
	1982	1983	1984	2011
Salmon	61.2%	63.8%	57.1%	27.2%
Nonsalmon fish	19.6%	20.1%	17.8%	31.0%
Large land mammals	13.1%	10.5%	17.8%	35.7%
Small land mammals	2.6%	1.9%	1.4%	2.0%
Birds and eggs	2.7%	3.2%	4.6%	2.9%
Vegetation	0.8%	0.6%	1.3%	1.2%
Total	100.0%	100.0%	100.0%	100.0%

Source: Community Subsistence Information System (CSIS), Alaska Department of Fish and Game, <http://www.adfg.alaska.gov/sb/CSIS/>.

Table 2. Estimated harvests of large land mammals, Alatna and Allakaket, 1982, 1983, 1984, and 2011 (Hutchinson-Scarborough et al 2021.).

Resource	Alatna and Allakaket combined								Alatna		Allakaket		Total
	1982 ^a	1983 ^a	1984 ^a	1997 ^{a,b}	1998 ^{a,b}	1999 ^{a,b}	2001 ^{a,b}	2002 ^{a,b}	2011	95% confidence limit (±)	2011	95% confidence limit (±)	
Black bear	21	8	21	14	11	11	25	19	7.5	116.0	17.6	46.3	25.1
Brown bear	1	1	1	0	0	2	1	0	0.0	0.0	1.4	103.6	1.4
Caribou	4	0	4	32	54	13	9	140	28.5	88.0	95.0	27.9	123.5
Moose	39	26	39	52	42	43	41	47	3.0	148.0	17.6	31.2	20.6
Dall sheep	2	0	2	ND	ND	ND	ND	ND	0.0	0.0	4.1	76.5	4.1

Source Community Subsistence Information System (CSIS), Alaska Department of Fish and Game, <http://www.adfg.alaska.gov/sb/CSIS/>.

Note In 1982, 1983, and 1984, Alatna and Allakaket were surveyed together, but in 1997, 1998, 1999, 2001, 2002, and 2011 the communities were surveyed separately.

Note ND indicates no data are available.

a. Values in the CSIS are rounded to the nearest whole number.

b. Harvest data for Alatna and Allakaket are combined for data years 1997, 1998, 1999, 2001, and 2002 for the sake of brevity and ease of comparison with other data in this table.

Harvest History

The Management Plan prescribes a maximum annual harvest rate of 5% for the Kanuti CUA moose population (ADF&G 2001). The Management Plan considers this a conservative harvest rate that is necessary due to significant mortality from predation. Given the 2021 population estimate for Kanuti NWR (952 moose), the 2021 harvestable surplus for Kanuti NWR was 48 moose.

Given the closure to non-Federally qualified users, all moose harvest on Federal public lands in the Kanuti CUA occurs under Federal regulations by Federally qualified subsistence users. Users with C&T for moose in the Kanuti CUA include residents of Unit 24, Galena, and Koyukuk. However, the primary harvesters are from Allakaket, Alatna, Bettles, and Evansville (FSB 1992).

In 1992, when the Board closed the Kanuti CUA to moose harvest by non-Federally qualified users, an estimated 50-75 moose were being harvested from the CUA by both subsistence and sport hunters each year, although annual reported harvest was 30 moose. ADF&G and Kanuti NWR staff recommended harvest from the CUA not exceed 50 moose per year (FSB 1992). A representative from the TCC the proposal's proponent testified that harvest pressure on moose was increasing because local people were depending more on moose to meet their subsistence needs given declines in caribou abundance. The Chair of the Interior Regional Council testified that subsistence needs in Allakaket and Alatna were not being met. The ADF&G representative testified that unlike other portions of Unit 24, most of the harvest from the Kanuti CUA was by local residents because of aircraft restrictions (FSB 1992).

Between 2006 (when Unit 24 was divided into subunits) and 2018, moose harvest by Federal registration permit in Unit 24B totaled 37 moose, ranging from 0-5 moose reported harvested per year (OSM 2018). Over the same time period, a total of 371 Federal permits were issued, ranging from 13-72 permits per year, indicating low success rates (**Figure 4**) (OSM 2019). In 2018 Federal regulations were changed and only a State permit and harvest ticket were required, instead of a Federal permit.

Between 2006 and 2017, annual reported moose harvest under State regulations in Unit 24B ranged from 23 - 49 moose and averaged 34.5 moose (**Figure 5**) (ADF&G 2018b). Non-local hunters accounted for the majority of the State-reported moose harvest in Unit 24B. Federally qualified subsistence users (those with C&T) only accounted for 28% of the reported moose harvest on average

(ADF&G 2018b). Since the closure of the Kanuti CUA in 1992, reported moose harvest, moose hunters, and harvest success rates under State regulations in Unit 24B have all trended downward (**Table 3**) (ADF&G 2018b). Over 95% of reported harvests occur in September (Stout 2018).

Illegal and unreported moose harvest in Unit 24 is significant and hampers management (Stout 2014). Between 2006 and 2015, ADF&G has estimated unreported moose harvest for all of Unit 24 as 135-144 moose per year and that 60-70% of unreported harvests are cows (Stout 2014, 2018). Using community household survey data between 1997 and 2002, Stout (2018) estimated unreported harvest rates for non-local hunters and local residents of Unit 24 as 17.7% and 76%, respectively. Much of the unreported harvest likely occurs between October and March. These data are based on intermittent household surveys, historical information, and public interviews (Stout 2014, 2018). Additionally, household surveys are intended to demonstrate community harvest patterns and resource use, rather than precise harvest numbers.

Between 1997 and 2011, annual moose harvest by the communities primarily responsible for moose harvest within the Kanuti CUA (Alatna, Allakaket, Bettles, and Evansville) ranged from 26-55 moose/year according to household survey data and from 3-10 moose/year according to State harvest reports (**Table 4**) (ADF&G 2018b, 2018c). This corresponds to unreported harvest rates of 81%-92% (**Table 4**). The number of moose actually harvested from the Kanuti CUA is unknown. The household survey data does not specify area and the State harvest reports are for all of Unit 24B.

However, unreported harvest rates were much lower for the Federal registration permit hunt (**Figure 4**). While most of the moose harvest in Unit 24B occurs under State regulations, unreported harvest rates for the Federal hunt between 2006 and 2018 only averaged 18%, ranging from 0%-44% per year (OSM 2019). These high reporting rates are likely due, in part, to good communication between local residents and Kanuti NWR staff who administered the Federal hunt and issued the permits.

At the 2019 winter Council meeting, the Council Chair stated that recent moose harvest in Allakaket and Alatna has been fairly low. The Koyukuk River Advisory Committee reported that only nine moose had been killed in these communities during the 2018 fall season, one in the Koyukuk CUA and eight locally (WIRAC 2019). Additionally, moose started moving later in fall 2018 due to warmer weather, resulting in local hunters spending a lot of time and fuel searching for moose (WIRAC 2019).

Table 3. Averages of reported harvest, number of hunters, and harvest success rates for moose in Unit 24B according to State harvest reports (ADF&G 2018b, 2022).

Years	Moose Harvest	Moose Hunters	Success Rate (%)
1987-1991	59.6	116.2	51.5
1992-2004	45.2	108.4	41.5
2005-2017	34.5	98.0	35.5
1992-2017	39.8	103.2	38.5
2018-2021	32	85	38.0

*In 2018, Federal regulations were changed to require State harvest tickets and permits instead of a Federal registration permit.

Table 4. Community household survey and reported moose harvests (ADF&G 2018b, 2018c, OSM 2019).

	Alatna	Allakaket	Bettles	Evansville	Household Survey Total	Reported Harvest Total	% Unreported
1997	9	43	0	3	55	7	87.3
1998	5	37	7	4	53	10	81.1
1999	6	37	2	2	47	8	83.0
2001	6	35	no data	no data	41	6	85.4
2002	12	35	0	0	47	4	91.5
2011	4	19	2	1	26	6*	76.9

*includes 3 moose reported by Federal permit. (No Federal permit hunts existed before 2006)

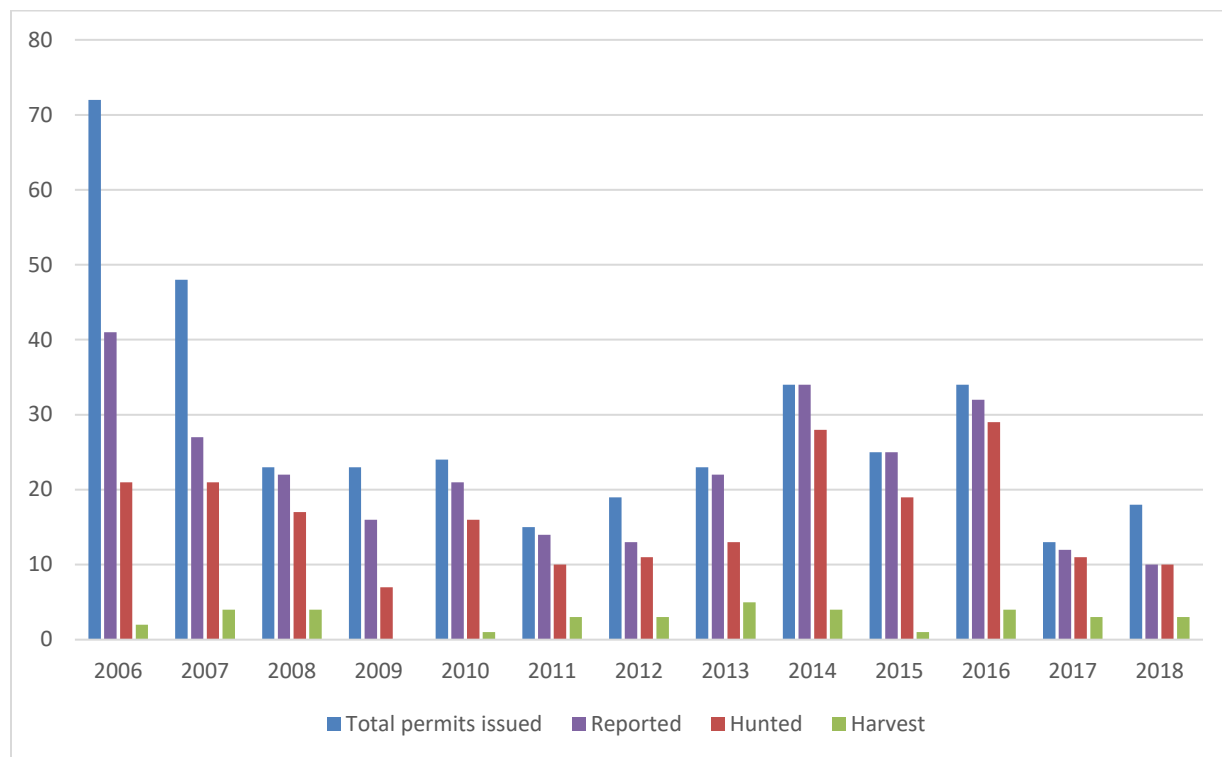


Figure 4. Number of permits issued and reported, hunters attempting harvest, and moose reported harvested for the Federal registration permit moose hunts (FM2401-FM2404) in Unit 24B (OSM 2019). The vast majority of Federal permit holders (95%) lived in Allakaket or Alatna. The remaining 5% of permit holders lived in Bettles.

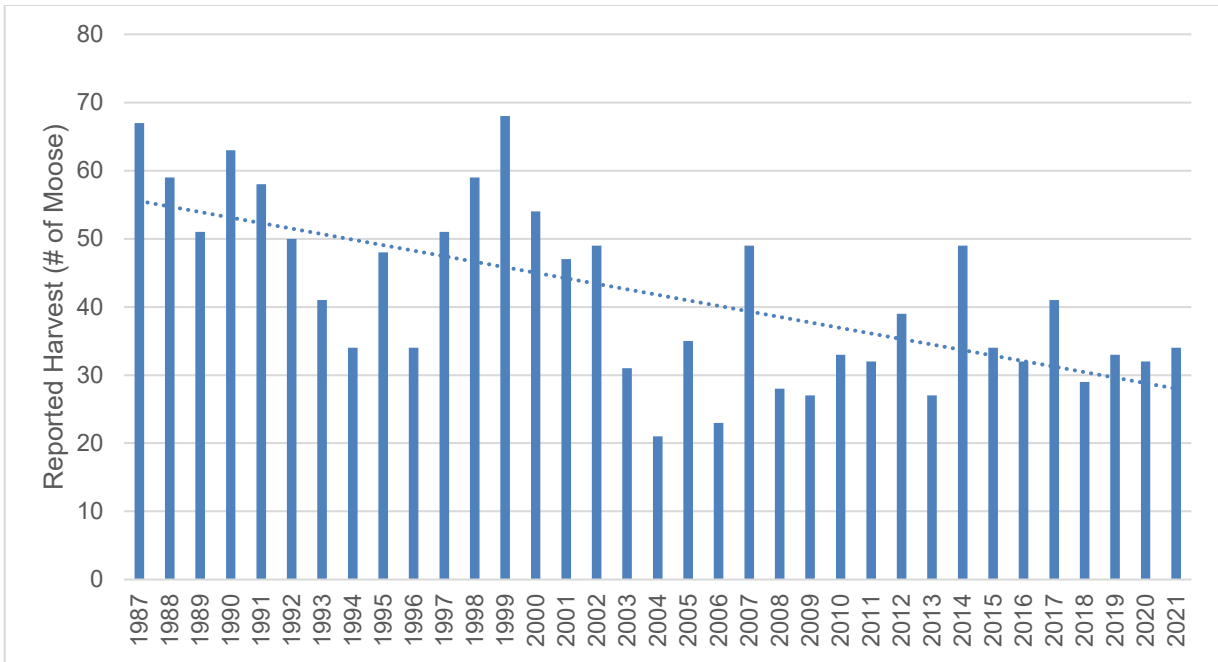


Figure 5. Reported moose harvested under State regulations in Unit 24B from 1987 to 2021 (ADF&G 2018b, 2022).

Effects

Retaining the status quo would continue to provide for continued subsistence priority. In 2020, when the closure was reviewed, it was determined that the communities of Allakaket and Alatna were not meeting their subsistence needs.

Biologically, the closure no longer seems warranted, due primarily to very high bull:cow ratios. Consistently high bull:cow ratios suggest there are surplus bulls available for harvest and only bulls can be legally harvested in Unit 24B. While the Kanuti CUA moose population has remained statistically stable since the closure was initiated in 1992, high calf:cow ratios and observed increases in the 2015 and 2017 population estimates indicate the moose population may be growing. Since 2018, two of the four winters have been considered severe, one mild, and one moderate. Even with these tough weather events the calf:cow ratios and observations remain within the levels considered to be stable.

Modifying the closure by eliminating the winter season portion of the closure during, Dec. 15 – Apr. 15, would be the conservative approach. Maintaining a closure from Aug. 15 – Oct. 1 helps community member of Allakaket and Alatna to meet their subsistence needs, while opening the winter season addresses the lack of conservation concern. The State season for moose is currently open to both residents and non-residents Sept. 5 – 25. Eliminating the closure during the Aug. 25 – Oct. 1 Federal season, may bring in a larger number of non-Federally qualified subsistence users to hunt the Kanuti CUA, resulting in unsustainable harvest.

OSM PRELIMINARY CONCLUSION:

- Retain the Status Quo**
- Rescind the Closure**
- Modify the closure to eliminate the closure during the winter season and clarify regulatory language**
- Defer Decision on the Closure or Take No Action**

The modified regulations should read:

Unit 24B–Moose

Unit 24B, remainder 1 bull by state harvest ticket *Aug. 25-Oct. 1*

OR

1 antlered bull by State registration permit *Dec. 15-Apr. 15*

*Federal public lands in the Kanuti Controlled Use Area, as described in Federal regulations, are closed to taking of moose **Apr. 16-Dec. 14**, except by Federally qualified subsistence users of Unit 24, Koyukuk, and Galena hunting under these regulations*

Justification

The Kanuti CUA was closed for conservation and continuation of subsistence uses reasons. Biologically, the closure no longer seems warranted, primarily due to very high bull:cow ratios, while population estimates since 1999 indicate a stable moose population. Moreover, harvest of mature bulls in a population with high bull:cow ratios should not materially affect population growth.

Prior to the 1992 closure, local hunters harvested most of the moose from the Kanuti CUA due to aircraft restrictions. Since 1992, average annual reported harvest from Unit 24B has declined, and most moose are harvested in September. This suggests opening the Kanuti CUA from, Dec. 15 – Apr. 15, to non-Federally qualified users may result in small increases in reported moose harvests. A rural subsistence priority would be maintained during the Federal fall season when the majority of moose are harvested.

However, it is not clear if the closure is needed for the continuation of subsistence uses. Harvest data in this area is limited, particularly over the last ten years. However, Federally qualified subsistence users have noted that they are relying more on moose and other large mammals as salmon levels have declined. Estimated high unreported harvest rates and intermittent household surveys preclude accurate

harvest information for Federally qualified subsistence users. Whether or not subsistence needs of Federally qualified subsistence users are being met is unknown, although high bull:cow ratios indicate bull moose are available for harvest and meeting subsistence needs.

A conservative approach would be to open the Dec. 15 – Apr. 15 season to non-Federally qualified subsistence users, followed by an evaluation of any changes in the moose population, bull:cow ratios, and harvest, while leaving the Aug. 25-Oct. 1 season closed to non-Federally qualified subsistence users.

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**FEDERAL WILDLIFE CLOSURE REVIEW
WCR24-43**

Issue: Wildlife Closure Review WCR24-43 reviews the closure to moose hunting, except by residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek in Unit 19A, remainder.

Closure Location and Species: Unit 19A, remainder—Moose (**Map 1**)

Current Federal Regulation

Unit 19A—Moose

Unit 19A, remainder—1 antlered bull by Federal drawing permit or a State permit. Sept. 1-20.

Federal public lands are closed to the taking of moose except by residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek hunting under these regulations

Closure Dates: Year-round

Current State Regulation

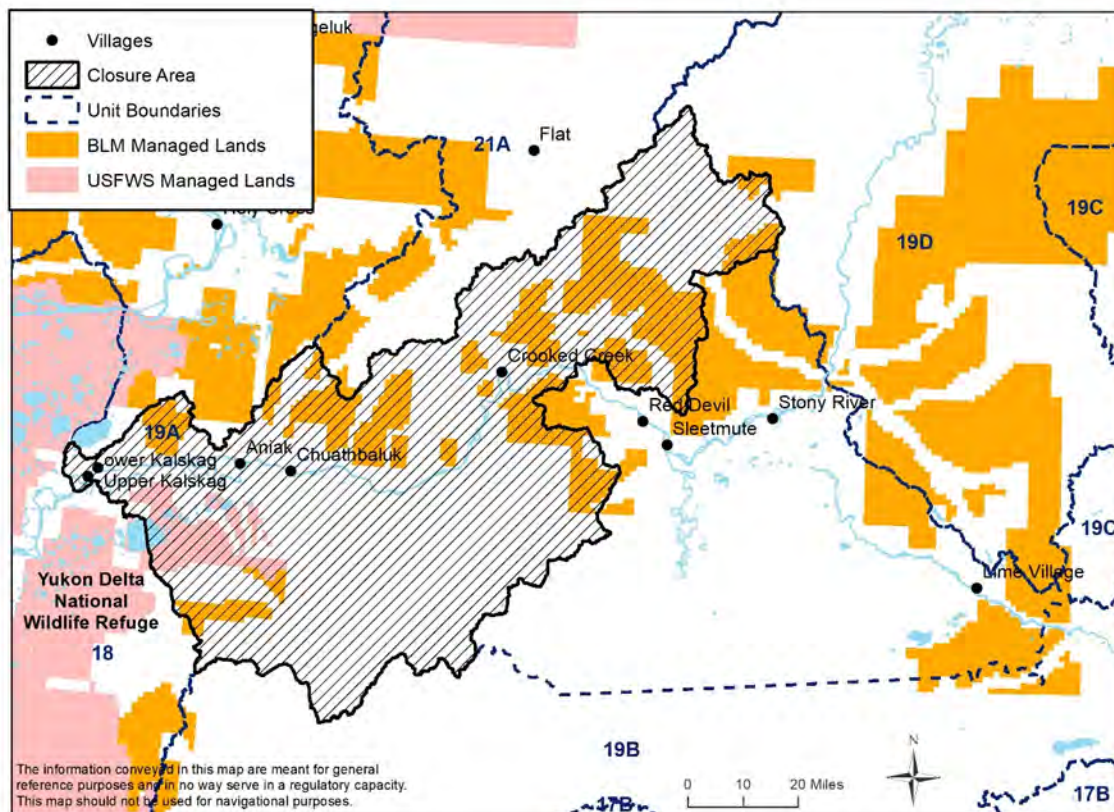
Unit 19A—Moose

Residents: Kuskokwim River drainage downstream from, and including, the George River drainage, and downstream from and excluding the Downey Creek drainage — One antlered bull by permit TM680 Sept. 1- 20

Regulatory Year Initiated: 2007

Extent of Federal Public Lands/Waters

Unit 19A is comprised of 23.6% Federal public lands and consist of 21.3% Bureau of Land Management (BLM) managed lands, and 2.4% U.S. Fish and Wildlife Service (USFWS) managed lands (**Map 1**).



Map 1. Federal hunt area closure for moose in Unit 19A remainder.

Customary and Traditional Use Determination

Residents of Unit 18 within the Kuskokwim River drainage upstream from and including the Johnson River, and residents of Unit 19 have a customary and traditional use determination for moose in Unit 19A.

Regulatory History

In 1990, Federal hunting regulations were adopted from State regulations. The moose season in Unit 19A was Sept. 1-Sept. 20, Nov. 20-Nov. 30, and Feb. 1-Feb. 10. The harvest limit was one moose, although antlerless moose could be taken only from Nov. 20-Nov. 30 and from Feb. 1-Feb. 10.

In 1992, the Federal Subsistence Board (Board) adopted Proposal P92-111 with modification to change the Unit 19A moose season to Sept. 5- 25, Jan. 1-Jan. 10, and Feb. 1-Feb. 5 to provide harvest opportunity during Russian Orthodox holidays in January (FSB 1992). Antlerless moose could only be taken during the winter seasons. The Board rejected Proposal P92-66 to liberalize moose hunting regulations in several units including Unit 19A because moose densities were too low to sustain increased harvests.

In April 1994, the Board deferred Proposal P94-54 to align Unit 19A Federal harvest limits and seasons with State regulations because not all affected Subsistence Regional Advisory Councils (Councils) had considered the proposal. In November 1994, the Board adopted P94-54 with

modification, aligning Unit 19A Federal moose regulations with State regulations with the exception of retaining the January season (FSB 1994). Unit 19A was divided into two hunt areas: that portion north of the Kuskokwim River upstream from, but not including the Kolmakof River drainage and south of the Kuskokwim River upstream from, but not including the Holokuk River drainage (Unit 19A east) and Unit 19A remainder. The seasons in both hunt areas were Sept. 1-20, Nov. 20-30, Jan. 1-10, and Feb. 1-10. The harvest limit in Unit 19A east was one moose, although antlerless moose could only be taken during the February season. The harvest limit in Unit 19A remainder was one bull.

In 2003, the Board adopted Proposal WP03-31 to shorten the February season in Unit 19A east to Feb. 1-Feb. 5 and eliminate the antlerless moose season because of declines in the Unit 19A moose population.

In 2004, the Board adopted Resolution 04-1 to support the Central Kuskokwim Moose Management Plan (Management Plan) (ADF&G 2004). The Board also adopted Proposal WP04-58 to eliminate the November, January, and February moose seasons in Unit 19A. Additionally, the Board adopted Proposal WP04-59 with modification to combine the Unit 19A hunt areas, require a State registration permit, and change the harvest limit to one antlered bull. These restrictions addressed severe declines in the Unit 19A moose population and complied with the Management Plan.

In 2006, the Alaska Board of Game (BOG) established a Tier II only moose hunt in Unit 19A, Kuskokwim River drainage downstream from, and including, the George River drainage, and downstream from and excluding the Downey Creek drainage (same as the Federal Unit 19A remainder hunt area) and eliminated the registration permit hunt to conserve the moose resource (OSM 2006). Subsequently, the Alaska Department of Fish and Game (ADF&G) submitted Special Action Request WSA06-01a to require a permit in Unit 19A remainder that worked in concert with the State's Tier II hunt (WSA06-01b requested closing moose hunting in eastern Unit 19A). The Board approved WSA06-01a with modification, requiring a Federal drawing or State Tier II permit and closing moose hunting in Unit 19A remainder except by residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek (OSM 2007). A limited harvestable surplus required a §804 analysis, which determined these six communities to be the most dependent on the Unit 19A remainder moose population (OSM 2006).

In 2007, the Western Interior Alaska Subsistence Regional Advisory Council (Western Interior Council) submitted Proposal WP07-35, requesting the same changes as WSA06-01. The Board adopted Proposal WP07-35 with modification because of continued conservation concerns for the Unit 19A moose population including low productivity, bull:cow ratios, and density combined with historically high hunting pressure (OSM 2007). This proposal also codified the temporary regulatory actions the Board took on Special Action requests WSA06-01a and WSA06-01b for moose in Units 19A and 19B in 2006. The modification was to delegate authority to the Yukon Delta National Wildlife Refuge (NWR) Manager to annually establish the harvest quota and number of available draw permits. The Western Interior and Yukon-Kuskokwim Delta Subsistence Regional Advisory Councils and ADF&G supported the proposal because of conservation concerns over the moose resource (OSM 2007).

Federal regulations for moose in Unit 19A remainder have not changed since 2007. In 2008, the Assistant Regional Director for the Office of Subsistence Management (OSM), with unanimous consent of the Interagency Staff Committee, rejected WSA08-07 to extend the Unit 19A remainder moose season by 10 days, ending Sept. 30 because the request did not meet the criteria in § ____.19(b) and (c) of ANILCA for accepting Special Action requests. Specifically, there was not an unusual, significant, or unanticipated change in resource abundance or hunting conditions (OSM 2008).

In August 2020, the Board approved a revised closure policy, which stipulated all closures will be reviewed every four years. The policy also specified that closures, like regulatory proposals, will be presented to the Councils for a recommendation and then to the Board for a final decision. Previously, closure reviews were presented to Councils who then decided whether to maintain the closure or to submit a regulatory proposal to modify or eliminate the closure.

In 2020, the Board adopted a modification for Closure Review WCR20-43 that maintained the closure in the western portion of Unit 19A, eliminated the closure for the Lime Village Management Area, established seasons, harvest limits, and permit requirements for the Lime Village Management Area hunt area, and removed the language referring to establishing quotas and permit numbers from the unit-specific regulations, and delegated authority to the Yukon Delta NWR manager to set quotas and permit numbers via a delegation of authority letter only. As the bull/cow ratio was still at the lower end of the ADF&G objective, the Board preferred a more robust bull/cow ratio before relaxing the closure. The Lime Village Management Area had inadvertently been included in Unit 19A remainder, so the modification primarily corrected a past oversight. Additionally, the modifications to the closure would increase harvest opportunities for Lime Village and reduce regulatory confusion by aligning Federal seasons with State regulations.

In 2022, the BOG adopted proposal 171 dividing Unit 19A into two subunits (19A, 19E). Dividing Unit 19A into two smaller units would align with the current State moose hunting boundaries and would benefit moose management in these units (Alaska Board of Game 2022).

Closure last reviewed: 2020 – WCR20-43

Justification for Original Closure (ANILCA Section 815 (3) criteria):

§815(3) of ANILCA states:

Nothing in this title shall be construed as – (3) authorizing a restriction on the taking of fish and wildlife for nonsubsistence uses on public lands (other than national parks and monuments) unless necessary for the conservation of healthy populations of fish and wildlife, for the reasons set forth in section 816, to continue subsistence uses of such populations, or pursuant to other applicable law...

The combination of low moose population densities, low calf production and survival, low bull:cow ratios and high hunting pressure contributed to declines in the Unit 19A moose population. In response to these conservation concerns, the Board closed moose hunting in Unit 19A remainder except by

residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek in 2007.

Council Recommendation for Original Closure:

The Yukon-Kuskokwim Delta and Western Interior Councils supported the closure to protect the moose resource for future generations.

State Recommendation for Original Closure:

The State supported the closure due to continued conservation concerns for the Unit 19A moose population and to better align with State regulations. The State established a Tier II only hunt in a portion of Unit 19A in 2006.

Biological Background

In 2004, ADF&G in cooperation with the Central Kuskokwim Moose Management Planning Committee published the Central Kuskokwim Moose Management Plan (Management Plan) (ADF&G 2004). State management objectives for the composition of the moose population in Unit 19A are the same as those in the Management Plan (Peirce 2018, ADF&G 2004):

- Maintain a minimum fall post hunt bull:cow ratio of 20-30 bulls:100 cows.
- Maintain a minimum fall post hunt calf:cow ratio of 30-40 calves:100 cows.
- Maintain no fewer than 20% calves (short yearlings) in late winter.

ADF&G has the additional intensive management objective for both Units 19A and 19B (Peirce 2018, Seavoy 2014):

- Achieve a moose population of 13,500-16,500 moose (7,600-9,300 in Unit 19A) with 750-950 moose available for harvest annually.

ADF&G conducts aerial surveys in Unit 19A to estimate the moose population in March (**Map 2**) (Peirce 2018, Seavoy 2014). The Federal closed area, Unit 19A remainder, primarily falls into the Unit 19A West (Aniak) moose survey area (MSA). ADF&G only surveys the Aniak MSA opportunistically, but surveys eastern Unit 19A every 3 years (**Map 2**) (Seavoy 2014). While the moose population in the Unit 19A West (Aniak) MSA appeared relatively stable between 2006 and 2010, it increased significantly in 2017 (**Figure 1, Table 2**). ADF&G also surveyed the entire Unit 19A West hunt area (TM680) for the first time in 2017, estimating 4,135 moose with 0.7 moose/mi² (Peirce 2018, pers. comm.). The population survey in winter 2020 indicates that the Unit 19A West population is continuing to increase with an estimate of 5,224 moose and 0.9 moose/mi² (Peirce 2022, pers. comm.).

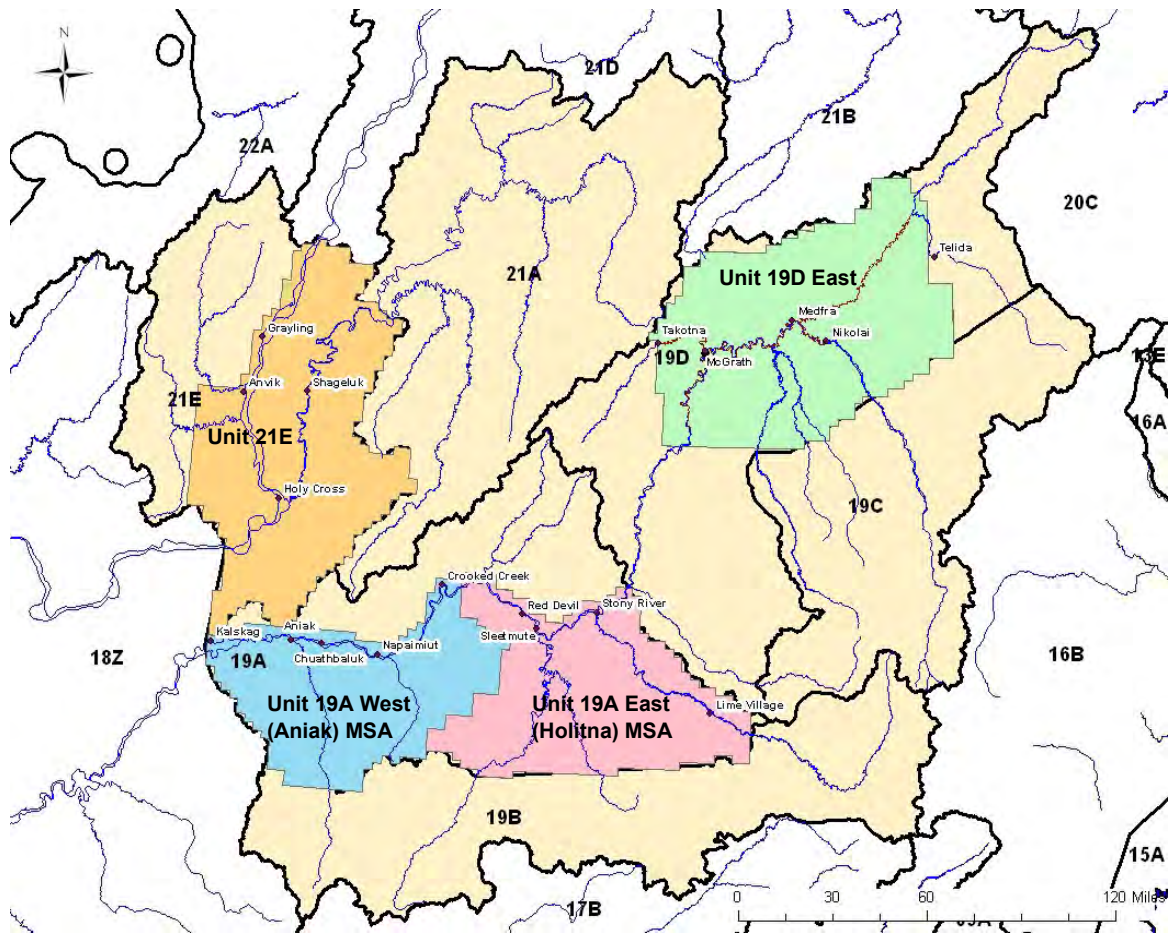
Moose densities of 0.75-0.93 moose/mi² are required to meet State population objectives (Seavoy 2014). Between 1998 and 2017, estimated moose density in Unit 19A ranged from 0.25 moose/mi² to 1.3 moose/mi² (**Table 1**) (ADF&G 2018a, Peirce 2018, Seavoy 2014, ADF&G 2004, Peirce 2018, pers. comm.). While the 2017 density estimate for the Unit 19A West (Aniak) MSA of 1.3 moose/mi²

is the highest ever recorded for this area and is well above State population objectives, the 2020 density estimate for the entire Unit 19A West hunt area increased to 0.9 moose/mi², which is within State management objectives (**Table 1, Table 2**).

ADF&G conducts aerial surveys to estimate the composition of the Unit 19A moose population in November (Peirce 2018). Between 1987 and 2018, the bull:cow ratio in Unit 19A ranged from 6 bulls:100 cows to 58 bulls:100 cows (**Figure 2**). Between 2004 and 2018, the bull:cow ratio in the Aniak MSA ranged from 20 bulls:100 cows to 42 bulls:100 cows (**Table 3**). The lowest bull:cow ratio occurred in 2001 but has met or exceeded management objectives since 2007. However, the 2017 bull:cow ratio in the Aniak MSA just met management objectives (20 bulls:100 cows). While the 2018 bull:cow ratio increased to 26 bull:100 cows, the number of large bulls in the population is fairly low (**Table 3, WIRAC 2019**). Intense hunting pressure and predation likely contributed to the low bull:cow ratio in 2001 (Boudreau 2004).

Between 1987 and 2017, the calf:cow ratio in the Holitna MSA and Aniak MSA ranged from 8 calves:100 cows to 72 calves:100 cows (**Figure 3**) (Peirce 2018, Seavoy 2014). Between 2004 and 2017, the calf:cow ratio in the Aniak MSA ranged from 23 calves:100 cows to 64 calves:100 cows. The lowest calf:cow ratio also occurred in 2001. Since 2011, the calf:cow ratio has been within or above management objectives. The 2017 calf:cow ratio in the Aniak MSA is the highest ever recorded but fell back below State objectives in 2018 (**Table 3, Peirce 2018, pers. comm., Peirce 2022, pers. comm.**).

Predation by wolves, black bears, and brown bears influences moose abundance in Unit 19 and may be limiting population growth (Peirce 2018, Keech et al. 2011). ADF&G conducts intensive management in Unit 19A to reduce predation on moose. However, management activities only occur in eastern Unit 19A (ADF&G 2018a).



Map 2. Units 19, 21A, and 21E showing the 3 scheduled moose survey areas (MSA): Unit 19D East moose survey area, Unit 19A East (Holtna), and Unit 21E moose survey area. Also shown is the Unit 19A West (Aniak) moose survey area which is surveyed opportunistically. The area south of the Kuskokwim River includes both the Unit 19A East (Holtna) and Unit 19A West (Aniak) survey areas (figure from Seavoy 2014).

Table 1. Moose density estimates in Unit 19A (moose/mi²). See Map 2 for survey areas. The TM680 State hunt area is similar to the Federal Unit 19A remainder hunt area. Note: The BOG divided Unit 19A into two subunits, 19A and 19E, in 2022. (ADF&G 2018a, Peirce 2018, Seavoy 2014, ADF&G 2004, Peirce 2018, pers. comm.).

Year	South of Kuskokwim River	Unit 19A West (Aniak)	Unit 19A East (Holitna)	Unit 19A West hunt area (TM680)
1998			1.25	
2001		0.7		
2005	0.27			
2006		0.39		
2008			0.44	
2010		0.33		
2011			0.25	
2011			0.43 ^a	
2014				
2017		1.3 ^a	0.52 ^a	0.7 ^a
2018				
2019				
2020				0.9 ^a
2021				

^a Includes a sightability correction factor

Table 2. Estimates from Moose surveys in the TM680 hunt area (5,704 mi²) 2010-2020 (Peirce 2022, pers. comm.).

Year	Estimate of observable moose	SCF	Estimate with SCF applied	Calves %	Total moose/mi ²
2010 ^a	1,577	1.25 ^b	1,971		0.3
2017	3,392	1.22	4,135		0.7
2020	4,354	1.20	5,224	14	0.9

^a Extrapolated estimate because the survey area was a different size

^b Extrapolated SCF.

Table 3. Aniak fall aerial moose composition counts (Peirce 2022, pers. comm.).

Regulatory Year	Bulls:100 Cows	Calves:100 Cows	Calves	% Calves	Adults	Moose	Moose/Hour
2005-2006	20	23	66	16	344	410	18
2007-2008	28	52	35	29	87	122	41
2008-2009	42	23	7	14	44	51	26
2013-2014	38	41	34	23	113	147	28
2016-2017	22	52	245	30	574	819	55
2017-2018	20	64	95	35	178	273	39
2018-2019	26	28	45	18	206	251	83

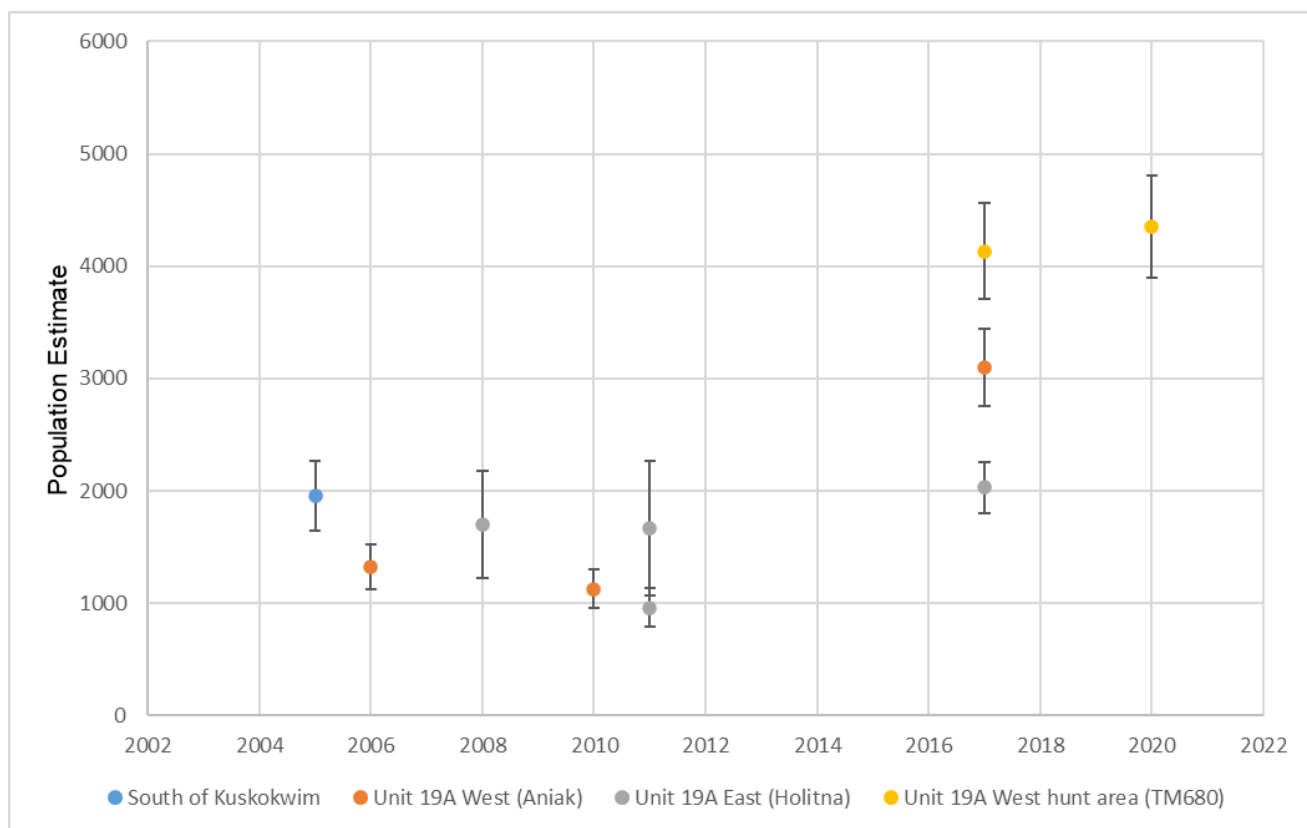


Figure 1. Population estimates for moose in Unit 19A with 90% confidence intervals. The higher estimate in 2011 and the 2017 estimate in the Unit 19A East (Holitna) survey area include sightability correction factors. See Map 2 for survey areas. The TM680 State hunt area is similar to the Federal Unit 19A remainder hunt area. Note: The BOG divided Unit 19A into two subunits, 19A and 19E, in 2022. (ADF&G 2018a, Seavoy 2014, Peirce 2018, pers. comm.).

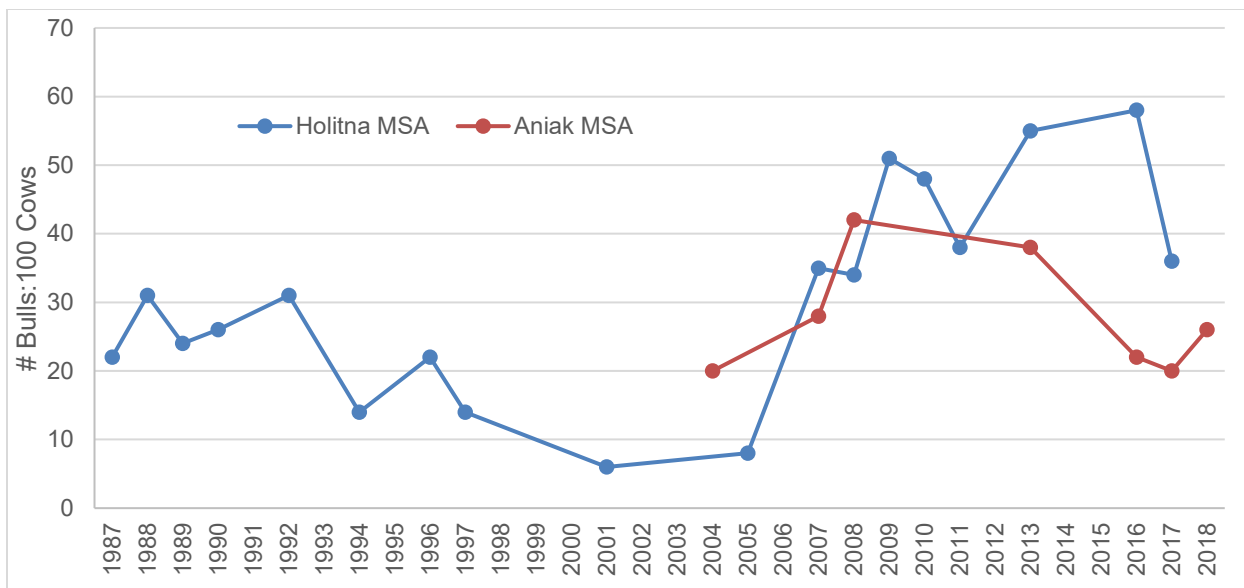


Figure 2. Fall bull:cow ratios for the Unit 19A East (Holitna) and Unit 19A West (Aniak) moose survey areas (Peirce 2018, ADF&G 2018a, Seavoy 2014, Peirce 2018, pers. comm., Peirce 2022, pers. comm.; WIRAC 2019). See Map 2 for survey areas.



Figure 3. Fall calf:cow ratios for the Unit 19A East (Holitna) and Unit 19A West (Aniak) moose survey areas (Peirce 2018, ADF&G 2018a, Seavoy 2014, Peirce 2018, pers. comm., Peirce 2022, pers. comm.). See Map 2 for survey areas.

Harvest History

Since 2006, moose harvest in Unit 19A remainder has only occurred under a State Tier II hunt, TM680, and a Federal drawing permit hunt, FM1901. Harvest for both hunts is limited to antlered bulls and restricted to Alaska residents. Harvest on Federal public lands is restricted to residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek.

Between 1994 and 2005, prior to any closures, annual reported moose harvest in all of Unit 19A ranged from 67-184 moose and averaged 127 moose (ADF&G 2004, 2018b). Between 2006 and 2021, annual reported moose harvest in Unit 19A remainder averaged 82 moose, ranging from 28-157 moose (**Figure 4**) (ADF&G 2018b, OSM 2022). Over the same time period, annual reported harvest on FM1901 averaged 36 moose, ranging from 4-73 moose (OSM 2022).

In 2006, ADF&G estimated the harvestable surplus of moose as 60 bulls for all of Unit 19A remainder (TM680 hunt area) and as 20 bulls on Federal public lands only (ADF&G 2006, OSM 2007). Most moose harvest on Federal public lands in Unit 19A remainder occurred on Yukon Delta NWR (ADF&G 2006). ADF&G estimated the harvestable surplus of moose for the Yukon Delta NWR portion of Unit 19A remainder as 16 bulls with a few additional harvests from BLM lands (ADF&G 2006).

Between 2006 and 2016, the moose population in the Unit 19A West (Aniak) MSA (**Figure 1**) appeared stable, suggesting the harvestable surplus had not changed. Since 2007, annual reported harvest has exceeded 60 bulls, the harvestable surplus. Since 2012, annual reported harvest has exceeded 110 moose (**Figure 4**). On Federal public lands, harvest has exceeded 20 bulls/year since 2014. While the number of available Tier II and Federal drawing permits has not changed substantially, hunter success rates steadily increased between 2006 and 2021 (**Table 4**).

The significant increase in the 2017 population estimate for the Unit 19A West (Aniak) MSA suggests a parallel increase in the harvestable surplus. At the 2019 winter meeting of the Western Interior Council, the ADF&G area biologist stated that the harvestable surplus is currently 160-165 moose per year while total reported harvest is roughly 150 moose per year (100 from Tier II permits and 50 from Federal permits) (WIRAC 2019). However, low 2016-2018 bull:cow ratios in the Unit 19A West (Aniak) MSA indicate few surplus bulls.

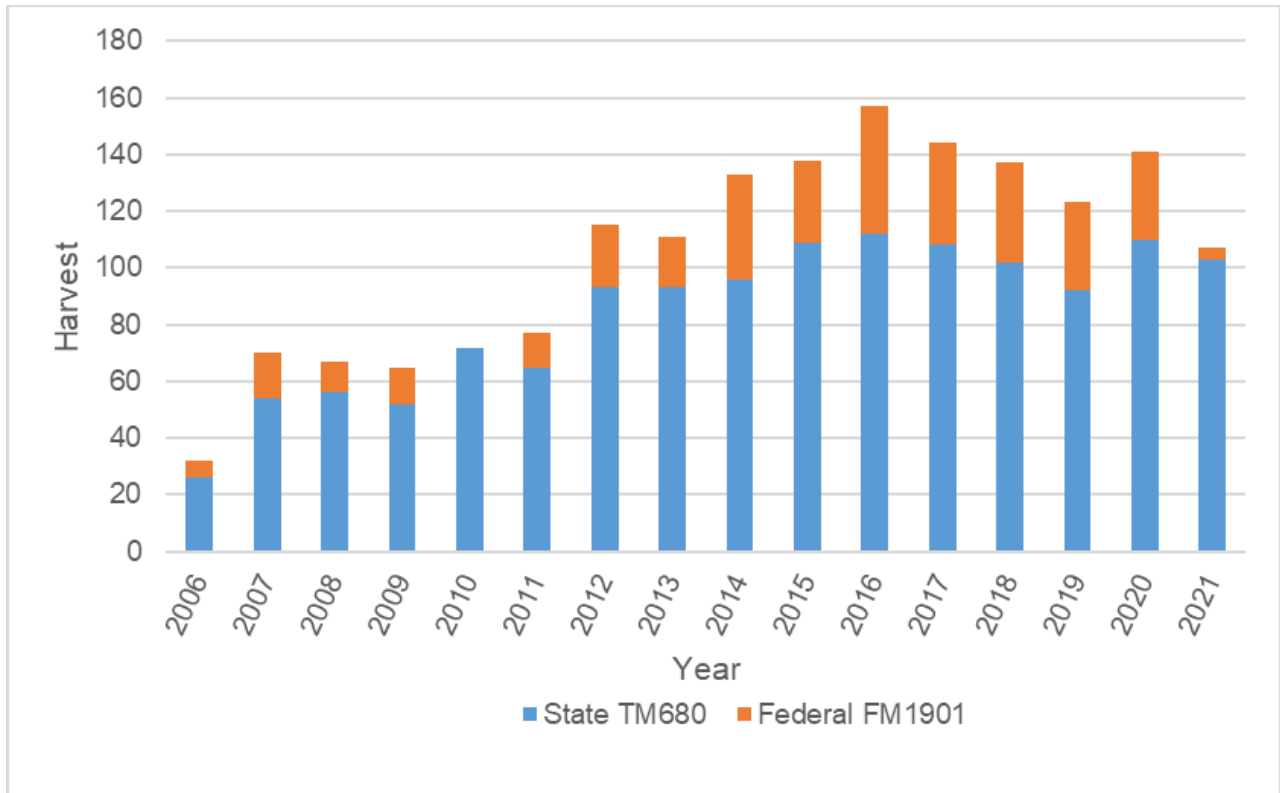


Figure 4. Reported moose harvest in Unit 19A remainder (ADF&G 2018b; OSM 2022; Peirce 2022, pers. comm.).

Table 4. Number of permits issued and success rates for the State Tier II, TM680 hunt and the Federal drawing permit, FM1901 hunt (ADF&G 2018b, 2022; OSM 2022).

Year	TM680 Issued	TM680 Success (%)	FM1901 Issued	FM1901 Success (%)
2006	200	15	92	13
2007	230	28	92	25
2008	230	28	97	14
2009	231	28	92	22
2010	200	41	*	*
2011	200	39	72	29
2012	200	56	82	43
2013	223	49	74	32
2014	192	60	92	64
2015	200	67	77	73
2016	200	64	96	65
2017	199	60	96	62
2018	210	56	100	35
2019	200	52	99	31
2020	200	64	68	31
2021	201	62	70	4
* No data available				

Effects

Maintaining status quo would continue to limit moose harvest on Federal public lands in Unit 19A remainder to only residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek. This allows for the continued growth of the moose population towards population goals, while providing the Federally qualified subsistence users (FQSUs) most dependent on the resource opportunity and priority on Federal public Lands.

Rescinding the closure could increase harvest opportunities for all residents, although the State hunt is currently a Tier II hunt, which limits hunters and harvest. However, this could increase hunting pressure on a slowly growing moose population, hampering recovery. Additionally, it would eliminate the Federal subsistence priority and decrease opportunity for FQSUs.

The closure could be modified to allow hunting by all FQSU but remain closed to non-Federally qualified users. This modification could increase the harvest pressure on the moose population, but would, furthermore, open the limited permits to all residents of Unit 18 within Kuskokwim River drainage upstream from and including the Johnson River, and residents of Unit 19. This could limit the permits and moose available for the residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek who have been determined as the communities most dependent on

this moose population. The closure could also be extended to all users, which would unnecessarily eliminate opportunity for FQSUs.

OSM PRELIMINARY CONCLUSION:

- Retain the Status Quo**
- Rescind the Closure**
- Modify the closure to . . .**
- Defer Decision on the Closure or Take No Action**

Justification

The moose population has increased over the years but remains at the lower end of the State's population goals, and the estimated harvestable surplus is usually met. The existing closure is necessary to allow the moose population to continue to grow, while still providing the FQSU most dependent on the resource priority and opportunity on Federal public lands. The affected area should remain closed to moose hunting until the population recovers to allow increased hunting pressure.

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FEDERAL WILDLIFE CLOSURE REVIEW WCR24-38

Issue: Wildlife Closure Review WCR24-38 reviews the closure to moose hunting in a portion of Unit 18, except by residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautlauk, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag.

Closure Location and Species: Unit 18, that portion east of a line running from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W162°22.14" Longitude), continuing upriver along a line 1/2 mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage (Unit 18, Kuskokwim)—Moose (**Figure 1**).

Current Federal Regulation

Unit 18 – Moose

Unit 18, that portion east of a line running from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W162°22.14" Longitude), continuing upriver along a line 1/2 mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage¹ - 1 antlered bull by State registration permit during the fall season

Sept. 1-Oct. 15.

Or

1 antlered bull by Federal registration permit during a may-be-announced winter season

May be announced between Dec. 1-Jan. 31.

Federal public lands are closed to the taking of moose except by residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautlauk, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag.

¹Referred to as the Kuskokwim hunt area throughout the analysis.

Closure Dates: Year-round

Current State Regulation

Unit 18 – Moose

Residents: Zone 1¹ – One bull excluding male calves, by permit, RM615 Sept. 1-Sept. 9²
available in person in Bethel and villages within the hunt area Aug
1-25 and online at [http:// hunt.alaska.gov](http://hunt.alaska.gov) Aug 1-Oct 1

Residents: Zone 2³— One bull excluding male calves, by permit, RM615 Sept. 1-Oct. 15
available in person in Bethel and villages within the hunt area Aug
1-25 and online at [http:// hunt.alaska.gov](http://hunt.alaska.gov) Aug 1-Oct 15

Non-residents: Unit 18 no open season

¹Zone 1 descriptor: Unit 18, all Kuskokwim River drainages north and west of a line beginning at the confluence of Whitefish Lake and Ophir Creek at the Unit 18 boundary and continuing southwest to the confluence of Tuluksak and Fog Rivers, then southerly to the lower Kisaralik River-Kasigluk River cutoff of the Kisaralik River, then southwesterly to the lower Kisaralik River-Kasigluk River cutoff of the Kasigluk River, then southwesterly to the Akulikutak River where the snowmachine trail crosses the river from the east side of Three Step Mountain, then westerly to the confluence of Kwethluk River and Magic Creek, then southwesterly to the confluence of Eek River and Middle Fork Eek River, then southwesterly to the Unit 18 boundary at 60° 4.983' N, 161° 37.140' W; and all drainages easterly of a line from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake at 60° 59.41' N, 162° 22.14' W, continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver along the east bank of Crooked Creek to the outlet at Arhymot Lake, then following the south bank of Arhymot Lake easterly to the Unit 18 boundary (**Figure 1**).

²full season is Sept. 1-Oct. 15, but ADF&G uses discretionary authority to set dates in Zone 1 each year

³Zone 2 descriptor: Unit 18, all Kuskokwim River drainages south and east of a line beginning at the confluence of Whitefish Lake and Ophir Creek at the Unit 18 boundary and continuing southwest to the confluence of Tuluksak and Fog Rivers, then southerly to the lower Kisaralik River-Kasigluk River cutoff of the Kasigluk River, then southwesterly to the lower Kisaralik River-Kasigluk River cutoff of the Kasigluk River, then southwesterly to the Akulikutak River where the snowmachine trail crosses the river from the east side of Three Step Mountain, then westerly to the confluence of Kwethluk River and Magic Creek, then southwesterly to the confluence of Eek River and Middle Fork Eek River, then southwesterly to the Unit 18 boundary at 60° 4.983' N, 161° 37.140' W (**Figure 1**).

Regulatory Year Initiated: 1991, closed to non-Federally qualified users; 2004-2009, closed to all users (harvest moratorium); 2010, closed except by some Federally qualified subsistence users (§804 restriction).

Extent of Federal Public Lands/Waters

Unit 18 is comprised of 67% Federal public lands and consists of 64% U.S. Fish and Wildlife Service (USFWS) managed lands and 3% Bureau of Land Management (BLM) managed lands.

The Unit 18 Kuskokwim moose hunt area is comprised of 57% Federal public lands and consists of 56% USFWS managed lands and 1% BLM managed lands (**Figure 1**). Zone 2 within the Kuskokwim moose hunt area is comprised of 82% Federal public lands and consists of 79% USFWS managed lands and 3% BLM managed lands (**Figure 1**).

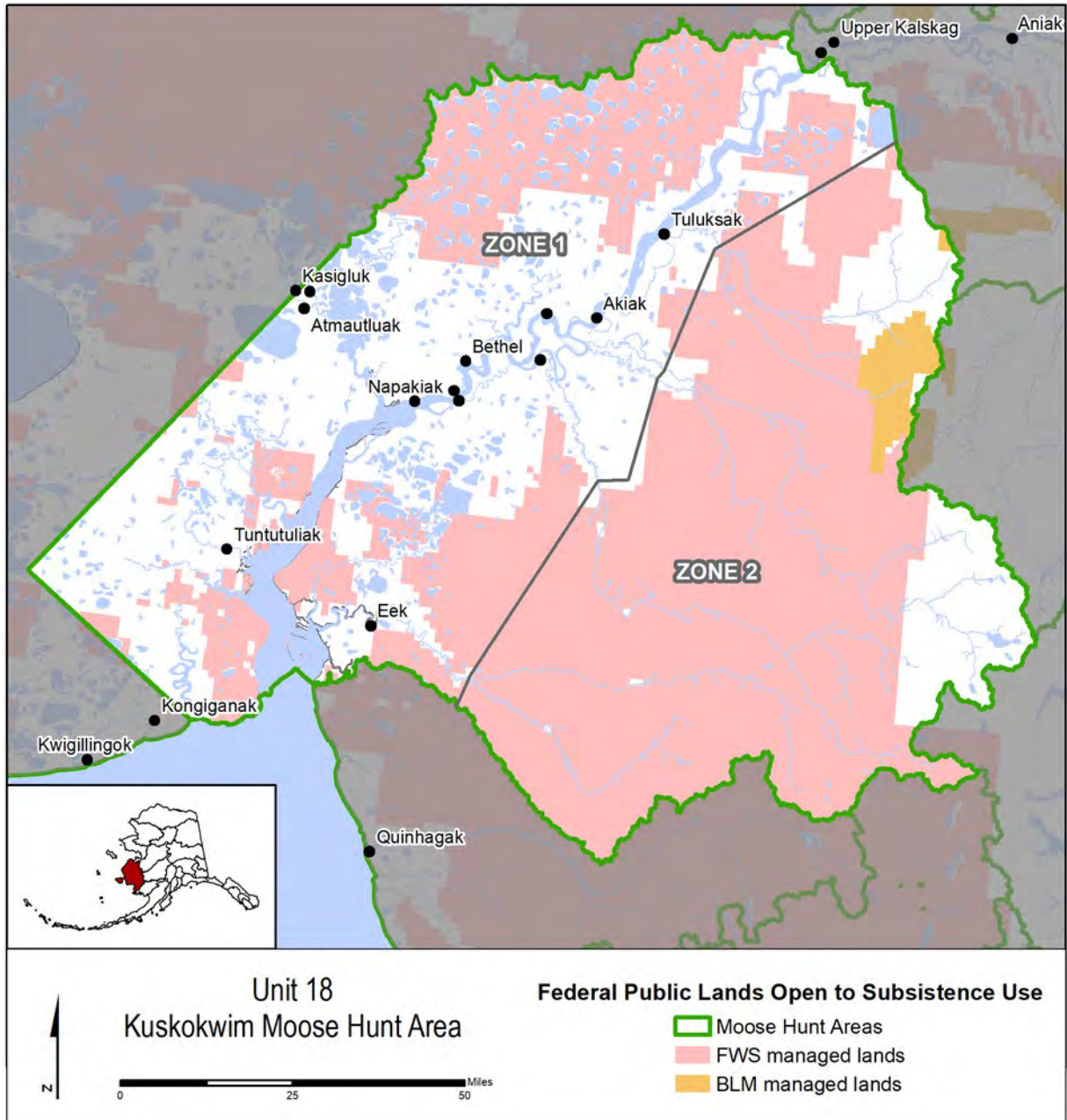


Figure 1 Land status and hunting zones in the Unit 18 Kuskokwim moose hunt area.

Customary and Traditional Use Determination

Residents of Unit 18, Upper Kalskag, Aniak, and Chuathbaluk have a customary and traditional use determination for moose in Unit 18, that portion of the Yukon River drainage upstream of Russian Mission and that portion of the Kuskokwim River drainage upstream of, but not including, the Tuluksak River drainage.

Residents of Unit 18, Lower Kalskag, and Upper Kalskag have a customary and traditional use determination for moose in Unit 18 remainder.

Regulatory History

Federal public lands in the Kuskokwim area have been closed to non-Federally qualified users since 1991, when the Board acted on Proposal P91-124. Submitted by the Togiak NWR, P91-124 requested that the moose season in the southern portion of Unit 18, including the Kanektok and Goodnews River drainages, be closed to allow establishment of a harvestable population. The Board adopted this proposal with modification to close Federal public lands throughout Unit 18 to moose harvest, except by Federally qualified subsistence users, given low moose densities throughout Unit 18.

Until 2004, Federal and State moose harvest limits for the lower Kuskokwim River area were one bull or one antlered bull, and the fall seasons were approximately one month. The State winter season varied widely from a continuous fall/winter season (Sept. 1–Dec. 31) to a 10-day December season and a winter “to be announced” season. The Federal winter season has varied from a 10-day season to a “to be announced” season.

Both the Federal and State seasons were closed in the fall of 2004 as part of a coordinated effort to build the Kuskokwim moose population. In 2003, at the request of local residents, the Alaska Board of Game (BOG) established a five-year moratorium on moose hunting under State regulations. The Board adopted Proposal WP04-51 in April 2004 that established a five-year moratorium on Federal public lands. The intent of the moratorium was to promote colonization of underutilized moose habitat. The moratorium was largely instigated by the Lower Kuskokwim Fish and Game Advisory Committee, which worked with the Alaska Department of Fish and Game (ADF&G), USFWS, and area residents to close the moose season for five years or when a population of 1,000 moose was counted in the lower Kuskokwim survey unit. Considerable outreach efforts were made to communicate the impact of the moratorium on the growth potential of the affected moose population to local communities.

In March 2009, the BOG established a registration hunt (RM615), in preparation for ending the moratorium on June 30, 2009. A September 1 – 10 season was established, with a harvest limit of one antlered bull by registration permit. The season was closed when the quota was met. In November 2009, the BOG adopted a proposal that changed the boundary separating the Unit 18 lower Kuskokwim area from the Unit 18 remainder area.

In May 2010, the Board adopted Proposals WP10-58 and WP10-62, with modification to make boundary changes similar to the BOG actions. Adoption of these proposals helped to clarify the boundary for moose hunters and law enforcement. At the same meeting in May 2010, the Board adopted Proposal WP10-54 with modification to reduce the pool of Federally qualified subsistence

users eligible to hunt moose on Federal public lands within the lower Kuskokwim. This was necessary because of the small number of moose available to harvest relative to the large number of subsistence users with a customary and traditional use determination for moose (42 communities including Bethel).

Special action requests were approved to establish Federal moose seasons in the lower Kuskokwim hunt area in 2010 and 2012. In 2010, Emergency Wildlife Special Action WSA10-02 was approved to establish a Sept. 1 – 5 moose season. In 2012, Emergency Wildlife Special Action WSA12-06 was approved to establish a Sept. 1 – 30 moose season. The harvest quota was set prior to the start of the season and the harvest limit was one antlered bull via a State registration permit.

In April 2014, the Board adopted WP14-27 with modification, establishing a Federal moose season in the lower Kuskokwim hunt area. The Sept. 1 – 30 season had a harvest limit of one antlered bull by State registration permit. The Yukon Delta NWR Manager was delegated the authority to establish an annual quota and close the season once the quota was met.

In August 2018, the Tuluksak Native Community submitted Emergency Special Action Request WSA18-02, requesting that the Board open the moose season early in the Kuskokwim hunt area to accommodate a food shortage emergency. The Board approved this request with modification to open an August 18 – 31 emergency season only to residents of Tuluksak, with a quota of seven antlered bulls by Federal registration permit.

In 2020, the BOG adopted Proposal 7 as amended to change the State season dates for the RM615 moose hunt to Sept. 1-Oct.15 with a harvest limit of one bull, excluding the take of male calves. The first amendment to Proposal 7 was to extend the season from Sept. 1 – Sept. 30 to Sept. 1 – Oct. 15. Consideration was made to accommodate the holiday and teacher in-service days by keeping the season open date the same to allow continued opportunity for youth hunts. The second amendment to Proposal 7 changed the harvest limit from one antlered bull to one bull excluding the take of male calves. This was done to allow for proxy hunting but continue to prohibit the potential harvest of calves or incidental harvest of cows (ADF&G 2020).

In April 2020, the Board considered Closure Review WCR20-38 and Proposal WP20-35 concerning moose in the Kuskokwim hunt area. The Board voted to maintain status quo on the Federal lands closure reviewed by WCR20-38 because demand for moose by Federally qualified subsistence users exceeded sustainable harvest levels. Proposal WP20-35 requested the addition of a may-be-announced season between Dec. 1 – Jan. 31. The Board rejected this proposal as part of the consensus agenda because of conservation concerns. While the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council (Council) had submitted this Proposal, they recommended to the Board to oppose it to allow more time for the moose population to fully recover following the harvest moratorium. Additionally, the Council noted that snowmachine access during a winter season could dramatically increase harvest pressure in the area, including accidental harvest of cows, further hampering recovery of the population.

In July 2020, the Board approved Wildlife Special Action WSA20-05, which requested extending the fall moose season in Zone 2 of the Unit 18, Kuskokwim hunt area from Sept. 1 – 30 to Sept. 1 – Oct. 7 for the 2020/21 regulatory year. Yukon Delta NWR submitted, and the Board approved Wildlife

Special Action WSA20-05 to provide more subsistence hunting opportunity since moose harvest quotas were not being met.

In August 2020, the Board approved a revised closure policy, which stipulated all closures will be reviewed every four years. The policy also specified that closures, like regulatory proposals, will be presented to the Councils for a recommendation and then to the Board for a final decision. Previously, closure reviews were presented to Councils who then decided whether to maintain the closure or to submit a regulatory proposal to modify or eliminate the closure.

In 2021, the Board adopted the Council's recommendation on Temporary Special Action Request WSA21-03, extending the fall moose season in Zone 2 of the Unit 18, Kuskokwim hunt area from Sept. 1–30 to Sept. 1–Oct. 15 for the 2021/22 regulatory year. The Board adopted this special action to provide additional subsistence opportunity as quotas were not being met and to reduce regulatory complexity by aligning with State regulations.

In 2022, the Board considered Proposal WP22-43 and Proposal WP22-44 concerning moose in the Kuskokwim hunt area. The Yukon-Kuskokwim and Western Interior Alaska Subsistence Regional Advisory Councils opposed Proposal WP22-43 and supported Proposal WP22-44. The Board adopted Proposal WP22-44 as modified by OSM to extend the fall moose season in the Kuskokwim Zone 2 hunt area of Unit 18 from Sept. 1–30 to Sept. 1–Oct. 15, and to establish a may-be-announced winter season from Dec. 1–Jan. 31 with a harvest limit of one antlered bull by Federal registration permit. The modification was to clarify the regulatory language and to delegate authority to the Yukon Delta NWR Manager to announce the winter season via delegation of authority letter. Proposal WP22-43 requested delegating authority to the Federal in-season manager to increase the moose harvest quota in Zone 1 of the Kuskokwim hunt area of Unit 18 if the water levels are too low to access Zone 2. The Board rejected this proposal as part of the consensus agenda because of conservation concerns.

In November 2022, the Board approved Special Action WSA22-04 as modified by OSM to amend the existing delegation of authority letter for moose in the Kuskokwim hunt area of Unit 18 to delegate the Yukon Delta NWR Manager the additional authority to determine the number of permits to be issued and any needed permit conditions for the may-be-announced winter moose season. This addition to the delegation of authority letter only applies to the 2022/23 winter may-be-announced season. The Board approved this request as modified by OSM to clarify the effective period ends January 31, 2023, and to specify permit conditions must comply with the Office of Management and Budget (OMB) information collection policy. The Board supported limiting permits and setting any needed permit conditions to ensure the in-season manager can more effectively manage this hunt, safeguarding against overharvest while providing additional subsistence hunting opportunity.

Closure last reviewed: 2020 – WCR20-38

Justification for Original Closure:

§815(3) of ANILCA states:

Nothing in this title shall be construed as – (3) authorizing a restriction on the taking of fish and wildlife for nonsubsistence uses on public lands (other than national parks and monuments) unless necessary for the conservation of healthy populations of fish and wildlife, for the reasons set forth in section 816, to continue subsistence uses of such populations, or pursuant to other applicable law...

The original closure in 1991 noted a conservation concern for the moose population. Given low moose densities throughout Unit 18, the moose population could not sustain harvest by all users as additional harvest would not allow for the maintenance of this wildlife resource in a condition that would assure a stable and continuing natural population. The Board stated that the closure of Federal public lands except to Federally qualified subsistence users provided rural users a subsistence priority.

In 2004, a five-year moratorium on moose hunting in the Kuskokwim River drainage was needed to recover a low moose population. The moratorium facilitated the establishment of a moose population capable of supporting annual harvests. Approximately 10,000 residents along the Kuskokwim River in Unit 18 could benefit from a moose population capable of supporting harvests.

In 2010 the closure was modified to specify the pool of Federally qualified subsistence users eligible to hunt moose when the Federal season opened in the moratorium area. This was necessary because of the small number of moose available to harvest relative to the large number of subsistence users with a customary and traditional use determination for moose (42 communities including Bethel).

Council Recommendation for Original Closure:

The first closure was in 1991. This closure was initiated prior to the formation of the Regional Advisory Councils in 1993.

For the closure initiated in 2004 by Proposal WP04-51, the Western Interior Council deferred to the home region. The Yukon/Kuskokwim Delta Council supported instating the moose moratorium within this area of the Kuskokwim River to allow for an increase in the moose population. The Council expressed concerns of allowing a winter moose season below Mountain Village in the lower Yukon portion of the proposed area because a cow moose can be mistaken for a bull moose during late-winter hunt. The lower Yukon and coastal area moose hunters were experiencing economic hardships due to a decline of salmon for commercial harvests, making it more difficult for hunters to make any extended trips during moose hunting seasons. However, the Council hoped the moratorium would yield more moose that would be available to subsistence users in this area

In 2010 the Yukon/Kuskokwim Delta Council supported Proposal WP10-54 with modification to include the results of the Section 804 analysis and also recommended further modification to establish

a one antlered-bull season Sept 1–5 by joint Federal or State registration permits and allow the Refuge Manager in consultation with AD&G to set the harvest quota and extend the season by up to five days if harvest quota has not been met.

State Recommendation for Original Closure:

The first closure was in 1991. Apart from the southernmost drainages, the State did not support closure of Federal public lands in Unit 18 to non-Federally qualified users, arguing that a closure was not warranted in terms of biological information or demands for moose by local users.

In 2004 the State supported the 5-year moratorium closure with a modification to the descriptor of the area to align the State and Federal areas and seasons. Furthermore, at its fall 2003 meeting, the BOG closed the moose season in a portion of Unit 18 that differs slightly from the closure area described in Proposal WP04-51. The State regulation allowed moose hunting in the portion of Unit 18, south of the Eek River drainage, which was proposed for closure in Proposal WP04-51.

In 2010 the State supported WP10-54 with a modification to establish a season on Federal public lands that matched the State season. This approach would minimize confusion for hunters and law enforcement. The State also recommended a cooperative harvest quota that would be managed between State and Federal managers. This action would be effective in the seventh year since the moratorium had been initiated in the lower Kuskokwim hunt area and fulfilled the original strategy supported by both State and Federal managers of closing the area for 5 years or reaching 1,000 moose.

Biological Background

Moose are believed to have begun colonization of the Yukon-Kuskokwim Delta in the 1940s (Perry 2014). By the 1990s, when the Federal public lands closure was initiated, moose densities throughout much of Unit 18 were very low. Though established populations existed in the far eastern portions of Unit 18, moose were only sparsely distributed throughout much of the unit. Harvested moose were likely immigrants from other areas, rather than part of a local breeding population (FSB 1991), and hunting pressure was effective in limiting growth of the moose population along the Kuskokwim River corridor (Perry 2014). The 2004 – 2008 hunting moratorium was effective in establishing a harvestable population, and the most recent indicators suggest that the population along the Kuskokwim River main stem and in its tributaries continues to grow.

Prior to 2020, the most recent population survey of the lower Kuskokwim survey area, which includes the main stem riparian corridor between Kalskag and Kwethluk, occurred in 2015. At that time, the population was estimated to be 1,378 moose, or 1.6 moose/mile² in Zone 1 (**Figure 2**). This represents an annual growth rate of 20% between 2011 and 2015. The population estimate for Zone 2 was 508 moose (YKDRAC 2019a). At that time, the Kuskokwim moose population remained below the State's population objective of at least 2,000 moose in this area (Perry 2014).

Lack of snow cover in recent years precluded additional population surveys between 2015 and 2020. The survey completed in 2020 shows an increase of the moose populations in both zones. The estimated mid-point population in Zone 1 was 3,220 moose, and the minimum count in Zone 2 was

789 moose, which exceeds State population objectives (**Figure 2**) (Jones 2021, pers. comm., YKDRAC 2019). Browse surveys indicate that the population in Zone 1 is potentially reaching a point that will limit or stop growth, and Zone 2 is about one-half of what it could be (Jones 2021, pers. comm.).

Composition estimates for the main stem in 2020 were 25 bulls:100 cows (ADF&G 2020). Bull:cow ratios, which were quite high during the harvest moratorium, declined when harvest resumed in 2009, but remained consistently above the minimum State management objective of 30 bulls:100 cows until 2020 (**Table 1**). The recent decline in the bull:cow ratio follows an increase in reported harvest and a liberal hunting season in 2019. Unreported harvest, increased winter mortality, and misclassification of young bulls with small antlers during surveys may also have contributed to the lower ratio in 2020. Bull:cow ratios in the Kuskokwim tributaries (Zone 2) are very high, although surveys have occurred infrequently. In 2015 and 2020, ratios were 83 and 42 bulls:100 cows, respectively (Oster 2020, Jones 2021, pers. comm.).

Fall calf:cow ratios of < 20 calves:100 cows, 20-30 calves:100 cows, and > 30-40 calves:100 cows may indicate declining, stable, and growing moose populations, respectively (Stout 2010). Between 2007 and 2020, calf:cow ratios in the main stem survey area (Zone 1) ranged from 45-73 calves:100 cows (**Table 1**; Jones 2018, pers. comm., ADF&G 2020, Oster 2020). In 2015 and 2020, calf:cow ratios in the Kuskokwim tributaries (Zone 2) were 62 and 40 calves:100 cows, respectively (Oster 2020). These high calf:cow ratios indicate a growing moose population. Twinning rates, which provide an index of nutrition, are also high, averaging 43% between 2015 and 2019 (YKDRAC 2019a, ADF&G 2020).

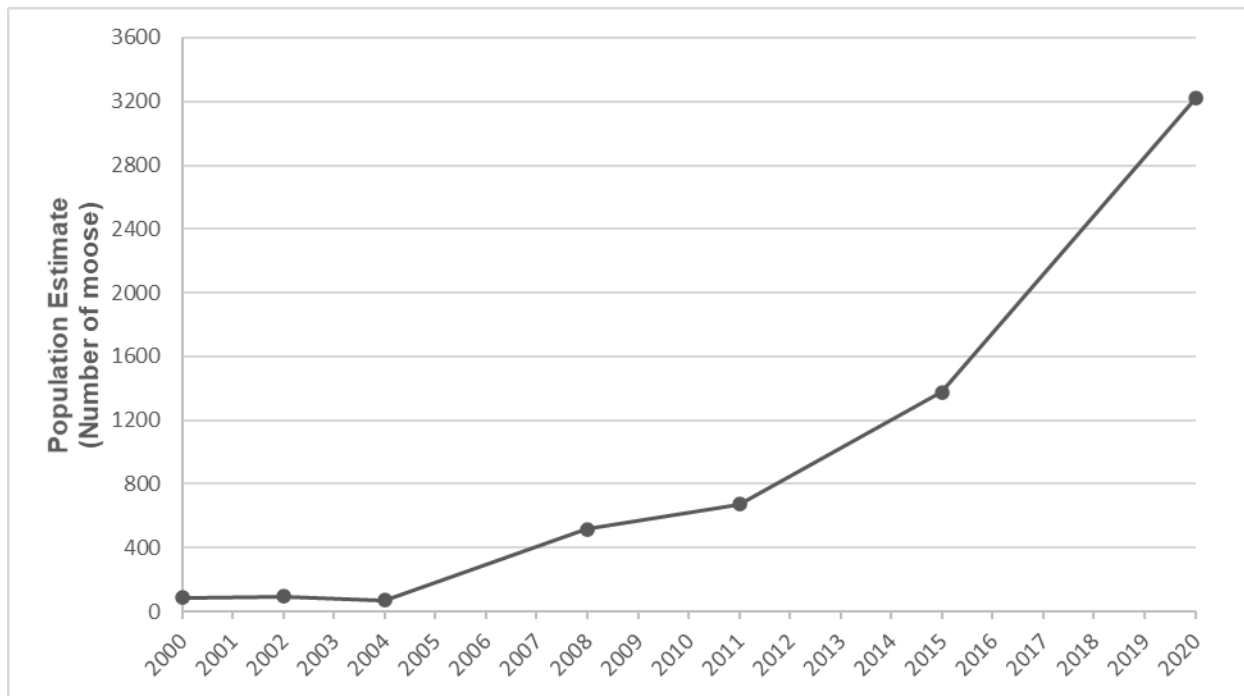


Figure 2. Estimated moose population size along the main stem of the Kuskokwim River, 2000 – 2020 (Perry 2014; Jones 2018, pers. comm.; Jones 2021, pers. comm.)

Table 1. Composition estimates for moose along the main stem of the Kuskokwim River, 2007 – 2020 (YDNWR 2015; Jones 2018, pers. comm.; ADF&G 2020; Oster 2020).

Year	Bulls:100 cows	Calves:100 cows
2007	98	73
2009	52	49
2010	51	49
2011	50	49
2013	41	72
2015	73	53
2016	70	56
2019	43	49
2020	25	45

Cultural Knowledge and Traditional Practices

Forty-two widely dispersed communities, roughly 27,000 people, have a customary and traditional use determination for moose in the Unit 18 Kuskokwim hunt area (ADLWD 2022). However, in 2010 the Board found that 15 communities (roughly 13,000 people) have the highest customary dependence on moose in the Unit 18 Kuskokwim hunt area, based on the three criteria in ANILCA Section 804: customary and direct dependence upon the populations as the mainstay of livelihood, local residency, and the availability of alternative resources. Only residents of these 15 communities area eligible to harvest moose in the Unit 18 Kuskokwim hunt area, presented from lower to upper river: Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautluak, Oscarville, Bethel, Kwethluk,

Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag. All but two of the 15 communities are situated within the hunt area; Kalskag and Lower Kalskag are situated along the Kuskokwim River in Unit 19A, upriver from the hunt area.

These communities share some characteristics. Most are small with populations between 70 people in Oscarville to over 800 in Kwethluk (**Table 2**). The exception is the community of Bethel, population over 6,000 people, which is the hub community in the area, a center of healthcare, trade, and government, providing services to outlying areas. Most of the communities are not connected by roads and are accessed by boats or planes, and snow machines, ATVs, or highway vehicles on trails and the frozen river during winter. Kalskag and Lower Kalskag are connected by a State-maintained 4.2-mile road.

Table 2. The population of communities eligible to harvest moose in the Unit 18 Kuskokwim River drainage hunt area 1960-2010, organized from lower to upper river communities and based on the US Census (blank cell=0 or not available, ADCCED 2022).

Community	1960	1970	1980	1990	2000	2010	2020
Tuntutuliak	144	158	216	300	370	408	485
Eek	200	186	228	254	280	296	404
Napakiak	190		262	318	353	354	358
Napaskiak	154	259	244	328	390	405	509
Oscarville	51	41	56	57	61	70	70
Kasigluk	244		342	425	543	569	623
Nunapitchuk	327	526	299	378	466	496	594
Atmautluak			219	258	294	277	386
Bethel	1,258	2,416	3,576	4,674	5,471	6,080	6,325
Kwethluk	325	408	454	558	713	721	812
Akiachak	229	312	438	481	585	627	677
Akiak	187	171	198	285	309	346	462
Tuluksak	37	195	236	358	428	373	444
Lower Kalskag	122	183	246	291	267	282	278
Kalskag	147	122	129	172	230	210	212
Total	3,715	4,977	7,143	9,173	10,760	11,514	12,639

Harvest and Use of Moose

The estimated harvest (from all areas) and use of moose based on periodic household surveys is displayed in **Table 3**. The estimated moose harvest ranged from a high of 357 moose by Bethel residents in 2012, to a low of 2 moose in Oscarville in 2010 and Lower Kalskag in 2005. The difference between these harvest levels is in part because Bethel's population is so much higher than other communities'. These harvest estimates track well with the reported harvest to ADF&G (ADF&G 2022a). Some of these harvest surveys were comprehensive surveys that included questions regarding the harvest of all wild resources during the study year. Based on these surveys, moose made up between 2% and 25% of the harvest of all wild resources, in pounds of edible weight (ADF&G 2022b).

Table 3 demonstrates that while local users hunting for moose are not always successful, a majority of households use moose either by harvesting it themselves or receiving it from another hunter. Of the total reported annual harvest of moose by these communities from 2011 to 2021, between 37% and 62% were taken from other areas, outside the Unit 18 Kuskokwim hunt area, based on the ADF&G reporting system and online database (ADF&G 2022a).

A primary source of information regarding the harvest and use of moose on the Kuskokwim is focused on Chuathbaluk, a central Kuskokwim Yup'ik village that has much in common with lower Kuskokwim communities in terms of culture, weather, environment, and hunting patterns (Charnley 1983).

Seasonal harvest patterns are influenced by several factors. Moose are hunted year-round; however, the intensity of harvest effort is influenced by weather conditions and regulations. Moose are available to hunters July, August, and September in habitats such as willows bordering rivers, creeks, and lakes. Bulls and cows are especially fat during these times. Bulls enter the rut in late September. In October the better-tasting meat of cows is preferred. In fall, access to moose habitat is possible if and when rivers and creeks are swollen from heavy rain. However, moose are more sedentary in rainy weather and harder to find, and gravel bars, where moose can sometimes be found feeding, become submerged. Freeze-up along the Kuskokwim River usually occurs in November, and it is often unsafe for travel. Warm spells in winter can return rivers and creeks to dangerous conditions for travel by hunters. Deep snow aids hunting by allowing travel by snow machine and by hampering moose mobility (Charnley 1983).

Community involvement in harvesting depends on the season. Moose hunting is almost always engaged in by the adult and adolescent men. During September an extended family group that often includes the wife, sisters, mother, and daughters of hunters camp together for up to a week. At this time, generally, women and children gather berries while men hunt moose and black bear. Sometimes two or three households camp together in one area. The November and February hunts usually involve the male members of a household only, and hunting occurs while checking trap lines and during day or overnight trips from the village. In February, camping is limited by cold weather (Charnley 1983).

Several means are used to access harvest areas. Moose are typically hunted from boats in the fall. Motors are shut off and boats are allowed to drift downstream, guided by oars. Most moose hunting takes place within one mile of either side of the waterway that is being hunted. Snow machines also are used to travel to areas where moose are likely to be found. Fresh tracks are followed on snow machine or foot. Moose are sometimes tracked with snowshoes to beds where they are resting for the day. Aircraft is seldom used in moose hunting (Charnley 1983).

The season of harvest dictates proper processing and preservation methods of the harvest. Generally, moose are butchered at the kill site by members of hunting parties, taken back to the village, and further processed. In the past, meat was dried and smoked at fall hunting camps. When enough animals had been taken, skin boats were constructed using the animal hides, and the hunters drifted back downstream (Charnley 1983).

Dry meat is a staple food eaten throughout the summer when families are at fish camp. Most villagers depend on the weather to prevent their meat from spoiling. For this reason, hunting seasons that occur during months when temperatures have already fallen below freezing are preferred. The hind and front quarters and rump are commonly hung in a salmon smokehouse, or suspended from a rack, wrapped with material such as burlap to protect them from animals (Charnley 1983).

During warm months, meat is placed in garbage bags and submerged in creeks to be kept cool. If meat is hung, it is also brushed with a brine solution to discourage flies from laying eggs. The large, butchered parts of the animal such as legs, rump, and ribs are smoked to create a hardened outer layer over the meat. This protective layer keeps flies off of the meat (Charnley 1983).

Preparing moose meat for meals commonly means boiling it, and less often frying, roasting, and barbequing. Marrow from the leg bone is considered a delicacy. Moose head soup is a favorite dish, the nose, tongue, cheek meat, and brains being the most desirable parts. The liver, heart, kidneys, part of the stomach muscle, and one of the four stomachs are all eaten. Moose fat is highly valued and is cooked and eaten or rendered into oil (Charnley 1983).

Table 3. The estimated harvest and use of moose by communities eligible to harvest moose in the Unit 18 Kuskokwim hunt area, organized by study year and based on household surveys (blank=question not asked) (ADF&G 2022b).

Community	Study year	Percentage of households using moose	Percentage of households attempting to harvest moose	Percentage of households harvesting moose	Estimated harvest of moose	Lower estimate	Upper estimate	Per person in pounds edible weight
Nunapitchuk	1983			24%	12	3	22	19
Kwethluk	1986		63%	29%	33	33	33	45
Akiachak	1998	95%	84%	68%	106	93	119	145
LowerKalskag	2003	74%	62%	24%	30	14	52	53
Kalskag	2003	74%	59%	29%	21	12	32	46
LowerKalskag	2004	36%	41%	17%	12	10	15	25
Kalskag	2004	72%	76%	16%	9	9	10	26
LowerKalskag	2005	40%	30%	3%	2	1	10	5
Kalskag	2005	59%	50%	18%	12	6	21	24
LowerKalskag	2009	81%	81%	24%	18	15	21	32
Kalskag	2009	92%	92%	25%	15	12	18	40
Akiak	2010	94%	62%	27%	27	20	33	38
Kwethluk	2010	84%	51%	22%	33	25	42	25
Oscarville	2010	75%	33%	17%	2	2	4	20
Tuluksak	2010	71%	65%	24%	20	16	24	24
Bethel	2011	61%	28%	13%	279	220	338	25
Napakiak	2011	71%	46%	14%	13	13	13	29
Napaskiak	2011	89%	64%	29%	29	29	29	43
Bethel	2012	75%	34%	19%	357	294	419	34
Eek	2013	77%	59%	16%	14	14	14	22
Tuntutuliak	2013	87%	64%	15%	17	17	17	22

Harvest History

Following the harvest moratorium, moose harvest on non-Federal lands was allowed under State regulations, beginning in 2009. In 2010, harvest on Federal public lands was opened to a subset of Federally qualified subsistence users, including residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautluak, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag. In this analysis, this user group will be referred to as local users.

Since 2011, reported harvest has averaged 183 moose annually (ADF&G 2022a). Notably, reported harvest has increased, doubling between 2014 and 2017 (**Figure 2**). Local users have taken 95% of the reported moose harvest in the Kuskokwim hunt area since 2009, with 30% of the harvest attributable to residents of Bethel. However, non-local use is increasing, from two harvest reports in 2013 to 18 in 2021 (ADF&G 2022a). Non-local users that report harvesting moose are primarily Federally qualified subsistence users from coastal communities of Unit 18, but also include a few users from southcentral

Alaska (ADF&G 2019a). About 30 moose, including around 20 cows are harvested each year for funerals and potlatches in Zone 1 (YKDRAC 2019; Moses 2020, pers. comm.).

Despite increases in quotas and harvest, demand still outweighs moose availability. From 2009 to 2019, an average of approximately 1,450 hunters have obtained permits to harvest moose in the Kuskokwim hunt area each year, but only 10% of permit holders successfully harvested moose (ADF&G 2019a). The disparity between demand and the relatively small quotas has routinely resulted in emergency closure of the State season within days of its opening. This has resulted in some frustration among locals, who note that short unpredictable seasons make planning difficult. In response to this, ADF&G no longer uses quotas or closes Zone 1 with emergency closures. Fixed dates determined by estimated time needed to reach the set harvest objective is released prior to the start of each season (Jones 2021, pers. comm.). Local residents have also commented on the challenges of hunting in early September in recent years, given warm conditions that make proper meat care difficult. To this end, many subsistence users have advocated for a later moose season (YKDRAC 2017b).

In an effort to better serve users in an area of checkerboard land status, State and Federal managers adjusted the structure of the hunt in 2017, introducing a zone-based hunt (**Figure 1**). An important feature of the zones is that, while they correspond roughly to State and Federal lands, they are delineated by easily identifiable geographical features (e.g. river confluences). Each of the two zones is managed with its own harvest objective. Zone 1, which is comprised primarily of State managed lands, is located along the main stem of the Kuskokwim River. The season and harvest objective for the main stem hunt are managed by ADF&G. Zone 2 is comprised primarily of Federal public lands, including those in the Tuluksak, Kisaralik, Kasigluk and Eek river drainages (“tributaries”). The season and harvest quota in the tributary hunt is managed by the Yukon Delta NWR (Rearden 2018, pers. comm.; YKDRAC 2017a).

There is more demand for moose in Zone 1, along the main stem, compared to Zone 2, in the tributaries. This is evidenced by the rate at which the quota is met within each zone, and the corresponding season length. On average, the main stem hunt has been open fewer than six days annually from 2011 through 2018, and the quota has been met or exceeded most years. Since ADF&G has changed to the fixed season using the harvest objective method, Zone 1 hunt was open for 11 days in 2020 and for 9 days in 2021 and 2022 (Jones 2021, pers. comm.). For the hunt in the tributaries, the quota has only been met once, in 2014, despite increasing season lengths (**Tables 4**). Local managers report that hunting in the tributaries is difficult, requiring specialized boats, longer travel times, and more fuel. Heavy vegetation along the banks contributes to the difficulty. It is believed that the unmet quota is a function of these difficulties, rather than lack of need for moose meat (YKDRAC 2017a, 2017b, Rearden 2018, pers. comm.).

ADF&G is currently managing the Kuskokwim moose population for continued growth and advises maintaining harvests within quotas and for bulls-only. However, ADF&G expects regulations in the Kuskokwim hunt area will be liberalized over the next five years if the moose population approaches carrying capacity as indicated by browse removal surveys (YKDRAC 2019a).

Local users took 51% of their reported moose harvest outside the Unit 18 Kuskokwim hunt area from 2011 to 2021, primarily in the reminder area of Unit 18, from a low of 42% in 2011 to a high of 63% in 2020 (ADF&G 2022a).

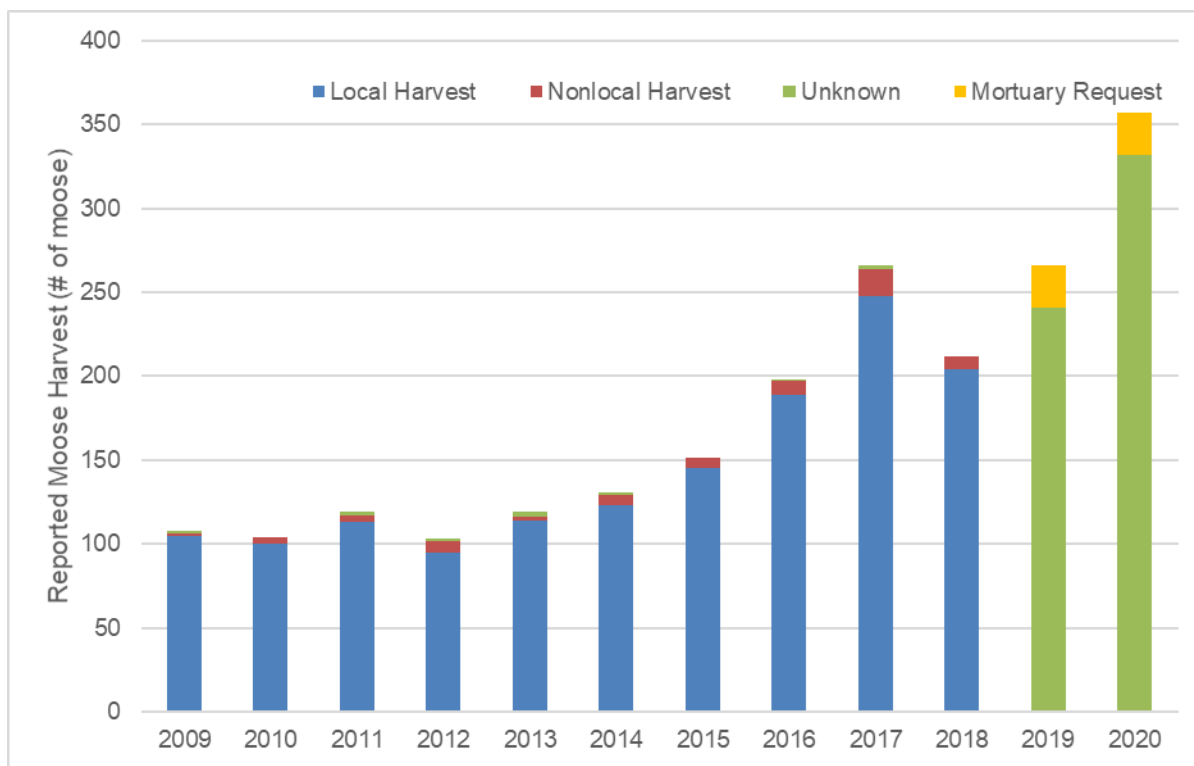


Figure 3. Reported moose harvest by RM615 in the Kuskokwim hunt area, 2009 – 2020 (ADF&G 2019a, Oster 2020, Jones 2021, pers. comm.). Note: 2019 and 2020 data does not distinguish between local and nonlocal harvest.

Table 4. State and Federal moose quotas and harvest, 2011 – 2020 (Rearden 2018, pers. comm.; ADF&G 2019b; Jones 2019, pers. comm.; Moses 2020, pers. comm.; ADF&G 2020; Oster 2020).

Year	Quota (number of moose)			Harvest (number of moose)				
	State	Federal	Total	State	Federal	Cultural	Unknown	Total
2011	81	19	100	93	11	5	15	124
2012	81	19	100	82	17	12	4	115
2013	81	19	100	89	21	18	9	137
2014	81	19	100	93	15	18	23	149
2015	110	45	155	105	31	24	15	175
2016	150	90	240	136	44	23	14	217
2017 ^a	170	110	280	186	80	36	0	302
2018 ^a	170	110	280	141	72	30	0	243
2019 ^a	N/A ^c	120	300	160	70	48	0	278
2020 ^a	N/A ^c	110	N/A ^c	239	90	33	5	367
2021 ^a	N/A ^c	110	N/A ^c	151	76	29	1	257
2022 ^a	N/A ^c	110	N/A ^c	188 ^b	60 ^b			

^a The State quota corresponds to Zone 1 and the Federal quota corresponds to Zone 2.

^b Reported harvest as of Oct. 24, 2022.

^c State uses fixed season dates instead of quota.

Other Alternatives Considered

One alternative considered was to change the winter may-be-announced season to a draw permit system instead of a registration permit system. This would reduce conservation concerns associated with overharvest as the number of permits issued could be determined annually by the in-season manager based on the quota remaining after the fall season. A draw permit would also provide more equitable permit distribution amongst Federally qualified subsistence users who could apply for a permit during a certain time period and then be randomly selected for the limited number of permits. Registration permits must be given out on a first-come, first-serve basis, which could put some Federally qualified subsistence users at a disadvantage if only a limited number of permits are available. However, this modification is beyond the scope of a closure review. The Council may want to consider submitting a proposal to request this modification at their winter 2023 meeting.

Effects

Retaining the status quo would continue to limit moose hunting on Federal public lands within the Unit 18 Kuskokwim hunt area to only the Federally qualified subsistence user of the 15 communities identified in the §804 restriction. Retaining the closure ensures that these 15 communities who have

demonstrated the most dependence on this resource continue to have a subsistence priority on Federal public lands.

Modifying the closure to open to all Federally qualified subsistence users but remain closed to non-Federally qualified users would provide additional opportunity to some Federally qualified subsistence users, but would likely decrease opportunity for residents of the 15 communities identified in the §804 analysis as being the most dependent on this resource.

Completely rescinding the closure would increase hunting opportunities for all users and would simplify regulations but would likely result in increased competition for moose on Federal public lands. While the moose population is growing in this area, demand still far exceeds supply, although the moose population may remain protected through very short seasons in Zone 1 and harvest quotas in Zone 2.

Extending the closure to all users is unnecessary at the moose population can sustain some harvest and that would completely preclude subsistence harvest opportunity on Federal public lands.

OSM PRELIMINARY CONCLUSION:

- Retain the Status Quo**
- Rescind the Closure**
- Modify the closure to . . .**
- Defer Decision on the Closure or Take No Action**

Justification

Despite recent increases in population size and harvest quotas, demand for moose still far outweighs the harvestable surplus of the Kuskokwim moose population. The problem of unmet demand is exacerbated by the difficulty of the hunt in the tributaries, as evidenced by unmet Federal quotas over the past years. Seasons have been extended and a may-be-announced winter season has been added to provide additional harvest opportunity and achieve unmet quotas. However, retaining the Federal public lands closure ensures that the 15 communities who have demonstrated the most dependence on this moose population continue to have a subsistence priority on Federal public lands.

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U.S. Fish and Wildlife Service
Bureau of Land Management
National Park Service
Bureau of Indian Affairs

Federal Subsistence Board Informational Flyer



Contact:

Office of Subsistence Management
(907) 786-3888 or (800) 478-1456
subsistence@fws.gov

How to Submit a Proposal to Change Federal Subsistence Regulations

Alaska rural residents and the public are an integral part of the Federal regulatory process. Any person or group can submit proposals to change Federal subsistence regulations, comment on proposals, or testify at meetings. By becoming involved in the process, subsistence users and the public assist with effective management of subsistence activities and ensure consideration of traditional and local knowledge in subsistence management decisions. Subsistence users also provide valuable fish and wildlife harvest information.

A call for proposals to change Federal subsistence regulations is issued in January of even-numbered years for fish and shellfish and in odd-numbered years for wildlife. Proposals to change the nonrural determinations will be accepted in January of every other even-numbered year (every other fish cycle). The period during which proposals are accepted is no less than 30 calendar days. Proposals must be submitted within this time frame. Announcements are made each year regarding the proposals being accepted and timelines that apply.

You may propose changes to Federal subsistence season dates, harvest limits, methods and means of harvest, customary and traditional use and nonrural determinations.

What your proposal should contain:

There is no form to submit your proposal to change Federal subsistence regulations. Include the following information in your proposal submission (you may submit as many as you like):

- Your name and contact information (address, phone, fax, or e-mail address)
- Your organization (if applicable)
- What regulations you wish to change. Include game management unit number, drainage, or area, and species. Quote the current regulation if known. If you are proposing a new regulation, please state “new regulation.”
- The proposed regulation written as you would like to see it
- An explanation of why this regulation change should be made
- Any additional information that you believe will help the Federal Subsistence Board (Board) in evaluating the proposed change

You may submit your proposals by one of the following methods:

- Electronically: Go to the Federal Rulemaking Portal: <https://www.regulations.gov>. In the Search box, enter the Docket number [the docket number will list in the proposed rule, news releases, and other forms of outreach]. Then, click on the Search button. On the resulting page, in the Search panel on the left side of the screen, under the Document Type heading, check the Proposed Rule box to locate this document. Ensure you select the proposed rule by the U.S. Fish and Wildlife Service and **not** by the U.S. Forest Service. You may submit a comment or proposal by clicking on “Comment.”
- By mail: Submit by U.S. mail or hand delivery: Public Comments Processing, Attn: [list the Docket number]; U.S. Fish and Wildlife Service; 5275 Leesburg Pike, MS: PRB (JAO/3W); Falls Church, VA 22041–3803.
- By hardcopy: If in-person Federal Subsistence Regional Advisory Council (Council) meetings are held, you may also deliver a hard copy to the Designated Federal Official (DFO) attending any of the Council public meetings. Information on the dates, locations, and call-in numbers for the Council meetings are announced with several news releases, public service announcements, on our webpage, and social media (see bottom of page for web addresses).

Submit a separate proposal for each proposed change; however, ***do not submit the same proposal by different accepted methods listed above.*** To cite which regulation(s) you want to change, you may reference 50 CFR 100 or 36 CFR 242, or the proposed regulations published in the Federal Register: <https://www.federalregister.gov/>. All proposals and comments, including personal information, are posted online at <https://www.regulations.gov>.

We cannot accept proposals delivered or sent to the Alaska Regional Office of the U.S. Fish and Wildlife Service, this includes: phone or voicemail, fax, hand delivery, mail, or email.

For the proposal processing timeline and additional information contact the Office of Subsistence Management at (800) 478-1456 / (907) 786-3888 or go to <https://www.doi.gov/subsistence/proposal/submit.cfm>.

How a proposal to change Federal subsistence regulations is processed:

- Once a proposal to change Federal subsistence regulations is received by the Board, the U.S. Fish and Wildlife Service, Office of Subsistence Management (OSM) validates the proposal, assigns a proposal number and lead analyst.
- The proposals are compiled into a book for statewide distribution and posted online to the Program website (<https://www.doi.gov/subsistence/current-proposals>). The proposals are also sent out to the applicable Councils and the Alaska Department of Fish and Game (ADF&G) and the Interagency Staff Committee (ISC) for review. The period during which comments are accepted is no less than 30 calendar days. Comments must be submitted within this time frame.
- The lead analyst works with appropriate agencies and proponents to develop an analysis on the proposal.
- The analysis is sent to the Regional Advisory Councils, ADF&G, and the ISC for comments and recommendations to the Federal Subsistence Board. The public is welcome and encouraged to provide comments directly to the Councils and the Board

at their meetings. The final analysis contains all the comments and recommendations received by interested/affected parties. This packet of information is then presented to the Board for action.

- The decision to adopt, adopt with modification, defer, or reject the proposal is then made by the Board. The public is provided the opportunity to provide comment directly to the Board prior to the Board's final decision.
- The final rule is published in the Federal Register and a public regulations booklet is developed and distributed statewide and on the Program's website.

Missing out on the latest Federal subsistence issues? If you'd like to receive emails and notifications on the Federal Subsistence Management Program, you may subscribe for regular updates by emailing fws-fsb-subsistence-request@lists.fws.gov. Additional information on the Federal Subsistence Management Program may be found on the web at <https://www.doi.gov/subsistence> or by visiting www.facebook.com/subsistencealaska.

ANNUAL REPORTS

Background

ANILCA established the Annual Reports as the way to bring regional subsistence uses and needs to the Secretaries' attention. The Secretaries delegated this responsibility to the Board. Section 805(c) deference includes matters brought forward in the Annual Report.

The Annual Report provides the Councils an opportunity to address the directors of each of the four Department of Interior agencies and the Department of Agriculture Forest Service in their capacity as members of the Federal Subsistence Board. The Board is required to discuss and reply to each issue in every Annual Report and to take action when within the Board's authority. In many cases, if the issue is outside of the Board's authority, the Board will provide information to the Council on how to contact personnel at the correct agency. As agency directors, the Board members have authority to implement most of the actions which would effect the changes recommended by the Councils, even those not covered in Section 805(c). The Councils are strongly encouraged to take advantage of this opportunity.

Report Content

Both Title VIII Section 805 and 50 CFR §100.11 (Subpart B of the regulations) describe what may be contained in an Annual Report from the councils to the Board. This description includes issues that are not generally addressed by the normal regulatory process:

- an identification of current and anticipated subsistence uses of fish and wildlife populations within the region;
- an evaluation of current and anticipated subsistence needs for fish and wildlife populations from the public lands within the region;
- a recommended strategy for the management of fish and wildlife populations within the region to accommodate such subsistence uses and needs related to the public lands; and
- recommendations concerning policies, standards, guidelines, and regulations to implement the strategy.

Please avoid filler or fluff language that does not specifically raise an issue of concern or information to the Board.

Report Clarity

In order for the Board to adequately respond to each Council's annual report, it is important for the annual report itself to state issues clearly.

- If addressing an existing Board policy, Councils should please state whether there is something unclear about the policy, if there is uncertainty about the reason for the policy, or if the Council needs information on how the policy is applied.
- Council members should discuss in detail at Council meetings the issues for the annual report and assist the Council Coordinator in understanding and stating the issues clearly.

- Council Coordinators and OSM staff should assist the Council members during the meeting in ensuring that the issue is stated clearly.

Thus, if the Councils can be clear about their issues of concern and ensure that the Council Coordinator is relaying them sufficiently, then the Board and OSM staff will endeavor to provide as concise and responsive of a reply as is possible.

Report Format

While no particular format is necessary for the Annual Reports, the report must clearly state the following for each item the Council wants the Board to address:

1. Numbering of the issues,
2. A description of each issue,
3. Whether the Council seeks Board action on the matter and, if so, what action the Council recommends, and
4. As much evidence or explanation as necessary to support the Council's request or statements relating to the item of interest.

Western Interior Subsistence Regional Advisory Council

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Anchorage, Alaska 99503-6199
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IN REPLY REFER TO:
RAC/WI.23014.NP

Anthony Christianson, Chair
Federal Subsistence Board
c/o Office of Subsistence Management
1011 E. Tudor Road, MS 121
Anchorage, Alaska 99503-6199

Dear Chairman Christianson:

The Western Interior Alaska Subsistence Regional Advisory Council (Council) appreciates the opportunity to submit its FY-2022 annual report to the Federal Subsistence Board (Board) under the provisions of Section 805(a)(3)(D) of the Alaska National Interest Lands Conservation Act (ANILCA). At its public meetings held in Fairbanks on October 19-20, 2022, the Council identified concerns and recommendations for this report, and approved this annual report at its winter 2023 meeting held in Aniak on April 4-5, 2023. The Council wishes to share information and raise concerns dealing with implementation of Title VIII of ANILCA and the continuation of subsistence uses in the Western Interior Region.

1. Sheep Management Plan for Units 24A and 26B

The Council has concerns over the reopening Federal public lands in Unit 24A and a portion of Unit 26B to sheep hunting. With the approval of Wildlife Special Action WSA22-02, the Board temporarily closed these Federal lands to all users through the wildlife regulatory year 2023-2024. This closure was enacted due to conservation concerns over the sheep population in these units, and the original special action request was submitted by this Council. There currently is not a set framework in place in for when the lands reopen to sheep hunting.

Recommendation:

The Council recommends the Board initiate communications with Federal, Tribal, and State managers to create and implement a sheep management plan for Units 24A and 26B, west of the Sagavanirktok River, for non-Federally qualified users. The plan should outline a management strategy prior to the reopening of these lands to non-Federally qualified users.

2. Failing Sheep Population in Unit 19C

The Council is concerned that the State has currently taken no regulatory action to ensure the continuation of a viable sheep population in Unit 19C. Similar to the Brooks Range sheep population, the Unit 19C has sheep population has declined as a result of winter weather events. Sheep hunting guides that have operated in Unit 19C have already begun to relocate to other units due to low population levels, including low numbers of legal rams. The Council hoped that the State would have modified or closed the sheep hunting season in this unit.

Recommendation:

None at this time, the Council would like the Board to be aware of these concerns.

3. Continued Decline of Mulchatna Caribou Herd

The Council would like to make the Board aware of the difficulty stabilizing the Mulchatna Caribou Herd population despite ongoing efforts by Federal and State managers. The Mulchatna Caribou Herd is an important subsistence resource for residents of the Kuskokwim River drainage, who are already facing food insecurities due to multiple years of severe subsistence salmon fishing restrictions or closures.

Recommendation:

None at this time, the Council would like the Board to be aware of these concerns.

4. Commercial Interception of Kuskokwim and Yukon River Bound Salmon

In 2022, returns of Chinook and Chum salmon in the Kuskokwim and Yukon Rivers and Coho Salmon in the Kuskokwim River were catastrophically low. This resulted in no salmon harvest opportunities on the Yukon River and early-season restrictions and a late summer subsistence fishing closure in the Kuskokwim River. Commercial salmon fishing continues to occur in the marine environment both in the State managed South Alaska Peninsula salmon fishery, or Area M, where salmon bound for Yukon and Kuskokwim rivers are intercepted and sold for profit. Salmon from these rivers are also caught in the Federally managed Bering Sea Aleutian Islands Trawl Fleet pollock fishery, where they are discarded in the high seas as bycatch at a 100% mortality rate. There have been no recent regulatory changes enacted in either of these fisheries to curtail the interception of Kuskokwim and Yukon bound salmon stocks, while escapement goals for both rivers continue to be unmet and subsistence opportunities are severely restricted or nonexistent.

Recommendation:

None at this time, the Council would like the Board to be aware of these concerns.

5. Severe Subsistence Restrictions for the Kuskokwim River During the 2023 Coho Salmon Run

All subsistence fishing was effectively closed in the Kuskokwim River from mid-August to mid-September 2022 to protect the remainder of the Coho Salmon run, which returned in much lower numbers than Federal and State managers expected. While the closure did allow for minimal gear to be used in in slack water areas and far off the mainstem, these opportunities did not provide adequate subsistence opportunities for subsistence users to harvest nonsalmon species, namely whitefish. This closure was in addition to earlier subsistence salmon fishing restrictions due to Chinook and Chum salmon conservation and increased the food insecurity of subsistence users on the Kuskokwim River.

Recommendation:

None at this time, the Council would like the Board to be aware of these concerns.

6. Highlighting the Success and Requesting Expansion of Tribal Consultation

The salmon co-management on the Kuskokwim River between the U.S. Fish and Wildlife Service (USFWS) and the Kuskokwim Inter-Tribal Fish Commission continues to be a success despite continued poor salmon runs into this system. The Council hopes that the Tribes on the Yukon River can establish similar successful programs among themselves and the USFWS.

Recommendation:

The Council would like to see Tribal consultation and co-management be expanded to include species that are of conservation concern, as well as for those that are of cultural and subsistence importance to local Tribes. This could be accomplished by the Board encouraging the Federal landowners to do so. The Council would also like to see Tribal consultation and co-management occur with other branches of the Federal Government outside the DOI, specifically the Department of Commerce as this department oversees the National Oceans and Atmospheric Administration (NOAA). The NOAA Alaska Regional Office works with the North Pacific Fishery Management Council to manage Federal marine commercial fishing in Alaskan waters, including the Bering Sea and Aleutian Island Pollock trawl fishery. This fishery currently incidentally catches Yukon and Kuskokwim drainage bound salmon and discards them as bycatch. This practice is exacerbating the significant population decline of pacific salmon in these drainages. The Council is currently unsure of what steps could be taken by the Board to facilitate this.

7. Continued Reliance on Nonsalmon Species for Subsistence Needs

Due to the continued poor run strength of multiple species of salmon into the Yukon and Kuskokwim rivers, subsistence users are relying heavily on nonsalmon species such as whitefish, Northern Pike, and Long Nosed Suckers to feed themselves and the remaining traditional dog teams. Little is known of the population or harvest thresholds for these fish in either system. It is concerning to the Council that the people of the Yukon and Kuskokwim could unintentionally overharvest these species, while waiting for salmon runs to improve, especially considering the length of time that some of these salmon runs have been depressed.

Recommendation:

None at this time, the Council would like the Board to be aware of these concerns. The Council will continue to utilize the priority information needs through the Fisheries Resource Monitoring Program for the Yukon and Kuskokwim to emphasize these concerns.

8. Continue to Encourage Federal Agencies to Assist in Salmon Recovery

The Council would like the Board to continue to encourage federal agencies to do everything necessary to develop a comprehensive understanding of the driving forces behind the continued multi-species salmon population crash in the Yukon and Kuskokwim River drainages to better facilitate stock recovery.

Recommendation:

The Council recommends the Federal Subsistence Management Program adequately fund and staff federal agency projects and fill staff positions that are involved in the Kuskokwim and Yukon drainages.

9. Development of the Ambler Road Project

Despite substantial negative impacts on Arctic ecosystems and subsistence users in the Northwest Arctic, North Slope and Western Interior regions, the Alaska Industrial Development Authority continues to push for the development of the Ambler Road Project.

Recommendation:

None at this time, the Council would like the Board to be aware of these concerns.

10. Representation on the Council

The vast Western Interior Region stretches all the way from the mid Kuskokwim River to the Arctic Circle, but not all parts of the region currently have representation on the Council. Therefore, the Council could be making recommendations to the Board on areas of their region that are not represented, and Council members may be needed to participate in working groups and planning teams in arenas that may be outside of their individual expertise. For example, there is currently no representation on the Council from the Grayling, Anvik, Shageluk, and Holy Cross (GASH) subregion, and, as a result, the Council's current representative member on the Alaska Wood Bison Management Planning Team is not from the GASH subregion, where the wood bison were released. Currently, the Council only has one member who resides on the Kuskokwim River, while this drainage covers a large percentage of the Western Interior Region.

Recommendation:

The Council would like effort to be made to increase the outreach and solicitation of applications from these unrepresented areas and communities.

The Western Interior Alaska Subsistence Regional Advisory Council appreciates the Board's attention to these matters and the opportunity to assist the Federal Subsistence Management Program in meeting its charge of protecting subsistence resources and uses of these resources on Federal public lands and waters. The Council looks forward to continuing discussions about the issues and concerns of subsistence users in the Western Interior Region. If you have any questions regarding this report, please contact me via Nissa Pilcher, Subsistence Council Coordinator, Office of Subsistence Management, at nissa_batespilcher@fws.gov, or 1-800-478-1456 or (907)455-1847.

Sincerely,

Jack Reakoff
Chair

cc: Federal Subsistence Board
Office of Subsistence Management
Interagency Staff Committee
Western Interior Alaska Subsistence Regional Advisory Council
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Projects Coordinator, Alaska Department of Fish and Game
Administrative Record

Subsistence Regional Advisory Council Correspondence Policy

The intent of the Subsistence Regional Advisory Council (Council) correspondence policy is to ensure that Councils can correspond appropriately with the Federal Subsistence Board (Board) and other entities. In addition, the correspondence policy will assist Councils in directing their concerns in an effective manner.

The Alaska National Interest Lands Conservation Act (ANILCA), Title VIII required the creation of the Councils to serve as advisors to the Secretary of the Interior and the Secretary of Agriculture and to provide meaningful local participation in the management of fish and wildlife resources on Federal public lands. Within the framework of Title VIII and the Federal Advisory Committee Act, Congress assigned specific powers and duties to the Councils. These are also reflected in the Councils' charters. (*Reference: ANILCA Title VIII §805, §808, and §810; Implementing regulations for Title VIII, 50 CFR 100 .11 and 36 CFR 242 .11; Implementing regulations for FACA, 41 CFR Part 102-3.70 and 3.75*)

The Secretaries of the Interior and Agriculture created the Board and delegated responsibility for implementing the Title VIII rural subsistence priority regarding fish and wildlife resources on Federal public lands and waters. The Board was also given the duty of establishing rules and procedures for the operation of the Councils in accordance with the requirements of the Federal Advisory Committee Act. The Office of Subsistence Management (OSM) was established to facilitate the work of the Federal Subsistence Management Program.

Policy

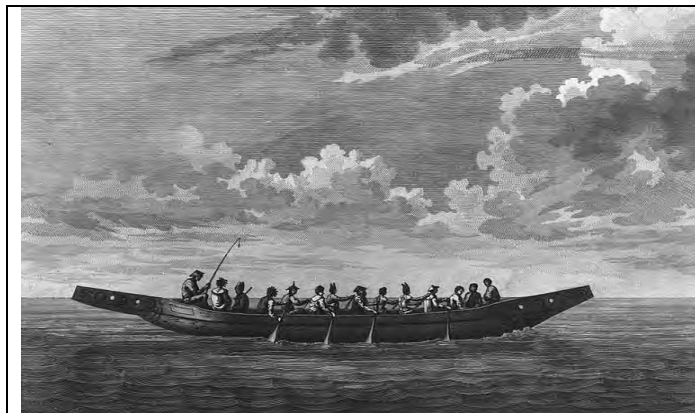
1. **Council correspondence shall be limited to subsistence-related matters, including matters related to the operation of the Federal Subsistence Management Program, and issues relevant to the subsistence way of life.**
2. Councils may and are encouraged to correspond directly with the Board. The Councils are **advisory bodies** to the Board.
3. Councils are urged to make use of the annual report process to bring matters to the Board's attention.
4. Types of communication encompassed by this policy include but are not limited to the following: letters of support, resolutions, letters offering comment or recommendations, **ANILCA §810 comments (subsistence and land use decisions)**, and any other correspondence to any government agency or any tribal or private organization or individual.
5. The correspondence process is as follows:
 - **Councils shall discuss and agree upon the contents of proposed correspondence during a public meeting.**
 - Council Coordinators draft the correspondence in accordance with the Council's position.
 - Council Coordinators will transmit all draft correspondence to the Assistant Regional

Director (ARD) of OSM for review prior to mailing, except as noted in items 6, 7, and 8 of this policy.

- Recognizing that such correspondence is the result of an official Council action and may be urgent, the ARD will complete this review in a timely manner.
 - Modifications identified as necessary by the ARD will be discussed with the Council Chair. **Council Chairs have the final authority to approve letters.**
6. Councils may submit notification of appointment directly to Subsistence Resource Commissions under §808 without review by the ARD of OSM.
 7. **Councils may submit comments regarding proposed regulatory changes affecting subsistence uses within their regions to the Alaska Board of Fisheries and the Alaska Board of Game without review by the ARD of OSM. The comments will be channeled through the appropriate OSM division(s) supervisors for review. A copy of comments or proposals will be forwarded to the ARD when the original is submitted.**
 8. Administrative correspondence such as letters of appreciation, requests for agency reports at Council meetings, and cover letters for meeting agendas will be channeled through the Council Coordinator to the appropriate OSM division(s) supervisor for review.
 9. **Due to Hatch Act restrictions, Councils may not communicate with elected officials political appointees in other Federal agencies. Councils further may not write Secretaries of Federal agencies or their offices, and instead may write to the Board to request that the Board relay correspondence on relevant subject matters of interest to the Secretaries of the Interior or Agriculture or to other Federal agencies at the Secretarial level.** This does not prohibit Council members from acting in their capacity as private citizens or through other organizations with which they are affiliated.
 10. Councils will submit copies of all correspondence generated and received by them to OSM to be filed in the administrative record system.

Approved by the Federal Subsistence Board on June 15, 2004.

Revised by the Federal Subsistence Board on XXXXXXXX.



***Southeast Alaska
Subsistence Regional
Advisory Council***

**Don Hernandez, Chairman
1011 E. Tudor Road, MS121
Anchorage, Alaska 99503**

**IN REPLY REFER TO:
RAC/SE22140.DP**

JAN 20 2023

Office of Subsistence Management
1011 E. Tudor Road, M/S 121
Anchorage, AK 99503-6199

USDA - USFS Regional Office
ATTN: Regional Forester Dave Schmid
P.O. Box 21628
Juneau, AK 99801-1807

USDA – USFS Tongass National Forest
ATTN: Forest Supervisor Earl Stewart
648 Mission Street, Suite #110
Ketchikan, AK 99901

National Park Service - Alaska Region
ATTN: Regional Director Sarah Creachbaum
240 W 5th Ave
Anchorage, AK 99501

National Park Service – Glacier Bay
ATTN: Superintendent Phillip Hooge
Glacier Bay National Park & Preserve
PO Box 140
Gustavus, AK 99826

To Interested Parties:

The Southeast Alaska Subsistence Regional Advisory Council (Council) supports responsible management of natural resources throughout southeast Alaska; specifically, those that are utilized by indigenous and rural residents for their subsistence needs.

The Council represents subsistence harvesters of fish and wildlife resources on Federal public lands and waters in Southeast Alaska. It was established by the authority in Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) and is chartered under the Federal Advisory Committee Act. Section 805 of ANILCA and the Council's charter establish its authority to initiate, review and evaluate regulations, policies, management plans, and other matters related to subsistence within the southeast Alaska region. The Council provides a forum for the expression of opinions and recommendations regarding any matter related to the subsistence uses of fish and wildlife within the region.

The Council also reviews resource management actions occurring outside their regions that may impact subsistence resources critical to communities served by the Council. Over the last several years, the Council has learned of meaningful opportunities for indigenous organizations and partnerships to actively participate in resource management. The Council would like to formally enumerate its support for local and regional indigenous/cooperative resource management in Southeast and looks forward to supporting co-management opportunities that are present under existing regulations.

1. Why co-management?

The Council has found, through testimony and deliberations at its meetings that co-management strengthens sustainable management of wild renewable resources, engages communities in stewardship of those resources, and results in overall improvement and acceptance of needed local strategies to maintain those wild renewable resources. This is because localizing natural resource monitoring leans on the knowledge of that place, puts money into the local community through local hire, and increases trust between managing entities and local user groups. Some local entities, Federal agencies are already moving toward addressing local concerns and needs under co-management, which some define as unique partnerships between Tribal governments, Federal government agencies, state agencies, Alaska Native corporations, and environmental non-governmental agencies. These groups have come together in a unified effort that strives to provide support to Alaska Native communities through the incorporation of local Indigenous Knowledge in the monitoring, protection, restoration, and decision-based co-management of traditional lands.

Since the inception of federal management of fish and wildlife on Federal public lands, federally recognized Tribes in Southeast Alaska have been important participants in the Federal Subsistence Management Program. In Southeast Alaska, tribes regularly comment on regulatory proposals that come before the Council, and they provide information on the state of subsistence in their traditional territories. Tribes actively cooperated in Tribal Government-to-Government or ANCSA (Alaska Native Claim Settlement Act) Consultation opportunities and dedicated tribal liaison Orville Lind, and with the Council in addressing proposed changes to the Roadless

Rule which has served Tongass communities very well. Tribes have been active participants in Forest Service and National Park Service land use planning and actions. They have also addressed herring depletion and other issues important to their members.

The Council has had a very positive relationship with Tribes and has supported cooperative fisheries harvest and escapement data gathering/analysis projects with Tribes. In recent years, Tribes are moving effectively to reestablish indigenous management of the traditional territories that have been theirs under traditional law. Tribes and tribal citizens are organizing through the Seacoast Indigenous Guardians Network project, the Sustainable Southeast Partnership, the Women's Earth and Climate Action Network, and other groups to prepare for a more active land and resource management responsibility.

In its role of providing a forum to gather and discuss matters related to subsistence, the Council has heard from these groups. At this time, our responsibility under our Federal Advisory Committee Act charter is to report what we have learned about this movement toward co-management to Office of Subsistence Management (OSM), USDA-Forest Service (USFS), and the National Park Service (NPS), and to suggest near-term program changes that may enhance subsistence protections. The Council also embraces our responsibility to develop a policy direction on how co-management might take place in our region by including more involvement by local Tribes. Increasing indigenous involvement in management plans is a natural progression of the previous efforts made to build capacity in the Fisheries Resource Monitoring Program and consultations with the Departments of Interior and Agriculture for policy changes.

2. Council has authority to support co-management and to recommend management changes to OSM, FS, and NPS

Under ANILCA Sections 801(1) and 805(a)(3), the Council has the authority to provide recommendations on management of fish and wildlife resources within the region and this extends to co-management of these resources. The Council has regularly provided its recommendations on fish and wildlife management proposals, rural determinations, Forest Service management plans, program customary and traditional use determinations, extra-territorial jurisdiction, cultural/special use permits and regulations governing ceremonial use (Khu.éex') of fish and wildlife resources, and other matters.

Section 805 of ANILCA grants broad authority to evaluate proposals, policies, plans, provide for public participation and to report our activities to the secretaries of Interior and Agriculture. We respect the limitations to our authority dealing with the taking of fish and wildlife under Section 805 (a)(3)(C); however, to fulfill the Council's authority, as assigned in Section 805(3)(C) and (D), the Council looks forward to supporting co-management opportunities that exist under existing regulations.

Additionally, ANILCA 802(3) dictates except as otherwise provided by this Act or other Federal laws, Federal land managing agencies, in managing subsistence activities on the public lands and in protecting the continued viability of all wild renewable resources in Alaska, shall cooperate

with adjacent landowners and land managers, including Native Corporations, appropriate State and Federal agencies and other nations.

3. History of the Federal Subsistence Management Program (FSMP) and request to examine greater incorporation of Tribes in management activities

Federal management of subsistence fish and wildlife resources on Federal public land has been in place since 1990 when the State of Alaska failed to comply with ANILCA provisions to provide a rural preference for subsistence. Few of us at the time thought that the Federal Subsistence Management Program would become a virtually permanent Federal responsibility. At this 32-year mark, the Council continues to support the examination of management structures that have been implemented and to recommend incremental changes in Federal management of subsistence harvest and land management activities. The Council has extensive experience in supporting the gathering of field data, the complex land management issues that exist in southeast Alaska, and the Council has worked productively with our region's 20 Federally recognized tribal communities, as well as with the Central Council of Tlingit and Haida Tribes of Alaska (CCTHITA).

Over this 32-year time period, the Council has not just supported Tribes, but have actively sought after co-management with Tribes. The Council supported 14 fisheries monitoring projects undertaken with Hydaburg Cooperative Association, Chilkoot Indian Association, Hoonah Indian Association, Klawock Heenya Corporation, Organized Village of Kake, Ketchikan Indian Community, Sitka Tribe of Alaska, Angoon Community Association, Alaska Department of Fish and Game, Takshanuk Watershed Council, and Skagway Traditional Council. These fisheries projects take place in the following areas in Southeast Alaska: Neva Lake, Kanalku Lake, Klag Lake, Kook Lake, Sitkoh Lake, Redoubt Lake, Falls Lake, Klawock Lake, Eek Lake, Hetta Lake, Hatchery Creek, Gut Bay, Unuk River, and Northern Southeast (Eulachon project).

The FSMP has supported subsistence harvest surveys in most of our region's communities. The Council led a multi-year planning effort concerning Prince of Wales Island deer strategy by forming a formal subcommittee for public process. The cooperative monitoring and subsistence use projects undertaken with Southeast Alaska indigenous communities have been particularly successful, such as the Southeast Alaska Sea Otter Commission co-management Tribal group, Southeast Alaska Tribal Oceans Research, which collects and assesses shellfish to better manage the resource, as well as Sitka Tribe's work through Southeast Alaska Tribal Ocean Research.

These co-management projects have been cost effective and have resulted in tribal capacity building and the Council would like to request that land management agencies examine their programs to identify additional opportunities for greater incorporation of Tribes in management activities.

4. Land Ownership under Traditional Law

The Council considers that all Southeast Alaska, including all Federal land in the Tongass National Forest, Glacier Bay National Park, the Admiralty Island and Misty Fjords national

monuments, and other Federal land designations to be Haa Aanii (our land), traditional and tribal clan territories, also known as Federal public lands under ANILCA.

The Council notes that traditional Native land ownership is well documented in kwaan and clan traditional law and in documentation studies done by Goldschmidt and Haas in 1946.

Traditional ownership boundaries have been reaffirmed in tribal community studies undertaken with many of our region's tribes since the passage of ANILCA. This is to say that clan and kwaan boundaries are generally known and established. Under traditional law, access to owned land and harvest of natural resources was controlled by the owning clan as with other At'oowu (something owned or purchased). Co-management acknowledges this Tribal stewardship and knowledge of the land since time immemorial.

5. Tribal land issues in our region need to be addressed

The Council believes that the Federal government's approach to managing the land, water, and fish and wildlife resources of our region should address and engage tribal co-management in protecting the continued viability of fish and wildlife resources on their traditional territories and the public lands of Southeast Alaska. The Council's long-term goal is to enhance hands-on land and resource management activities in our region by including input from the tribal entities that traditionally owned Haa Aanii. This change would be similar to changes that have taken place where tribes actively manage land and resources with limited technical oversight by the Bureau of Indian Affairs. It is also similar to the Federal government's trust obligations to tribal entities, which now effectively manage health, housing, and other trust obligations and to the empowerment of tribal courts.

6. Existing indigenous/cooperative management activities

Over the past year and a half, the Council has heard from the Seacoast Indigenous Guardians Network, the Southeast Alaska Sustainability Partnership, the Women's Earth and Climate Action Network, and other groups. Very broadly, these groups support co-management of our region's natural resources and insuring subsistence food security. We support these ongoing efforts and encourage future food sovereignty concepts.

Examples of informal co-management from Federally recognized Tribes are the Hoonah Native Forest Partnership, where communities and landowners are working together to collect data and make decisions about what can happen across that landscape and Keex' Kwaan Community Forest Partnership, a science-based, landscape scale, community forest approach to watershed management in the Tlingit village of Kake, Alaska. These co-management opportunities have progressed through capacity building and have resulted in the Tribe making decisions in that project area.

7. Request for active engagement by OSM, USFS, and NPS with southeast Alaska Tribes concerning subsistence management

In the short and near term, the Council requests OSM, USFS, and NPS, as our region's lead Federal agencies, to actively engage our region's Tribes in co-management agreements

concerning **subsistence research and planning** as well as **active subsistence management**. We call on OSM to enter into co-management agreements with our region's Tribes to 1) monitor the status of fish and wildlife populations and their harvests used for subsistence, 2) analyze regulatory proposals that may be submitted to OSM and the Council, 3) issue licenses and permits that may be required, 4) engage their constituents on management issues. OSM and USFS should also enter into co-management agreements to address the looming threat posed to the continuation of the opportunity for subsistence uses to address climate change and environmental justice and looming threats from resultant pressure on subsistence resources identified in ANILCA 801(3) as the "continuation of the opportunity for subsistence uses of resources on public and other lands in Alaska is threatened by the increasing population of Alaska, with resultant pressure on subsistence resources, by sudden decline in the populations of some wildlife species which are crucial subsistence resources, by increased accessibility of remote areas containing subsistence resources, and by taking of fish and wildlife in a manner inconsistent with recognized principles of fish and wildlife management."

The Council would like to see funding for Tribes to engage with the Federal government on co-management opportunities. Many Tribes rely on grant funds, but it is not known if there are funds available to pay for tribal staff to engage in this type of work. The Council would like to encourage the exploration of the possibility of agreements between Federally Recognized Tribes and OSM. The Council would like to see the FSMP help Tribes to secure funding to have staff follow through on this engagement as it recognizes that if Tribes are asked to be a partner to an agreement, they should receive the resources to fulfill the agreement.

8. Request for active engagement by USFS and NPS with Southeast Alaska Tribes concerning cooperative and co-management for land management

In the short and near term, the Council calls on USFS and NPS to also enter cooperative co-management agreements with our region's Tribes on all matters concerning **land management of traditional lands**. The goal of these agreements should be driven by the community and would include space for co-decision making and extensive local resource monitoring. These could include delegating authority to prepare review materials for Federal plans and land use actions, to perform data gathering on forest resources, to assess and implement restoration activities, and to enable tribes to become effective guardians of public land resources. These agreements will require a long view on meeting the gaps of communities, Tribes, and Federal entities. Both agencies should recruit qualified tribal residents to their internship programs to grow a new generation of natural resource managers.

In conclusion, the Council is appreciative of the 32-year-old Federal Subsistence Management Program in Southeast Alaska and believes that incorporating our region's Tribes in active land and resource management provides meaningful opportunities for Alaska Federally qualified subsistence users residing within the region to contribute in a meaningful way to the protection of subsistence resources on Federal public lands and will result in greatly improved management in our region.

The Council would like to emphasize its strong support for local and regional indigenous/cooperative resource management in Southeast Alaska and looks forward to supporting co-management opportunities that are present under existing regulations.

If you have any questions regarding this letter, they can be addressed through our Council Coordinator DeAnna Perry at 907-209-7817 or dlperry@usda.gov.

Sincerely,



Donald Hernandez
Chair Regional Advisory Council
Southeast Alaska Region

cc: Federal Subsistence Board
Southeast Alaska Subsistence Regional Advisory Council Members
Office of Subsistence Management
Greg Risdahl, Subsistence Program Leader Alaska Region 10, USDA – Forest Service
Interagency Staff Committee
Southcentral Alaska Subsistence Regional Advisory Council
Kodiak/Aleutians Subsistence Regional Advisory Council
Bristol Bay Subsistence Regional Advisory Council
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council
Western Interior Alaska Subsistence Regional Advisory Council
Seward Peninsula Subsistence Regional Advisory Council
Northwest Arctic Subsistence Regional Advisory Council
Eastern Interior Alaska Subsistence Regional Advisory Council
North Slope Subsistence Regional Advisory Council
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Projects Coordinator, Alaska Department of Fish and Game
Administrative Record

ICTP23-02 Executive Summary	
General Description	Proposal ICTP23-01 submitted by Kevin Mayo and members of his household, requests an individual customary and traditional (C&T) use determination for moose, caribou, grouse and ptarmigan in Game Management Unit 13 (GMU 13) in areas managed by the National Park Service where subsistence uses are allowed. Kevin Mayo already has an individual C&T determination for moose and caribou in GMU 13 in areas managed by the National Park Service where subsistence uses are allowed.
Proposed Regulation	<p>Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments</p> <p><i>§ .16 Customary and traditional use process</i></p> <p><i>(a) The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the National Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.</i></p> <p>Customary and Traditional Use Determination Moose, caribou, grouse, and ptarmigan in GMU 13 in areas managed by Denali National Park and Preserve where subsistence uses are allowed.</p> <p>Caribou <i>Unit 13E – Residents of Units 11, 12, (along the Nebesna Road), 13, Chickaloon, McKinley Village, and the area between milepost 216-239 of the Parks Highway. No subsistence priority for the residents of Denali National Park headquarters*.</i></p> <p>Moose <i>Unit 13E Residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between milepost 216-239 of the Parks Highway. No Federal subsistence priority for the residents of Denali National Park headquarters*.</i></p> <p>Grouse <i>Residents of Units 11, 13, 15, 16, 20D, 22, and Chickaloon*.</i></p> <p>Ptarmigan <i>Residents of Units 11, 13, 16, 20D, 22, 23, and Chickaloon*.</i></p> <p><i>*For all the above species: residents of Healy, Alaska: Kevin Mayo and family household.</i></p>

	<p><i>*Note: Names of individual do not appear in the regulation booklets, they are on a list maintained by the respective National Park Service subsistence manager.</i></p>
National Park Service Recommendation	Support
Southcentral Subsistence Regional Advisory Council Recommendation	
Eastern Interior Subsistence Regional Advisory Council Recommendation	
Denali National Park Subsistence Resource Commission Recommendation	Support
Public Comments	

STAFF ANALYSIS

ISSUES

Proposal ICTP23-02, submitted by Kevin Mayo and members of his household family, request an individual customary and traditional (C&T) use determination for moose, caribou, grouse, and ptarmigan in GMU 13 in areas managed by Denali National Park and Preserve where subsistence uses are allowed.

DISCUSSION

The proponent has described a history of C&T use of moose, caribou, grouse, and ptarmigan in Denali National Park and Preserve, part of GMU 13E where subsistence uses are allowed. Kevin Mayo holds a National Park Service subsistence use permit (13.440)¹. Kevin Mayo and his family are from Cantwell, which is a resident zone community of Denali National Park. In 2010, the Federal Subsistence Board determined that Kevin Mayo had substantial evidence to support the issuance of an individual C&T use determination for moose and caribou; however, this C&T request for moose and caribou to the Federal Subsistence Board did not extend to his family members. Currently Mr. Mayo's family members are unable to harvest moose, caribou, grouse, and ptarmigan because they now reside in a rural community (Healy), which does not have a positive C&T use determination for caribou, grouse, and ptarmigan (however, as previously noted Kevin Mayo currently has C&T use determination for moose and caribou).

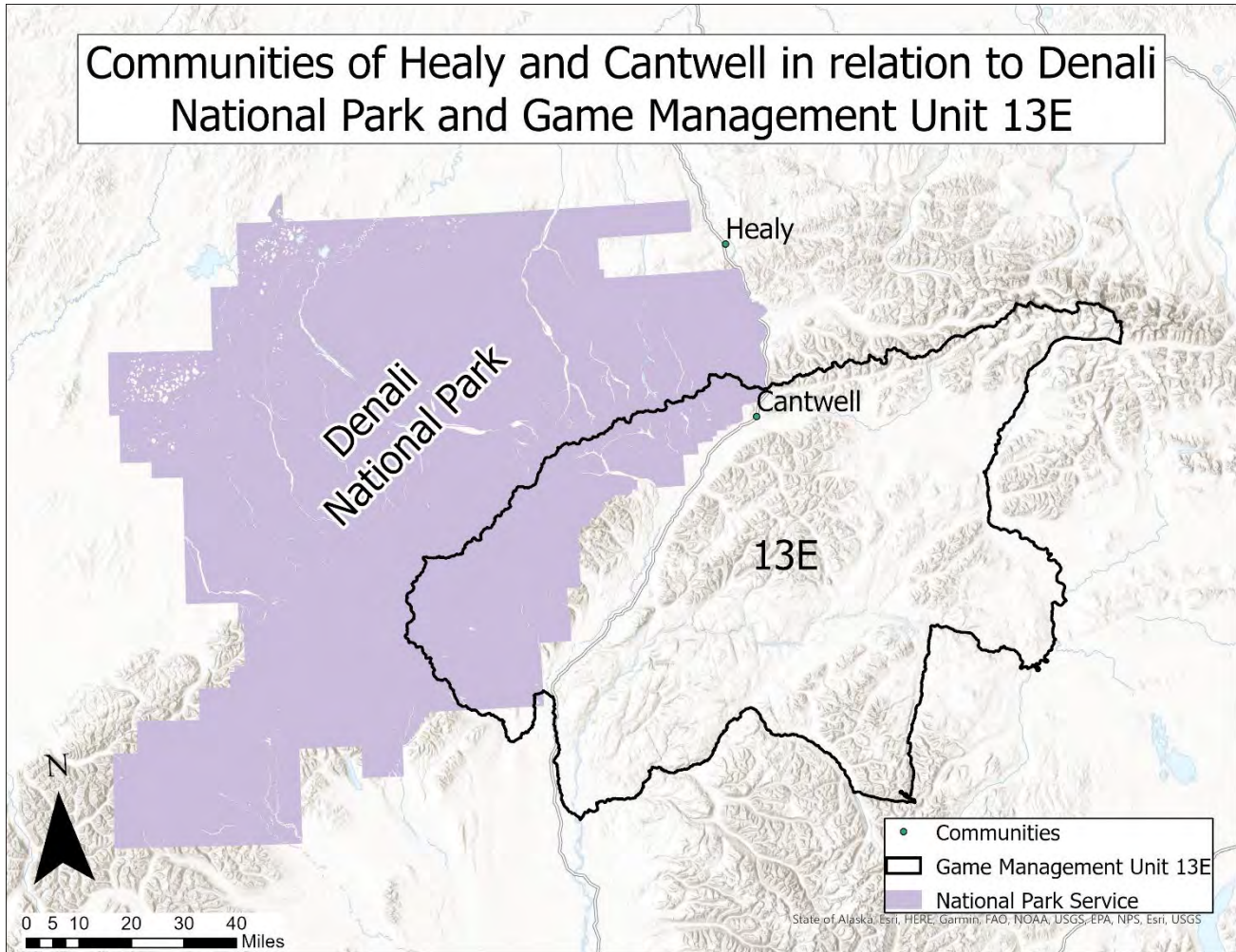
To be eligible to engage in subsistence uses, Federal subsistence regulations require that rural Alaska residents live in a community or area that has a customary and traditional use determination for the desired species and harvest area (50 CFR 100.5(b)). They also state that the National Park Service (NPS) may further regulate eligibility to engage in subsistence on NPS-managed lands (50 CFR 100.5(d)).

According to NPS regulations, in order to qualify as a local rural resident eligible to engage in subsistence uses within a National Park or National Monument, a person must live in a resident zone community, live within the boundaries of the park or monument, or hold a §13.440 subsistence eligibility permit (36 CFR 13.420, 430). If a person qualifies as a local rural resident as described in the previous sentence, but lives in a community or area without a customary and traditional use determination for the species they wish to hunt or fish, they may submit a proposal to the Federal Subsistence Board for an individual customary and traditional use determination.

Federal subsistence regulations allow the Board to make individual customary and traditional use

¹ Individuals residing outside of Denali National Park and Preserve's resident zone communities who have a personal or family history of using the Park additions established by ANILCA in 1980 for subsistence purposes at the time ANILCA was passed, may obtain a special subsistence use permit (36 CFR 13.440). They must provide documentation of their traditional use, without the use of aircraft for access. Eligible subsistence users for Denali National Park and Preserve must also comply with the Federal Subsistence Management Regulations regarding the harvest of fish and wildlife (NPSb 2010).

determinations in NPS-managed National Park and National Monument areas where subsistence is authorized, but not in Preserves. National Park Service regulations include unique subsistence eligibility requirements for National Park Service lands. Fewer people have subsistence eligibility in National Parks and National Monuments as compared to other Federal public lands. Requests for individual customary and traditional use determinations are analyzed in the same way that a community or area request for a customary and traditional use determination is analyzed (FSB 1999: 224).



Existing Federal Regulation

Other Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments

36 CFR 13.410 Applicability.

Subsistence uses by local rural residents are allowed pursuant to the regulations of this subpart in the following park areas:

- (a) *In national preserves;*
- (b) *In Cape Krusenstern National Monument and Kobuk Valley National Park;*
- (c) *Where such uses are traditional (as may be further designated for each park or monument in the applicable special regulations of this part) in Aniakchak National Monument, Gates of the Arctic National Park, Lake Clark National Park, Wrangell-St. Elias National Park, and the Denali National Park addition.*

50 CFR 100.16 Customary and traditional use process.

- (a) *The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the National Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.*

Individual Customary and Traditional Use Determinations

<p>Customary and Traditional Use Determination—Caribou <i>Unit 13E – Residents of Units 11, 12, (along the Nebesna Road), 13, Chickaloon, McKinley Village, and the area between milepost 216-239 of the Parks Highway. No subsistence priority for the residents of Denali National Park headquarters.</i></p> <p>Moose <i>Unit 13E Residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between milepost 216-239 of the Parks Highway. No Federal subsistence priority for the residents of Denali National Park headquarters.</i></p> <p>Grouse <i>Residents of Units 11, 13, 15, 16, 20D, 22, and Chickaloon.</i></p> <p>Ptarmigan <i>Residents of Units 11, 13, 16, 20D, 22, 23, and Chickaloon</i></p>	<p>Residents of Chickaloon and McKinley Village</p> <p>Residents of Chickaloon, McKinley Village, and Slana</p> <p>Residents of Chickaloon</p> <p>Residents of Chickaloon</p>
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Proposed Federal Regulation

<p>Caribou <i>Unit 13E – Residents of Units 11, 12, (along the Nebesna Road), 13, Chickaloon, McKinley Village, and the area between milepost 216-239 of the Parks Highway. No subsistence priority for the residents of Denali National Park headquarters.</i></p> <p>Moose <i>Unit 13E Residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between milepost 216-239 of the Parks Highway. No Federal subsistence priority for the residents o Denali National Park headquarters.</i></p> <p>Grouse <i>Residents of Units 11, 13, 15, 16, 20D, 22, and Chickaloon.</i></p> <p>Ptarmigan <i>Residents of Units 11, 13, 16, 20D, 22, 23, and Chickaloon</i></p>	<p>Residents of Chickaloon and McKinley Village, and Kevin Mayo and members of his household*.</p> <p>Residents of Chickaloon, McKinely Village, and Slana and Kevin Mayo and members of his household*.</p> <p>Residents of Chickaloon and Kevin Mayo and members of his household*.</p> <p>Residents of Chickaloon and Kevin Mayo and members of his household*.</p> <p>*Names of individuals do not appear in the regulation booklets; they are on a list maintained by the respective National Park Service Manager.</p>
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Extent of Federal Public Lands/Waters

Extent of Federal Public Lands/Waters Federal public lands comprise approximately 19% of GMU 13 E, managed by the National Park Service, Denali National Park.

Background

The community of Cantwell is located near the Alaska Range at the confluence of the Parks and Denali highways, which is north of Broad Pass and 28 miles south of Denali National Park and Preserves. The area is characterized by a continental climate with warm summers and cold, dark winters with an annual average snowfall of 78 inches and 15 inches of precipitation.

Traditional Ahtna territory centers on the Copper River Basin but also includes parts of the Susitna and upper Tanana drainages. Historically, Ahtna Athabaskans seasonally occupied areas to the east of the current village of Cantwell at Valdez Creek. In this area, caribou, moose, porcupine, migratory and upland birds, and berries continued to be relied on heavily by local subsistence users.

Within Denali National Park, Cantwell subsistence users harvest moose and caribou on the southwest boundary just outside the designated Denali Wilderness. This area, where subsistence hunting is permitted under the federal program, is referred to by local subsistence users as the Cantwell Traditional Use Area (Holen et al 2014:36,58).

Regulatory History

Requests for individual customary and traditional use determinations began almost as soon as the Federal Subsistence Board assumed management authority for subsistence on Federal public lands in 1990. Because of the proximity of the Parks Highway to Denali National Park, many of the first requests came from residents of this area (Norris 2002:229). Cantwell is the only resident zone community on the highway, yet there are many people who have conducted subsistence harvests in the Park who also live along the highway outside of Cantwell (Norris 2002:229). Many of the initial individual customary and traditional use proposals were held up for years because of a huge backlog of proposals for community customary and traditional use determinations and lack of clarity as to whether or not individual customary and traditional use determinations were within the purview of the Federal Subsistence Board (Norris 2002: 229-232). In 1999, the Board finally addressed several proposals for individual customary and traditional use determinations. The Department of the Interior's Office of the Solicitor affirmed that the Board "had sufficient legal authority under ANILCA to make customary and traditional use determinations for NPS administered lands on an individual basis" (Norris 2002:232). Later in 1999, the Board recognized three individual customary and traditional use determination for Denali National Park and several from Wrangell St. Elias National Park (Norris 2002:232, FSB 1999:222-243). The Board also denied some of these proposals due to lack of sufficient information exemplifying the eight factors (Norris 2002: 232; FSB 1999: 222-243). In 2010 and 2021, the Board approved an additional individual customary and traditional use determinations, in this case for Kevin Mayo of Healy (WP10-31) and Blaine Mayo (ICP21-01).

In January 2021 the Federal Subsistence Board adopted a revised policy on individual customary and traditional use determinations to follow the procedures described in the National Park Service's "Standard Operating Procedures for Issuance of Subsistence Eligibility Permits and Individual Customary and Traditional Use Determinations." The new policy allows for proposals to be submitted on a continuous basis, and also provides for concurrent application for 13,440 Subsistence Eligibility Permits. Subsequently under this new policy, Blaine Mayo of Healy submitted Proposal ICP21-01, which requests an individual customary and traditional use determination for moose in Unit 13E for himself, his wife, and children (NPS 2021). The Board approved this request during its

August 2021 work session (FSB 2021).

Eight Factors for Determining Individual Customary and Traditional Use

A community or area's C&T use is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use for these resources recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or park unit; (5) a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to the community or area.

The Board makes customary and traditional use determinations based on a holistic application of the above eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)). In addition, the Board takes into consideration the reports and recommendations of any appropriate Regional Advisory Council regarding customary and traditional use of subsistence resources (50 CFR 100.16(b) and 36 CFR 242.16(b)). The Board makes customary and traditional use determinations for the sole purpose of recognizing the pool of users who generally exhibit the eight factors. The Board does not use such determinations for resource management or restricting harvest. If a conservation concern exists for a particular population, the Board addresses that concern through the imposition of harvest limits or season restrictions rather than by limiting the customary and traditional use finding.

Specific information on each of the eight factors is not required because an individual seeking a customary and traditional use determination only must "generally exhibit" the eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)).

Integrated Discussion of the Eight Factors

Since 1964, the Cotter/Smith/Mayo families have hunted, harvested, and shared moose, caribou, grouse, and ptarmigan. According to Kevin Mayo, the family harvests moose and caribou in late August and the first weekend in September before the meat gets ratty after the weather cools. Kevin Mayo feels that it is hard to justify harvesting caribou in the winter because caribou are too lean but most importantly for him, he does not feel it is a fair or ethical hunt. Caribou are under stress from winter weather and due to lack of food. During moose and caribou season, the Kevin Mayo family will also hunt grouse and ptarmigan from their hunting camp.

Historically the Cotter/Smith/Mayo families traveled to their hunting/trapping areas by foot, Coats,

Weasels, off road vehicles (ORVs), and snowmachines. Today the Kevin Mayo family continues to maintain a reoccurring pattern of use within the area by foot, ORVs and snowmachines. Once the family sets up their hunting camp, they walk about two miles to a hill where they sit and spot for an animal with binoculars. Once they spot an animal, they walk to within shooting distance. After they shoot the animal (generally located within the New Park), they pack it out by foot to a designated ORV trail to camp.

Since 1971, the Kevin Mayo family has hunted in the area and in 1985 they established their current hunting camp. The Mayo family used to put their tent up and take it down after every hunting season; however, about 15 years ago they built a tent platform. The extended family prefers to hunt close to their camp. Typically, the Cotter/Smith/Mayo families remain at their camp until they harvest a moose. While hunting for moose, the family also opportunistically hunts for caribou, grouse, and ptarmigan.

For over four generations the Smith/Cotter/Mayo families have hunted and harvested animals by reasonable ground access in areas near their residence within GMU13E. Kevin Mayo's extended family hunts moose, caribou, grouse, and ptarmigan together every hunting season in the Cantwell Creek and Foggy Pass area. The Kevin Mayo family's camp borders the New Park and is located on state land. To access the camp, the Mayo family use ORVs and walking. According to Kevin, the family knows the area like the back of their hands.

Moose and caribou are gutted, skinned, and quartered in the field and then packed by foot to a designated ORV trail and transported to camp. The Kevin Mayo family uses all edible parts of the moose and caribou. Much of the moose and caribou meat is canned or stored in the freezer to preserve it and some portions of the moose and caribou are processed by drying. Kevin uses the same handling techniques that he was taught by his father, grandfather, and great grandfather. Usually the combination of a moose and a caribou will feed two to three families. The Kevin Mayo family uses the following methods for processing meat: a vacuum sealer, smoker, meat grinder, pressure cooker, and sausage stuffer. Processing meat is a family event. Grouse and ptarmigan are brought back to camp and cleaned and immediately consumed. The breast is targeted for consumption, marinated and grilled over the camp fire.

Knowledge, skills, and the use of particular hunting areas are passed from generation to generation. Kevin Mayo's grandparents learned how to hunt in the Cantwell areas and passed this knowledge on to their extended family. As a young child, Kevin Mayo accompanied his father, mother, and other relatives hunting and trapping, long before he was actually old enough to hunt and trap himself.

Kevin has hunted and trapped every year since 1982. Kevin continues these traditions with his family and is passing them on to his wife and children. Hunting, trapping, berry picking, and fishing are subsistence activities the Kevin Mayo family is dependent upon. Subsistence for the Mayo family is a family activity, and the next generation is learning these practices as well.

Kevin Mayo learned from his mom and dad, grandparents, and friends how to hunt, fish, trap, preserve, and process meat. But most importantly Kevin Mayo learned from his family about respecting and caring for the animals harvested. Subsistence for the Mayo family is a family activity, and the next generation is learning these practices as well.

The most important aspect of grouse and ptarmigan hunting is that it provides an opportunity to introduce hunting to the kids. This is an important aspect of subsistence that is often overlooked in that it introduces kids the skills and knowledge of subsistence. Kids are able to practice aiming the .22 rifle and become familiar with using a gun. Grouse and ptarmigan hunting is one of the highlights for the kids, providing them with an immense amount of pride when they are able to provide food for the family while at camp.

Below is an excerpt from a joint interview with Blaine and Kevin Mayo on August 15, 2022.

“We have learned a lot over the years from hunting with our parents, each other, and our friends. We are never ones to push the knowledge that we have onto anyone saying our way is the only way but we are always one for sharing whatever knowledge we have. There are literally a thousand different ways skin an animal. Whenever we harvest an animal, we all know our places and go from there, it’s like clockwork.

Bird hunting is another huge part of our life. Ptarmigan and spruce hens were always part of moose and caribou hunting. When we went out to moose camp or caribou hunting, we always have a .22 to harvest birds. Hunting is more than just going out and shooting an animal; it’s a huge part of our lives. It’s amazing family time, camping, making of memories and showing our kids what we grew up doing. Our kids love to go out to hunting. Moose camp and our winter camp is always on our minds. We’ve showed them how to call moose, to look for paddles in the brush, how to fish the creeks, lakes, and how to ice fish. It’s truly a blessing to be able to pass down to our kids what we’ve learned from our parents and family. And they still learn from my parents and family, it’s a beautiful thing!

As far as fishing goes, again, we’ve learned a lot from our parents, each other, our sister, and our grandparents. One of our more favorite fish are burbot. We try to pass on our fishing knowledge to our friends. Grayling, lake trout, salmon and other fish are always a blessing to have in the freezer or better yet on the plate. Hunting, fishing, cutting down trees for firewood, being out in the wilderness are ingrained into our lives, it’s what we do! Wouldn’t change a thing.”

The Mayo family hunts are a family event, often including several generations who participate together in activities such as hunting, establishing camps, and processing harvested meat. Extended family members always share in the harvest. It is the Mayo’s family tradition to share meat and equipment. If a family member or friend does not get enough meat during the season it is expected that the Kevin Mayo family will share their harvest with that person or household. For example, Kevin’s mom always shares moose and caribou meat with her sister, mother, and elders.

Kevin Mayo’s great grandparents passed down their traditional subsistence lifestyle to their extended multi 5th generational family. It is this traditional subsistence lifestyle that Kevin Mayo wants to continue to pass on to his wife and children. Typically, the extended family harvests one moose per hunting season. The family never takes more than one moose or two caribou as a family per hunting season.

Moose have been and continue to be the Kevin Mayo family's primary source of meat. The family utilizes a variety of subsistence resources such as berries, caribou, bear, ptarmigan, fish and furbearers such as beaver, marten, fox, wolf, and lynx. In addition to wildlife, berries, and fish resources providing a substantial nutritional need for the family, these activities also provide a significant social and family activity involving all members of the multiple Mayo households. Multiple generations will participate in the fall, winter, and spring hunting, trapping, fishing and processing activities together. Approximately fifty percent of the Mayo family's meat comes from moose meat. Typically, wildlife and other subsistence foods provide meals four out of seven days per week. The Mayo family enjoys eating moose, caribou, brown bear, grouse, and ptarmigan meat because it is low in fat and it is traditional.

Hunting is a way of life for the Mayo family. They like to know where their meat comes from and how it was handled. They like to eat organic foods as much as possible and the animals they harvest are such. They fish, ice fish, hunt, trap, harvest berries, and cut down firewood to provide for their family. Their subsistence way of life has been handed down through the generations and it is ingrained in their family's lives. Kevin Mayo feels that it is a blessing to have been raised in Cantwell and to have had the parents and grandparents he has had.

Effects of the Proposal

If adopted, this proposal would recognize Kevin Mayo and his household family's C&T use of moose, caribou, grouse, and ptarmigan in GMU 13E in areas managed by Denali National Park and Preserve where subsistence uses are allowed and would allow Mr. Mayo to pass his traditional subsistence lifestyle to his children. Because this C&T determination is for one household who has a history of moose, caribou, grouse, and ptarmigan in the area, the effects on other subsistence users should be minimal.

NPS Conclusion

Support Proposal ICTP23-02

Justification

The proponents exhibit a clear long-term and consistent use of moose, caribou, grouse, and ptarmigan in GMU 13, in areas managed by Denali National Park and Preserve where subsistence uses are allowed. This pattern has been repeated for many years and through several generations. Methods and means are characterized by efficiency of economy of effort and cost based on local characteristics. The pattern is consistent with past methods and means of harvests at and near the family's hunting camp within the Unit in question. Knowledge of handling, preparing, preserving, and storing moose meat is shared among and between generations, as is knowledge of the skills, values, and lore associated with hunting moose, caribou, grouse, and ptarmigan. Moose, caribou, grouse, and ptarmigan are regularly shared with family and community members such as elders. The proponents demonstrate a pattern of use that relates to reliance on a wild diversity of wild foods that provide this family with cultural, economic, social, and nutritious benefits. All eight of the factors associated with C&T determination are evident. Furthermore, this family's pattern of use is also evidence through the Federal Subsistence previous determination for Kevin Mayo for moose and caribou. here is substantial evidence to support the issuance of an individual C&T determination for moose, caribou, grouse and ptarmigan within GMU13 of Denali National Park and Preserves where subsistence is allowed for the proponents, including all members of the Kevin Mayo family that reside within the same household as Kevin Mayo.

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Personal communication in person with Kevin and Blaine Mayo by Amy Craver, Subsistence Coordinator, Denali National Park and Preserve. August 15, 2022.

**U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ALASKA REGION**

**NATIONAL PARK/MONUMENT SUBSISTENCE INDIVIDUAL CUSTOMARY AND
TRADITIONAL USE DETERMINATION ANALYSIS**

To be completed by the relevant Subsistence Coordinator:

Date: January 6, 2023
Applicant Name: Kevin Mayo, Danielle Mayo, Breanna Mayo, Kayla Mayo, and Isaiah Mayo
Analyst Name: Amy Craver

This analysis is in response to the following request:

X Individual Customary and Traditional Use Determination ONLY

Please type a brief summary of the applicant's reported subsistence use pertaining to the request, as determined from information provided on the application and during the interview:

See accompanying analysis.

For a National Park/Monument Subsistence Eligibility Permit (13.440), the analysis should address the following topics:

1. Synopsis of the applicant's pattern of use specifically in the National Park or Monument for which the permit is requested, including the following:
 - a. Species harvested: moose, caribou, grouse, and ptarmigan
 - b. Specific locations where the use occurred: GMU 13, in areas managed by Denali National Park and Preserve where subsistence uses are allowed.
 - c. Years during which the subsistence uses took place: 1982-2006; 2011-2022
 - d. Whether aircraft was used for access. No.
2. Does the pattern of use begin prior to the signing of the Alaska National Interest Lands Conservation Act (ANILCA)? Yes.
3. Does the applicant have a pattern of use established while as a resident of a resident zone community after the passage of ANILCA? Yes.

For an Individual C&T use determination, the analysis should address the following eight questions:

1. Does the applicant have a long-term, consistent pattern of use of these resources, excluding interruptions beyond their control? Please explain.
2. Does the applicant have a pattern of use for these resources recurring in specific seasons for many years? Please explain.
3. Does the applicant have a pattern of use of these resources consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics? Please explain.
4. Does the applicant exhibit consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the park unit? Please explain.
5. Does the applicant exhibit a means of handling, preparing, preserving, and storing fish or

- explain.
5. Does the applicant exhibit a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate? Please explain.
 6. Does the applicant exhibit a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation? Please explain.
 7. Does the applicant exhibit a pattern of use in which the harvest is shared or distributed within a definable community of persons? Please explain.
 8. Does the applicant exhibit a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to your household?

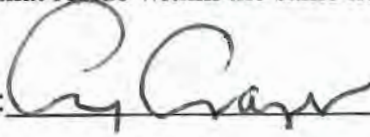
The analysis should include an integrated discussion of the eight factors. A factor-by-factor discussion is not required in the analysis and it is also not necessary that all eight factors be addressed to demonstrate a pattern of use. The eight factors provide a framework for examining the pattern of use of a resource. There are regional, cultural and temporal variations and the application of the eight factors will likely vary by region and by resource depending on actual patterns of use. The goal of customary and traditional use determination analyses is to recognize customary and traditional uses in the most inclusive manner possible.

As a result of this analysis (Select All that Apply):

- There is substantial evidence to support the issuance of an Individual Customary and Traditional Use Determination.** Yes, moose, caribou, grouse, and ptarmigan in GMU 13, in areas managed by Denali National Park and Preserve where subsistence uses are allowed.
- There is NOT substantial evidence to support the issuance of an Individual Customary and Traditional Use Determination for (species location).

Brief Justification:

As is evidence in the analysis, the proponents exhibit a clear long-term and consistent use of moose, caribou, grouse, and ptarmigan in GMU 13, in areas managed by Denali National Park Sand Preserve where subsistence uses are allowed. This pattern has been repeated for many years and through several generations. Methods and means are characterized by efficiency of economy of effort and cost based on local characteristics. The pattern is consistent with past methods and means of harvests at or near the family's hunting camp within the Unit in question. Knowledge of handling, preparing, preserving, and storing moose meat is shared among and between generations, as is knowledge of the skills, values, and lore associated with hunting moose, caribou, grouse, and ptarmigan. Moose, caribou, grouse, and ptarmigan are regularly shared with family and community members such as elders. The proponents demonstrate a pattern of use that relates to reliance on a wild diversity of wild foods that provide this family with cultural, economic, social, and nutritious benefits. All eight of the factors associated with C&T determination are evident. Furthermore, this family's pattern of use is also evidence through the Federal Subsistence previous determination for Kevin Mayo for moose and caribou. For these reasons, I believe that there is substantial evidence to support the issuance of an individual C&T determination for moose, caribou, grouse and ptarmigan within GMU13 of Denali National Park and Preserves where subsistence is allowed for the proponents, including all members of the Kevin Mayo family that reside within the same household as Kevin Mayo.

Signature of Analyst: 

Date: 

U.S. Department of the Interior

National Park Service

Alaska Region

Individual Customary and Traditional (C&T) Use Determination

Subsistence Resource Commission (SRC) Recommendation

To be completed by the relevant Subsistence Coordinator:

Date of Formal Action: January 11, 2023
Proponent Name: Kevin Mayo and members of his household family
Proponent Request: Moose, Caribou, grouse, and ptarmigan in Game Management Unit 13 (GMU 13) in areas managed by Denali National Park and Preserve where subsistence uses are allowed.
Affected SRC: Denali Subsistence Resource Commission

This SRC has determined that (select all that apply):

- There is sufficient evidence to support an individual C&T use determination for Kevin Mayo and members of his household family: Danielle Mayo (wife), Isaiah Mayo (son), Kayla Mayo (daughter), and Branna Mayo (daughter) for moose, caribou, grouse, and ptarmigan in Game Management Unit 13 (GMU 13) in areas managed by Denali National Park and Preserve where subsistence uses are allowed.

- There is NOT sufficient evidence to support an individual C&T use determination for Kevin Mayo and members of his household family: Danielle (wife), Isaiah Mayo (son), Kayla Mayo (daughter), and Branna Mayo (daughter) for moose, caribou, grouse, and ptarmigan in Game Management Unit 13 (GMU 13) in areas managed by Denali National Park and Preserve where subsistence uses are allowed.

Brief justification for above decision:

According to the SRC, due diligence has been achieved documenting Kevin's family's pre-ANILCA history of using the Park additions established by ANILCA. The SRC believes that C&T requests need to be expedited so as to allow for subsistence customs and traditions to continue so that qualified families can carry on their participation in subsistence activities to future generations.

Signature of SRC Chair Justin L. Mason Date 01/17/2023

ICTP23-01 Executive Summary	
General Description	Proposal ICTP23-01 submitted by Blaine Mayo and members of his household, request an individual customary and traditional (C&T) use determination for caribou, grouse and ptarmigan in Game Management Unit 13 (GMU 13) in areas managed by the National Park Service where subsistence uses are allowed. Blaine Mayo and members of his household already have a C&T determination for moose in GMU 13 in areas managed by the National Park Service where subsistence uses are allowed.
Proposed Regulation	<p>Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments</p> <p><i>§ .16 Customary and traditional use process</i></p> <p><i>(a) The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the National Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.</i></p> <p>Customary and Traditional Use Determination Moose, caribou, grouse, and ptarmigan in GMU 13 in areas managed by Denali National Park and Preserve where subsistence uses are allowed.</p> <p>Caribou <i>Unit 13E – Residents of Units 11, 12, (along the Nebesna Road), 13, Chickaloon, McKinley Village, and the area between milepost 216-239 of the Parks Highway. No subsistence priority for the residents of Denali National Park headquarters*.</i></p> <p>Grouse <i>Residents of Units 11, 13, 15, 16, 20D, 22, and Chickaloon*.</i></p> <p>Ptarmigan <i>Residents of Units 11, 13, 16, 20D, 22, 23, and Chickaloon*.</i></p> <p><i>*For all the above species: residents of Healy, Alaska: Kevin Mayo and family household.</i></p> <p><i>*Note: Names of individual do not appear in the regulation booklets, they are on a list maintained by the respective National Park Service subsistence manager.</i></p>
National Park Service Recommendation	Support

Southcentral Subsistence Regional Advisory Council Recommendation	
Eastern Interior Subsistence Regional Advisory Council Recommendation	
Denali National Park Subsistence Resource Commission Recommendation	Support
Public Comments	

STAFF ANALYSIS

ISSUES

Proposal ICTP23-01, submitted by Blaine Mayo and members of his household family: Tracy Mayo (wife), Owen Mayo (son), Adelynn Mayo (daughter), and Ryland Mayo (daughter), request an individual customary and traditional (C&T) use determination for caribou, grouse, and ptarmigan in GMU 13 in areas managed by Denali National Park and Preserve where subsistence uses are allowed.

DISCUSSION

The proponent has described a history of C&T use of moose, caribou, grouse, and ptarmigan in Denali National Park and Preserve, part of GMU 13E where subsistence uses are allowed. Blaine Mayo holds a National Park Service subsistence use permit (13.440)¹. Blaine Mayo and his family are from Cantwell, which is a resident zone community of Denali National Park. In 2022, the Federal Subsistence Board determined that Blaine Mayo and his household had substantial evidence to support the issuance of an Individual C&T use determination for moose. Currently Mr. Mayo's family members are unable to harvest caribou, grouse, and ptarmigan because they now reside in a rural community (Healy), which does not have a positive C&T use determination for caribou, grouse, and ptarmigan.

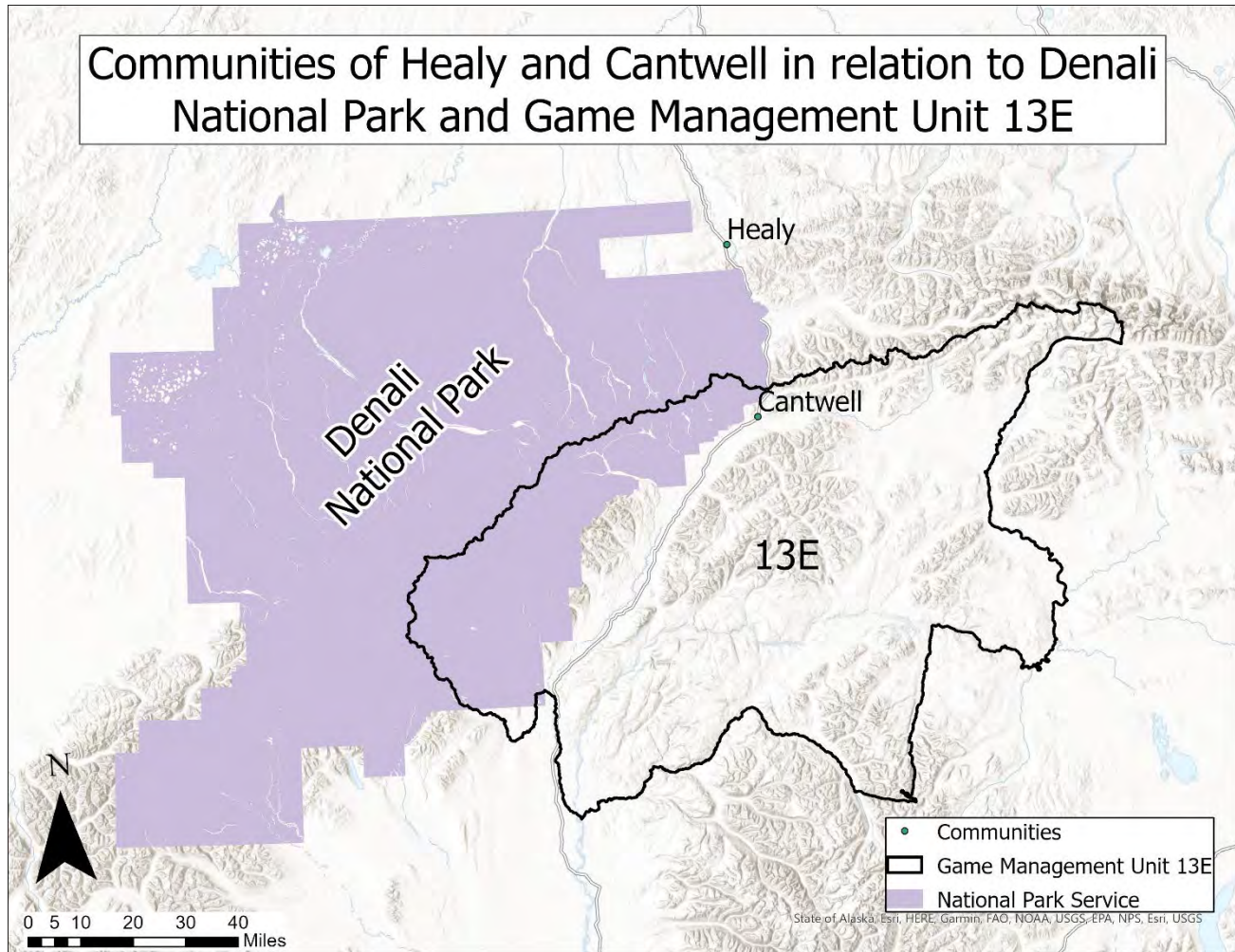
To be eligible to engage in subsistence uses, Federal subsistence regulations require that rural Alaska residents live in a community or area that has a customary and traditional use determination for the desired species and harvest area (50 CFR 100.5(b)). They also state that the National Park Service (NPS) may further regulate eligibly to engage in subsistence on NPS-managed lands (50 CFR 100.5(d)).

According to NPS regulations, in order to qualify as a local rural resident eligible to engage in subsistence uses within a National Park or National Monument, a person must live in a resident zone community, live within the boundaries of the park or monument, or hold a §13.440 subsistence eligibility permit (36 CFR 13.420, 430). If a person qualifies as a local rural resident as described in the previous sentence, but lives in a community or area without a customary and traditional use determination for the species they wish to hunt or fish, they may submit a proposal to the Federal Subsistence Board for an individual customary and traditional use determination.

Federal subsistence regulations allow the Board to make individual customary and traditional use determinations in NPS-managed National Park and National Monument areas where subsistence is authorized, but not in Preserves. National Park Service regulations include unique subsistence eligibility requirements for National Park Service lands. Fewer people have subsistence eligibility in National Parks and National Monuments as compared to other Federal public lands. Requests for individual customary and traditional use determinations are analyzed in the same way that a community or area request for a

¹ Individuals residing outside of Denali National Park and Preserve's resident zone communities who have a personal or family history of using the Park additions established by ANILCA in 1980 for subsistence purposes at the time ANILCA was passed, may obtain a special subsistence use permit (36 CFR 13.440). They must provide documentation of their traditional use, without the use of aircraft for access. Eligible subsistence users for Denali National Park and Preserve must also comply with the Federal Subsistence Management Regulations regarding the harvest of fish and wildlife (NPSb 2010).

customary and traditional use determination is analyzed (FSB 1999: 224).



Existing Federal Regulation

Other Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments

36 CFR 13.410 Applicability.

Subsistence uses by local rural residents are allowed pursuant to the regulations of this subpart in the following park areas:

- (a) In national preserves;*
- (b) In Cape Krusenstern National Monument and Kobuk Valley National Park;*
- (c) Where such uses are traditional (as may be further designated for each park or monument in the applicable special regulations of this part) in Aniakchak National Monument, Gates of the Arctic National Park, Lake Clark National Park, Wrangell-St. Elias National Park, and the Denali National Park addition.*

50 CFR 100.16 Customary and traditional use process.

(a) *The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the National Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.*

Individual Customary and Traditional Use Determinations

<p>Customary and Traditional Use Determination— Caribou <i>Unit 13E – Residents of Units 11, 12, (along the Nebesna Road), 13, Chickaloon, McKinley Village, and the area between milepost 216-239 of the Parks Highway. No subsistence priority for the residents of Denali National Park headquarters.</i></p> <p>Grouse <i>Residents of Units 11, 13, 15, 16, 20D, 22, and Chickaloon.</i></p> <p>Ptarmigan <i>Residents of Units 11, 13, 16, 20D, 22, 23, and Chickaloon</i></p>	<p>Residents of Chickaloon and McKinley Village</p> <p>Residents of Chickaloon</p> <p>Residents of Chickaloon</p>
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Proposed Federal Regulation

<p>Caribou <i>Unit 13E – Residents of Units 11, 12, (along the Nebesna Road), 13, Chickaloon, McKinley Village, and the area between milepost 216-239 of the Parks Highway. No subsistence priority for the residents of Denali National Park headquarters.</i></p> <p>Grouse <i>Residents of Units 11, 13, 15, 16, 20D, 22, and Chickaloon.</i></p> <p>Ptarmigan <i>Residents of Units 11, 13, 16, 20D, 22, 23, and Chickaloon.</i></p>	<p>Residents of Chickaloon and McKinley Village, and Blaine Mayo and members of his household*.</p> <p>Residents of Chickaloon and Kevin Mayo and members of his household*.</p> <p>Residents of Chickaloon and Kevin Mayo and members of his household*.</p> <p>*Names of individuals do not appear in the regulation booklets; they are on a list maintained by the respective National Park Service Manager.</p>
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Extent of Federal Public Lands/Waters

Extent of Federal Public Lands/Waters Federal public lands comprise approximately 19% of Unit 13 E, managed by the National Park Service, Denali National Park.

Background

The community of Cantwell is located near the Alaska Range at the confluence of the Parks and Denali highways, which is north of Broad Pass and 28 miles south of Denali National Park and Preserves. The area is characterized by a continental climate with warm summers and cold, dark winters with an annual average snowfall of 78 inches and 15 inches of precipitation.

Traditional Ahtna territory centers on the Copper River Basin but also includes parts of the Susitna and upper Tanana drainages. Historically, Ahtna Athabaskans seasonally occupied areas to the east of the current village of Cantwell at Valdez Creek. In this area, caribou, moose, porcupine, migratory and upland birds, and berries continued to be relied on heavily by local subsistence users.

Within Denali National Park, Cantwell subsistence users harvest moose and caribou on the southwest

boundary just outside the designated Denali Wilderness. This area, where subsistence hunting is permitted under the federal program, is referred to by local subsistence users as the Cantwell Traditional Use Area (Holen et al 2014:36,58).

Regulatory History

Requests for individual customary and traditional use determinations began almost as soon as the Federal Subsistence Board assumed management authority for subsistence on Federal public lands in 1990. Because of the proximity of the Parks Highway to Denali National Park, many of the first requests came from residents of this area (Norris 2002:229). Cantwell is the only resident zone community on the highway, yet there are many people who have conducted subsistence harvests in the Park who also live along the highway outside of Cantwell (Norris 2002:229). Many of the initial individual customary and traditional use proposals were held up for years because of a huge backlog of proposals for community customary and traditional use determinations and lack of clarity as to whether or not individual customary and traditional use determinations were within the purview of the Federal Subsistence Board (Norris 2002: 229-232). In 1999, the Board finally addressed several proposals for individual customary and traditional use determinations. The Department of the Interior's Office of the Solicitor affirmed that the Board "had sufficient legal authority under ANILCA to make customary and traditional use determinations for NPS administered lands on an individual basis" (Norris 2002:232). Later in 1999, the Board recognized three individual customary and traditional use determination for Denali National Park and several from Wrangell St. Elias National Park (Norris 2002:232, FSB 1999:222-243). The Board also denied some of these proposals due to lack of sufficient information exemplifying the eight factors (Norris 2002: 232; FSB 1999: 222-243). In 2010 and 2021, the Board approved an additional individual customary and traditional use determinations, in this case for Kevin Mayo of Healy (WP10-31) and Blaine Mayo (ICTP21-01).

In January 2021 the Federal Subsistence Board adopted a revised policy on individual customary and traditional use determinations to follow the procedures described in the National Park Service's "Standard Operating Procedures for Issuance of Subsistence Eligibility Permits and Individual Customary and Traditional Use Determinations." The new policy allows for proposals to be submitted on a continuous basis, and also provides for concurrent application for 13,440 Subsistence Eligibility Permits. Subsequently under this new policy, Blaine Mayo of Healy submitted Proposal ICTP21-01, which requested an individual customary and traditional use determination for moose in Unit 13E for himself, his wife, and children (NPS 2021). The Board approved this request during its August 2021 work session (FSB 2021).

Eight Factors for Determining Individual Customary and Traditional Use

A community or area's C&T use is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use for these resources recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or park unit; (5) a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to the community or area.

The Board makes customary and traditional use determinations based on a holistic application of the above

eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)). In addition, the Board takes into consideration the reports and recommendations of any appropriate Regional Advisory Council regarding customary and traditional use of subsistence resources (50 CFR 100.16(b) and 36 CFR 242.16(b)). The Board makes customary and traditional use determinations for the sole purpose of recognizing the pool of users who generally exhibit the eight factors. The Board does not use such determinations for resource management or restricting harvest. If a conservation concern exists for a particular population, the Board addresses that concern through the imposition of harvest limits or season restrictions rather than by limiting the customary and traditional use finding.

Specific information on each of the eight factors is not required because an individual seeking a customary and traditional use determination only must “generally exhibit” the eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)).

Integrated Discussion of the Eight Factors

Since 1964, the Cotter/Smith/Mayo families have hunted, harvested, and shared moose, caribou, grouse, and ptarmigan. According to Blaine Mayo, the family harvests moose and caribou in late August and the first weekend in September before the meat gets ratty after the weather cools. Blaine Mayo feels that it is hard to justify harvesting caribou in the winter because caribou are too lean but most importantly for him, he does not feel it is a fair or ethical hunt. Caribou are under stress from winter weather and due to lack of food. During moose and caribou season, the Blaine Mayo family will also hunt grouse and ptarmigan from their hunting camp.

Historically the Cotter/Smith/Mayo families traveled to their hunting/trapping areas by foot, Coots, Weasels, off road vehicles (ORVs), and snowmachines. Today the Blaine Mayo family continues to maintain a reoccurring pattern of use within the area by foot, ORVs and snowmachines. Once the family sets up their hunting camp, they walk about two miles to a hill where they sit and spot for an animal with binoculars. Once they spot an animal, they walk to within shooting distance. After they shoot the animal (generally located within the New Park), they pack it out by foot to a designated ORV trail to camp.

Since 1971, the Blaine Mayo family has hunted in the area and in 1985 they established their current hunting camp. The Mayo family used to put their tent up and take it down after every hunting season; however, about 15 years ago they built a tent platform. The extended family prefers to hunt close to their camp. Typically, the Cotter/Smith/Mayo families remain at their camp until they harvest a moose. While hunting for moose, the family also opportunistically hunts for caribou, grouse, and ptarmigan.

For over four generations the Smith/Cotter/Mayo families have hunted and harvested animals by reasonable ground access in areas near their residence within GMU13E. Blaine Mayo’s extended family hunts moose, caribou, grouse, and ptarmigan together every hunting season in the Cantwell Creek and Foggy Pass area. The Blaine Mayo family’s camp borders the New Park and is located on state land. To access the camp, the Mayo family use ORVs and walking. According to Blaine, the family knows the area like the back of their hands.

Moose and caribou are gutted, skinned, and quartered in the field and then packed by foot to a

designated ORV trail and transported to camp. The Blaine Mayo family uses all edible parts of the moose and caribou. Much of the moose and caribou meat is canned or stored in the freezer to preserve it and some portions of the moose and caribou are processed by drying. Blaine uses the same handling techniques that he was taught by his father, grandfather, and great grandfather. Usually the combination of a moose and a caribou will feed two to three families. The Blaine Mayo family uses the following methods for processing meat: a vacuum sealer, smoker, meat grinder, pressure cooker, and sausage stuffer. Processing meat is a family event. Grouse and ptarmigan are brought back to camp and cleaned and immediately consumed. The breast is targeted for consumption, marinated and grilled over the campfire.

Knowledge, skills, and the use of particular hunting areas are passed from generation to generation. Kevin Mayo's grandparents learned how to hunt in the Cantwell areas and passed this knowledge on to their extended family. As a young child, Blaine Mayo accompanied his father, mother, and other relatives hunting and trapping, long before he was actually old enough to hunt and trap himself.

Blaine has hunted and trapped ever since he was 14 years old. Blaine Mayo continues these traditions with his family and is passing them on to his wife and children. Hunting, trapping, berry picking, and fishing are subsistence activities the Blaine Mayo family is dependent upon. Subsistence for the Mayo family is a family activity, and the next generation is learning these practices as well.

Blaine Mayo learned from his mom and dad, grandparents, and friends how to hunt, fish, trap, preserve, and process meat. But most importantly Blaine Mayo learned from his family about respecting and caring for the animals harvested. Subsistence for the Mayo family is a family activity, and the next generation is learning these practices as well.

The most important aspect of grouse and ptarmigan hunting is that it provides an opportunity to introduce hunting to the kids. This is an important aspect of subsistence that is often overlooked in that it introduces kids the skills and knowledge of subsistence. Kids are able to practice aiming the .22 rifle and become familiar with using a gun. Grouse and ptarmigan hunting is one of the highlights for the kids, providing them with an immense amount of pride when they are able to provide food for the family while at camp.

Below is an excerpt from a joint interview with Blaine and Kevin Mayo on August 15, 2022.

"We have learned a lot over the years from hunting with our parents, each other, and our friends. We are never ones to push the knowledge that we have onto anyone saying our way is the only way but we are always one for sharing whatever knowledge we have. There are literally a thousand different ways skin an animal. Whenever we harvest an animal, we all know our places and go from there, it's like clockwork.

Bird hunting is another huge part of our life. Ptarmigan and spruce hens were always part of moose and caribou hunting. When we went out to moose camp or caribou hunting, we always have a .22 to harvest birds. Hunting is more than just going out and shooting an animal; it's a huge part of our lives. It's amazing family time, camping, making of memories and showing our kids what we grew up doing. Our kids

love to go out to hunting. Moose camp and our winter camp is always on our minds. We've showed them how to call moose, to look for paddles in the brush, how to fish the creeks, lakes, and how to ice fish. It's truly a blessing to be able to pass down to our kids what we've learned from our parents and family. And they still learn from my parents and family, it's a beautiful thing!

As far as fishing goes, again, we've learned a lot from our parents, each other, our sister, and our grandparents. One of our more favorite fish are burbot. We try to pass on our fishing knowledge to our friends. Grayling, lake trout, salmon and other fish are always a blessing to have in the freezer or better yet on the plate. Hunting, fishing, cutting down trees for firewood, being out in the wilderness are ingrained into our lives, it's what we do! Wouldn't change a thing."

The Mayo family hunts are a family event, often including several generations who participate together in activities such as hunting, establishing camps, and processing harvested meat. Extended family members always share in the harvest. It is the Mayo's family tradition to share meat and equipment. If a family member or friend does not get enough meat during the season it is expected that the Mayo family will share their harvest with that person or household. For example, Blaine Mayo's mom always shares moose and caribou meat with her sister, mother, and elders.

Blaine Mayo's great grandparents passed down their traditional subsistence lifestyle to their extended multi generational family. It is this traditional subsistence lifestyle that Blaine Mayo wants to continue to pass on to his wife and children. Typically, the extended family harvests one moose per hunting season. The family never takes more than one moose or two caribou as a family per hunting season.

The family utilizes a variety of subsistence resources such as berries, moose, caribou, bear, ptarmigan, fish and furbearers such as beaver, marten, fox, wolf, and lynx. In addition to wildlife, berries, and fish resources provide a substantial nutritional need for the family, these activities also provide a significant social and family activity involving all members of the multiple Mayo households. Multiple generations will participate in the fall, winter, and spring hunting, trapping, fishing and processing activities together. Approximately fifty percent of the Blaine Mayo family's meat comes from moose meat. Typically, wildlife and other subsistence foods provide meals four out of seven days per week. The Mayo family enjoys eating moose, caribou, brown bear, grouse, and ptarmigan meat because it is low in fat and it is traditional.

Hunting is a way of life for the Mayo family. They like to know where their meat comes from and how it was handled. They like to eat organic foods as much as possible and the animals they harvest are such. They fish, ice fish, hunt, trap, harvest berries, and cut down firewood to provide for their family. Their subsistence way of life has been handed down through the generations and it is ingrained in their family's lives. Blaine Mayo feels that it is a blessing to have been raised in Cantwell and to have had the parents and grandparents he has had.

Effects of the Proposal

If adopted, this proposal would recognize Blaine Mayo and his household family's C&T use of caribou, grouse, and ptarmigan in GMU 13E in areas managed by Denali National Park and Preserve

where subsistence uses are allowed and would allow Mr. Mayo to pass his traditional subsistence lifestyle to his children. Because this C&T determination is for one household who has a history of moose, caribou, grouse, and ptarmigan in the area, the effects on other subsistence users should be minimal.

NPS Conclusion

Support Proposal ICTP23-01

Justification

The proponents exhibit a clear long-term and consistent use of moose, caribou, grouse, and ptarmigan in GMU 13, in areas managed by Denali National Park and Preserve where subsistence uses are allowed. This pattern has been repeated for many years and through several generations. Methods and means are characterized by efficiency of economy of effort and cost based on local characteristics. The pattern is consistent with past methods and means of harvests at or near the family's hunting camp within the Unit in question. Knowledge of handling, preparing, preserving, and storing moose meat is shared among and between generations, as is knowledge of the skills, values, and lore associated with hunting moose, caribou, grouse, and ptarmigan. Moose, caribou, grouse, and ptarmigan are regularly shared with family and community members such as elders. The proponents demonstrate a pattern of use that relates to reliance on a wild diversity of wild foods that provide this family with cultural, economic, social, and nutritious benefits. All eight of the factors associated with C&T determination are evident. Furthermore, this family's pattern of use is also evidence through the Federal Subsistence previous determination for Blaine Mayo for moose. There is substantial evidence to support the issuance of an individual C&T determination for caribou, grouse and ptarmigan within GMU13 of Denali National Park and Preserves where subsistence is allowed for the proponents, including all members of the Blaine Mayo family that reside within the same household as Blaine Mayo.

Literature Cited

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Personal communication in person with Kevin and Blaine Mayo by Amy Craver, Subsistence Coordinator, Denali National Park and Preserve. August 15, 2022.

**U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ALASKA REGION**

**NATIONAL PARK/MONUMENT SUBSISTENCE INDIVIDUAL CUSTOMARY AND TRADITIONAL USE
DETERMINATION ANALYSIS**

To be completed by the relevant Subsistence Coordinator:

Date: January 6, 2022
Applicant Name: Blaine Mayo, Tracy Mayo, Owen Mayo, Adelynn Mayo, and Ryland Mayo
Analyst Name: Amy Craver

This analysis is in response to the following request (Choose One):

- Subsistence Eligibility Permit ONLY
 Individual Customary and Traditional Use Determination ONLY

Please type a brief summary of the applicant's reported subsistence use pertaining to the request, as determined from information provided on the application and during the interview:

See accompanying analysis.

For a National Park/Monument Subsistence Eligibility Permit (13.440), the analysis should address the following topics:

1. Synopsis of the applicant's pattern of use specifically in the National Park or Monument for which the permit is requested, including the following:
 - a. Species harvested: moose, caribou, grouse, and ptarmigan
 - b. Specific locations where the use occurred: GMU 13, in areas managed by Denali National Park and Preserve where subsistence uses are allowed.
 - c. Years during which the subsistence uses took place: 1982-2006; 2011-2022
 - d. Whether aircraft was used for access. No.
2. Does the pattern of use begin prior to the signing of the Alaska National Interest Lands Conservation Act (ANILCA)? Yes.
3. Does the applicant have a pattern of use established while as a resident of a resident zone community after the passage of ANILCA? Yes.

For an Individual C&T use determination, the analysis should address the following eight questions:

1. Does the applicant have a long-term, consistent pattern of use of these resources, excluding interruptions beyond their control? Please explain.
2. Does the applicant have a pattern of use for these resources recurring in specific seasons for many years? Please explain.
3. Does the applicant have a pattern of use of these resources consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost,

- conditioned by local characteristics? Please explain.
4. Does the applicant exhibit consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the park unit? Please explain.
 5. Does the applicant exhibit a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate? Please explain.
 6. Does the applicant exhibit a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation? Please explain.
 7. Does the applicant exhibit a pattern of use in which the harvest is shared or distributed within a definable community of persons? Please explain. Yes.
 8. Does the applicant exhibit a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to your household? Please explain.

As a result of this analysis (Select All that Apply):

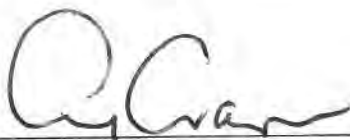
- There is substantial evidence to support the issuance of an Individual Customary and Traditional Use Determination.** Yes, caribou, grouse, and ptarmigan in GMU 13, in areas managed by Denali National Park and Preserve where subsistence uses are allowed.
- There is NOT substantial evidence to support the issuance of an Individual Customary and Traditional Use Determination for (species location).

Brief Justification:

As is evidence in the analysis, the proponents exhibit a clear long-term and consistent use of caribou, grouse, and ptarmigan in GMU 13, in areas managed by Denali National Park Sand Preserve where subsistence uses are allowed. This pattern has been repeated for many years and through several generations. Methods and means are characterized by efficiency of economy of effort and cost based on local characteristics. The pattern is consistent with past methods and means of harvests at or near the family's hunting camp within the Unit in question. Knowledge of handling, preparing, preserving, and storing moose meat is shared among and between generations, as is knowledge of the skills, values, and lore associated with hunting moose, caribou, grouse, and ptarmigan. Caribou, grouse, and ptarmigan are regularly shared with family and community members such as elders. The proponents demonstrate a pattern of use that relates to reliance on a wild diversity of wild foods that provide this family with cultural, economic, social, and nutritious benefits. All eight of the factors associated with C&T determination are evident. Furthermore, this family's pattern of use is also evidence through the Federal Subsistence previous determination for Blaine Mayo and his household family for moose. For these reasons, I believe there is substantial evidence to support the issuance of an individual C&T determination for moose, caribou, grouse and ptarmigan within GMU13 of Denali National Park and Preserves where subsistence is allowed for the proponents, including all members of the Blaine Mayo family that reside within the same household as Blaine Mayo.

Signature of Analyst: _____

Date: _____



January 6, 2023

U.S. Department of the Interior

National Park Service

Alaska Region

Individual Customary and Traditional (C&T) Use Determination

Subsistence Resource Commission (SRC) Recommendation

To be completed by the relevant Subsistence Coordinator:

Date of Formal Action: January 11, 2023
Proponent Name: Blaine Mayo and members of his household family
Proponent Request: Caribou, grouse, and ptarmigan in Game Management Unit 13 (GMU 13) in areas managed by Denali National Park and Preserve where subsistence uses are allowed.
Affected SRC: Denali Subsistence Resource Commission

This SRC has determined that (select all that apply):

- There is sufficient evidence to support an individual (C&T) determination for Blaine Mayo and members of his household family: Tracy (wife), Owen Mayo (son), Adelynn Mayo (daughter), and Ryland Mayo (daughter) for caribou, grouse, and ptarmigan in Game Management Unit 13 (GMU 13) in areas managed by Denali National Park and Preserve where subsistence uses are allowed.
- There is NOT sufficient evidence to support an individual C&T determination for Blaine Mayo and members of his household family: Tracy (wife), Owen Mayo (son), Adelynn Mayo (daughter), and Ryland Mayo (daughter) for caribou, grouse, and ptarmigan in Game Management Unit 13 (GMU 13) in areas managed by Denali National Park and Preserve where subsistence uses are allowed.

Brief justification for above decision:

According to the SRC, due diligence has been achieved documenting Blaine's family's pre-ANILCA history of using the Park additions established by ANILCA. The SRC believes that C&T requests need to be expedited so as to allow for subsistence customs and traditions to continue so that qualified families can carry on their participation in subsistence activities to future generations.

Signature SRC Cha Justin L Mason te 01/17/2023



Federal Subsistence Board Fact Sheet



U.S. Fish and Wildlife Service
Bureau of Land Management
National Park Service
Bureau of Indian Affairs

Forest Service

Contact: Scott Ayers
(907) 744-3824 or (800) 478-1456
scott_ayers@fws.gov

Fisheries Temporary Special Action Request FSA23-01: Kanektok River Chinook and Chum Salmon Fishing Closures to Non-federally Qualified Users During June 2023 and June 2024

Background: The Kanektok River drainage in the Kuskokwim Fisheries Management Area provides residents of Quinhagak with fishery resources for subsistence purposes. Currently, salmon abundance information for this system is collected only through aerial surveys that do not include assessments of Chum Salmon stocks. Kuskokwim River drainage fisheries have been closed throughout June in recent years, and some displaced fishermen have instead traveled to harvest fish in the Quinhagak area and the Kanektok River drainage.

Question 1: What is a temporary special action and how long will it last?

Answer: A temporary special action is a temporary regulatory change made to modify harvest limits, seasons, methods or means outside of the normal regulatory cycle when unusual situations arise, such as significant changes in fish or wildlife abundance. There must be public notice and a public hearing before the Federal Subsistence Board (Board) can act on a temporary special action request. The Board must consult with the State of Alaska and the Regional Advisory Council Chairs of the affected regions prior to acting on a temporary special action request. While not required, the Board is seeking recommendations from the affected Regional Advisory Councils on this proposed temporary special action as part of the Councils' regularly scheduled winter 2023 meetings. A temporary special action typically extends longer than 60 days but may not exceed one regulatory cycle. If permanent changes to Federal subsistence fisheries regulations are desired, a proposal must be submitted through the normal two-year regulatory process. The next fisheries regulatory cycle will commence in early 2024.

Question 2: What is included in the request?

Answer: The special action request submitted by the Native Village of Kwinhagak asks the Board to close Federal public waters of the Kanektok River drainage to the harvest of Chinook and Chum salmon except by Federally qualified subsistence users from June 1 through June 30, 2023, and 2024. The request cites Chum Salmon stocks in Western Alaska are in decline with the poorest returns on record, escapement goals throughout the Arctic-Yukon-Kuskokwim region not being met, and the long period of decline of Chinook Salmon stocks throughout the state as reasons for the temporary special action request. Considering these concerns, the proponent considers that precautionary management actions are necessary due to the lack of available salmon assessment data for the Kanektok River.

Question 3: How can the public comment on this specific special action request?

Answer: Two public hearings to receive public testimony have been scheduled. An in-person Public Hearing will take place in Quinhagak, Alaska, at the Bingo Hall or via teleconference (1-888- 455-7765;

Passcode: 5922158) on **Wednesday, February 15, 2023, from 6 pm to 8 pm** (or until conclusion of public comments). A second Public Hearing via teleconference only (1-888- 455-7765); Passcode: 5922158), will occur on **Tuesday, February 21, 2023, from 3 pm to 5 pm** (or until conclusion of public comments). The public will be asked to comment on the following issues at the public hearings:

- a) Should Federal public waters of the Kanektok River drainage be temporarily closed to the harvest of Chinook and Chum salmon except by Federally qualified subsistence users? [See Questions 4, 5, and 6 below]
- b) Are the start and end dates for the closure (June 1 through June 30, 2023, and June 1 through June 30, 2024) appropriate dates for this special action?
- c) Are there any other comments or issues that may help the Board make its decision on this special action request?

Summary of public testimony on the special action request will be forwarded to the Board for consideration.

Additionally, affected Regional Advisory Councils will consider the special action request as part of the Councils' regularly scheduled winter 2023 meetings. The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council will consider the special action request at its meeting April 4–6, 2023. The Western Interior Alaska Subsistence Regional Advisory Council will consider the special action request at its meeting April 4–5, 2023. The Council chairs may ask for public comment at those meetings.

Question 4: What Federal public waters would be affected by this special action request?

Answer: The entire Kanektok River drainage will be affected. For purposes of this discussion, the phrase “Federal public waters” is defined as those waters described under 50 CFR 100.3 and include all inland waters, navigable and non-navigable, located within and adjacent to the exterior boundaries of the Togiak National Wildlife Refuge. The Kanektok River drainage is entirely within the exterior boundaries of the Togiak National Wildlife Refuge (see **Figure 1**).

Question 5: Who are Federally qualified subsistence users affected by this special action request?

Answer: Federally qualified subsistence users are permanent residents of a rural area or community that have a Federally recognized customary and traditional use determination for that resource. Federally qualified subsistence users of Chinook and Chum salmon in the Kanektok River drainage who would be affected by this temporary special action include most of the permanent rural residents of the Kuskokwim Fishery Management Area, except those persons residing on United States military installations located on Cape Newenham, Sparrevohn USAFB, and Tatalina USAFB. Permanent residents of over 40 communities have a customary and traditional use determination for salmon in the Kanektok River.

Question 6: How will non-Federally qualified users be affected?

Answer: Non-Federally qualified users would not be allowed to harvest Chinook and Chum salmon in the Kanektok River drainage at any time from June 1 through June 30, 2023, and 2024. In Federal regulations, taking or take means to fish, pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct (see 50 CFR 100.25(a)). This includes catch and release practices.

Question 7: How can affected Tribes and Alaska Native Corporations provide information and comments?

Answer: For in-season management decisions and special actions, consultation is not always possible, but to the extent practicable, the Federal Subsistence Board will be responsive to requests from Federally recognized Tribes in Alaska and Alaska Native Claims Settlement Act (ANCSA) corporations for consultation. To request consultation with the Board please contact Orville Lind at Orville_lind@fws.gov.

Question 8: What is the remaining process for this special action request after the public hearing?

Answer: The Office of Subsistence Management is currently analyzing the potential effects of this request on Chinook and Chum salmon populations and Federal subsistence fishing opportunity. The Board will consider this special action request at a to-be-announced public Board meeting later this spring. The Board will consider all information provided in the analysis, public testimony, Tribal and ANCSA corporation consultations, recommendations of affected Regional Advisory Councils, and comments from the State of Alaska when making its decision. The Board may approve, approve with modification, reject, or defer this special action request until the next regulatory cycle.

Question 9: How can I get more information on this special action request?

Answer: Please contact Scott Ayers, Fisheries Division Leader at the Office of Subsistence Management, at (907) 744-3824 or (800) 478-1456 with questions about this special action request or visit the Federal Subsistence Management Program website (www.doi.gov/subsistence/) for more information about subsistence on Federal public lands and waters.

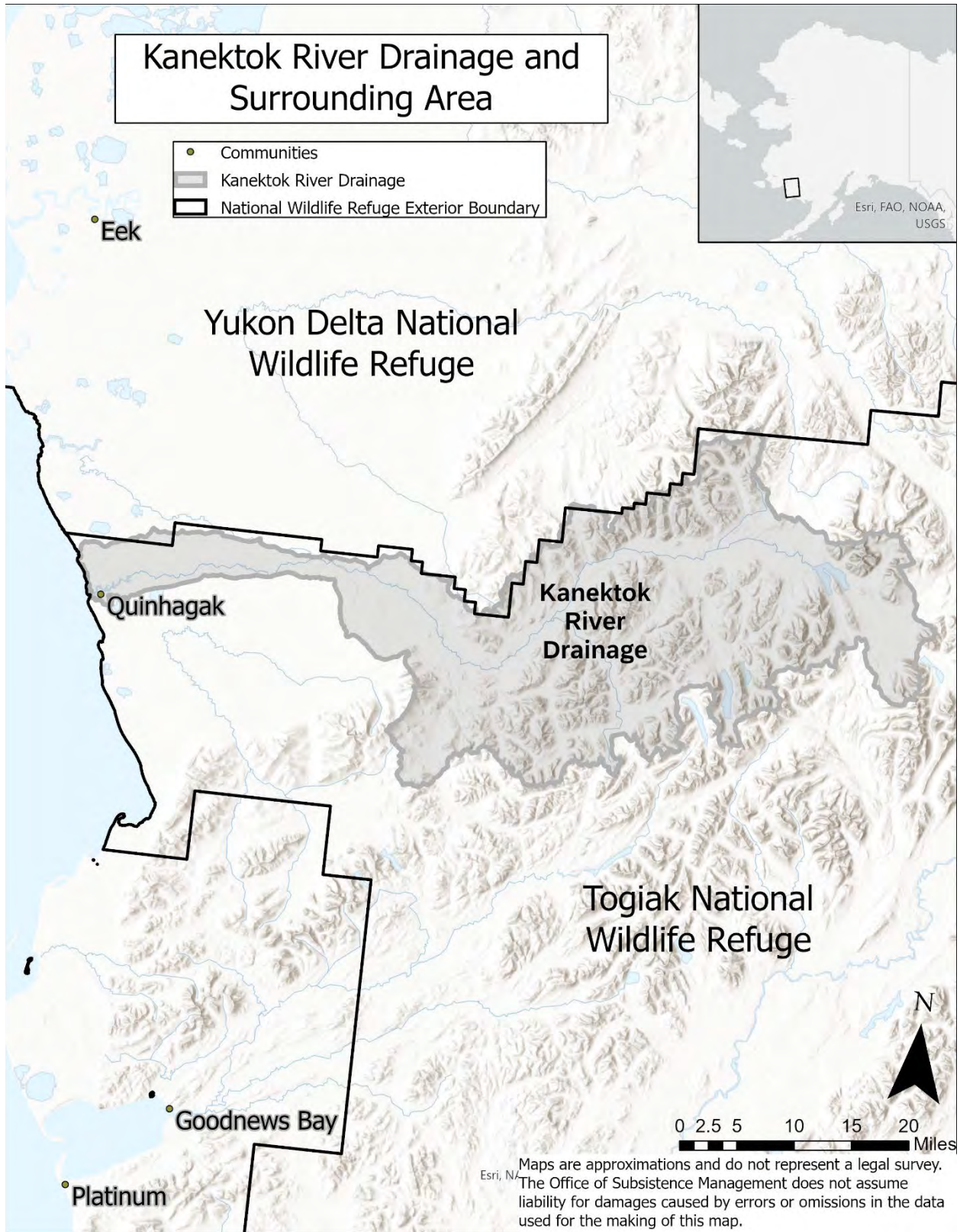


Figure 1. Map of the Kanektok River drainage and surrounding area



Alaska Board of Game

P.O. Box 115526

Juneau, AK 99811-5526

(907) 465-4110

www.boardofgame.adfg.alaska.gov

CALL FOR PROPOSALS

ALASKA BOARD OF GAME 2023/2024 Meeting Cycle

The Alaska Board of Game calls for proposed changes to hunting and trapping regulations for the following Regions:

1. Western Arctic / Western Region – (GMUs 18, 22, 23, and 26A)
2. Interior and Eastern Arctic Region (GMUs 12, 19, 20, 21, 24, 25, 26B, and 26C)

PROPOSAL DEADLINE: Monday, May 1, 2023

The Alaska Board of Game is accepting proposed changes to hunting and trapping regulations for the Interior, Arctic, & Western areas of Alaska which covers Game Management Units 12, 18, 19, 20, 21, 22, 23, 24, 25, and 26. The Call for Proposals includes the following topics:

Hunting seasons and bag limits, including subsistence and general hunts for all species; trapping seasons and bag limits; big game prey populations and objectives for intensive management; predation control areas implementation plans; restricted areas including controlled use areas, management areas, closed areas, and closures in state game refuges.

Proposed changes to 5 AAC Chapter 92, Statewide Provisions specific to the GMUs in these regions will also be accepted, excluding changes to Game Management Unit Boundaries. This includes regulations under the categories of general provisions, permits, permit conditions and provisions, methods and means, possession and transportation, and the use of game.

The following topics will be considered for all Game Management Units:

- Brown Bear Tag Fee Exemptions
- Reauthorization of Antlerless Moose Hunts (*State statute requires all antlerless moose hunts be reauthorized annually.*)

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

Online: www.adfg.alaska.gov/index.cfm?adfg=gameboard.proposal

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

Fax: (907) 465-6094

Proposals must be received by May 1, 2023, at the Boards Support Section office in Juneau. (A postmark is NOT sufficient for timely receipt).

You are encouraged to submit proposals at the earliest possible date on Board of Game proposal forms available from the Boards Support Section regional offices and on the website at:

www.adfg.alaska.gov/index.cfm?adfg=gameboard.proposal. All proposals must contain an individual's name and an organizational name if appropriate, contact telephone number, and address. Regional proposals must specify the applicable region or game management unit.

Providing clarity on the proposal form helps the board, advisory committees, and the public more fully understand the proposed regulatory changes. Proposals that are incomplete or unclear may be omitted from the proposal book. You are encouraged to contact the Boards Support Section staff if you have questions or need assistance with completing the proposal form. Proposals published in the proposal book will be formatted, referenced with the appropriate Alaska Administrative Code citation, and include a brief description of the action requested. Proposals with emotionally charged language will be rejected or redacted as they detract from the substance of the proposals, may draw opposition not germane to the element(s) of the proposal, and may elicit nonresponsive charges from the public/board members. Proposals not meeting this call or submitted late will not be published.

Proposal books will be available to the advisory committees, agencies, and the public at www.boardofgame.adfg.alaska.gov for review and comment.

Proposals received per the above "Call for Proposals" deadline will be considered by the Board of Game at their Western Arctic / Western Region meeting scheduled for January 26-29, 2024 and the Interior and Eastern Arctic Region Meeting scheduled for March 15-22, 2024. For more information, please contact the [ADF&G Boards Support Section](#) at (907) 465-4110, or email kristy.tibbles@alaska.gov.



Alaska Board of Game

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ALASKA BOARD OF GAME
2023/2024 Cycle
Tentative Meeting Dates

Meeting Dates	Topic	Location	Comment Deadline
January 25, 2024 (1 day)	Work Session	Kotzebue	January 18, 2024
January 26-29, 2024 (4 days)	Western Arctic/Western Region Game Management Units 18, 22, 23, & 26A	Kotzebue	January 12, 2024
March 15-22, 2024 (8 days)	Interior and Eastern Arctic Region Game Management Units 12, 19, 20, 21, 24, 25, 26B, and 26C	Fairbanks	March 1, 2024

Total Meeting Days: 13

Agenda Change Request Deadline: Wednesday, November 1, 2023

(The Board of Game will meet via teleconference to consider Agenda Change Requests following the November 1 deadline.)



PO Box 2898, Palmer, Alaska 99645 ♦ Ph: 907-272-3141 Fax 907-272-3142 ♦ www.yukonsalmon.org

Email: info@yukonsalmon.org

***Report to the Regional Advisory Councils
March/April 2023***

FRMP PROJECTS

In-Season Salmon Management Teleconferences:

The In-Season Salmon Management Teleconferences will begin on June 6, 2023. In preparation for the teleconferences, posters will be sent to all the communities along the Yukon River including Canadian First Nations in late April 2023. A meeting will be held with the fishery managers to discuss any concerns or issues associated with the upcoming season and if we need to adapt the teleconference due to no salmon fishing opportunity. We plan to utilize the platform to provide other information pertaining to the Yukon River, such as, Area M updates from ADF&G, Bycatch Report from NPFMC, water monitoring report from Yukon River Inter-Tribal Watershed Council, and climate change research project from NOAA.

There is value in having a public forum that is accessible to the people of the Yukon River to call in to hear first hand about the status of the salmon fisheries. While there are other methods such as e-mail or newsletters that are sent out to communities, this is the only toll free number that a person can call in and speak with the manager in a weekly forum. In the rural and remote Yukon River, the internet availability to attend a virtual meeting is not always the option to attend meetings, so providing the opportunity for everyone to participate by a simple toll-free number is the best means possible.

In-Season Salmon Survey:

The In-season Subsistence Salmon Survey Program is an important communication tool that helps managers ensure that both Yukon River escapement is met and, in a normal year, as many subsistence fishers are meeting their goals as possible. YRDFA hires a local person in 10 communities along the Yukon River stretching from Alakanuk to Eagle to survey fishers during the Chinook salmon season in their community. The observations fishers share with YRDFA surveyors are summarized by the community to protect anonymity and then shared with Yukon River In-season Managers and the Yukon River community through the In-season Salmon Management Teleconferences. This project is funded by the Fisheries Resource Monitoring Program through March of 2024.

In March, YRDFA will begin rehiring our surveyors for the 2023 season. A training event will take place during the week of April 17-20 during one evening of the meeting series which includes the YRDFA annual board meeting and the annual Yukon River Preseason Planning Meeting. These meetings are planned to take place in Fairbanks. We expect to rehire our surveyors in Alakanuk, Mountain Village, Marshall, Russian Mission, Tanana and Eagle. We expect to be looking for new surveyors in Anvik, Ruby, Huslia, and Fort Yukon.

OTHER PROJECTS:

Yukon River Watershed Clearinghouse: A culturally responsive monitoring program.

The Yukon River Watershed Clearinghouse project, funded by the State of Alaska, is underway with YRDFA and the Yukon River Inter-Tribal Watershed Council meeting regularly to plan for the upcoming summer. The goal of this project is to establish a clearinghouse that allows for tracking of both social and ecological changes in ways that are culturally relevant and responsive to the needs of the people of the Yukon River watershed. This spring we plan to train 7 locally hired technicians who will each work in their district to conduct water quality monitoring and Traditional Ecological Knowledge interviews with their Elders. These interviews will focus on fish health and abundance changes, observed changes, and local concerns of the Yukon River freshwater environment.

They Told Us There'd Come a Time, Conserving Fish, Preserving Tradition on the Yukon River, A catalog of Elders Warnings:

This project, funded by the North Pacific Research Board, has YRDFA partnering with the Tanana Chiefs Conference young adult Emerging Leaders to research documented Local and Traditional Knowledge of salmon and search for advice or warnings from the Elders. Our third training event took place in Anchorage at the BP Energy Center in November of 2022. At this training event, we learned about creating short videos from our interviews and archival research. We also learned about podcasting as an alternative to semi structured interviews. Some of the Emerging Leaders were considering trying this approach with some potential participants. Entering our third and final year of this project, we are beginning to wrap up our interview phase and turn to producing final products, which will include short videos, presentations, summary brochures, and reports. In addition, part of our final products will be the submission of our interviews to the UAF Alaska and Polar Region Collection and Archives. Our team has spent the last two years digging through the archives, learning about Elders from their communities, and conducting interviews with their Elders. Some of the team participated in the Tanana Chiefs Conference Board of Fish training event in Anchorage in January. They were able to interview many of the participants attending the training and Board of Fish meeting. These knowledgeable and passionate Yukon River fishers traveled from their communities to testify at the Board of Fish and the Emerging Leaders were able to capture their passion and concerns in semi structured interviews. We look forward to

their exploration into how to share all we have learned. Next steps include short presentations at upcoming meetings this spring.

November 2022 Elders Warnings Training at the BPEnergy Center. From Left: Gabe Canfield, Catherine Moncrieff, Nataawnee Wiehl, Millena Jordan. Missing: Katie Turner.



March 2022 Elders Warnings Training in Fairbank at UAF. From left: Millena Jordan, Nataawnee Wiehl, Katie Turner, Catherine Moncrieff.



Nataawnee Wiehl speaking to Elder at Denakkanaaga 2022, Fairbanks, Alaska. Millena Jordan and Nataawnee Wiehl at YRDFA Preseason Meeting March 2022, Anchorage.

Integrating Local and Traditional Ecological Knowledge (LTK) into Anadromous Waters Cataloging and Fish Inventories of select drainages of the Tanana and Yukon rivers 2021-2024:

This project, funded by the Alaska Sustainable Salmon Fund (AKSSF), is a partnership between YRDFFA and the Alaska Department of Fish and Game. Together, we are working with the communities of Tanana, Nenana, and Manley Hot Springs to identify important areas with anadromous fish and other fish for investigations to nominate areas for the Anadromous Waters Catalog and the Alaska Freshwater Fish Inventory. In year one, we conducted interviews and mapping activities with 20 knowledgeable fishers and hunters in the three communities. In year two, the ADFG team attempted to document fish presence, rearing, and spawning through river boat and helicopter surveys. They were unable to complete their work due to inclement weather and fires, thus we have extended this project for one year through June of 2024. Nominations were made for water bodies supporting anadromous fishes such as least cisco, broad whitefish, humpback whitefish, and/or Chinook salmon. In total we caught 15 species. Through the field work to date, ADFG team was able to make 29 nominations to the Alaska Freshwater Fish Inventory on 30 water bodies. As a result of these nominations, there were 13 new or extended water bodies added to the Anadromous Waters Catalog, 8 water bodies had new species or species life-phases added, and 33 miles of previously unlisted anadromous fish habitat (streams) were added.



Community meeting Tanana 2021



Mapping activity Manley Hot Springs 2021

Engaging Fishers in Chinook and Chum Salmon Decline

This project, funded by the North Pacific Research Board, began in January of 2023 and has a goal of contributing to an understanding of the drivers of decline and collapse in Yukon Chinook and chum salmon. Through this project we will be partnering with four Yukon River communities - Alakanuk, Emmonak, St. Mary's, and Huslia - and another NPRB funded project, Exploring Linkages of a Changing Climate and Productivity of Chinook Salmon led by Drs. Katie

Howard and Vanessa von Biela. Local and Traditional Knowledge interviews on historical Chinook salmon health in Alakanuk and Emmonak will inform their biological research on drivers of salmon decline by learning about the historic health of Chinook salmon as they leave the marine environment and enter the freshwater environment. A community meeting and interviews are scheduled for Emmonak in March. Additionally, Yukon River fishers in St. Mary's and Huslia will be trained to document carcass/egg studies, temperature monitoring, and develop a rapid community response Standard Operating Plan to document heat events and impacts on Yukon River salmon. This project will go through February 2026.

IMPORTANT ISSUES

2020 & 2021 Yukon River Fisheries Disaster

The second round of comments for the Fishing Disaster Spend Plan went underway. The following allocation are:

2020/2021 Yukon River & 2020 Kuskokwim River commercial \$2,531,005

2020/2021 Yukon River Subsistence \$12,660,315

Once the funding is available for the people we will make sure that all the communities along the Yukon River are aware.

2022 Yukon River Fisheries Disaster

The Governor submitted a fisheries disaster for the Yukon River for the 2022 fishing season. The determination by the Department of Commerce is pending. I am assuming the same process will apply once funded by the federal government. The funding will go through the State of Alaska with public comment for allocation.

Meetings:

Tanana Chiefs Conference Annual Convention - March 13-17, 2023, Fairbanks, AK

Salmon Bycatch Committee Meeting - March 20-22, 2023, Anchorage, AK

American Fisheries Society Alaska - March 27-31, Fairbanks, AK

Yukon River Panel Meeting - April 1-6, Whitehorse, YT, Canada

YR DFA Annual Board Meeting - April 17-18, 2023, Fairbanks, AK

Yukon River Preseason Meeting - April 19-20, 2023, Fairbanks, AK

Native American Fish and Wildlife Society Meeting - April 24-27, 2023, Anchorage, AK

YR DFA/YRITWC Summer Technician Training - May 2-4, Galena, AK

North Pacific Fisheries Management Council Meeting

Yukon River Educational Exchange - July 2023



United States Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
Yukon Delta National Wildlife Refuge
PO Box 346
Bethel, Alaska 99559



In Reply Refer To:

TO: Western Interior Regional Advisory Council
FROM: Aaron P. Moses Subsistence Specialist
THROUGH: Boyd Blihovde, Refuge Manager
DATE: 13 January 2023
SUBJECT: Spring, 2023 Yukon Delta National Wildlife Refuge Update

Refuge Management

It is our pleasure to give a brief update of activities at Yukon Delta National Wildlife Refuge (YDNWR) for the Spring 2023 Regional Advisory Council (RAC) meeting. The winter months are always a bit slower for the Refuge staff, but this year we've been as busy as a typical summer season. Our primary focus has been to keep promoting salmon conservation, caribou conservation, and we've expanded hunting opportunities for moose on federal lands in a portion of Unit 18.

Here's a summary of some specific items staff has focused on:

1. The fish management team has submitted a Special Action Request (SAR) to the Federal Subsistence Board. That SAR is on hold until the upcoming Federal Subsistence Board meeting. The FSB will be deciding on changes to Delegation of Authority Letters (DAL) to determine whether temporary special action authority may be added to the DALs for the Kuskokwim River. Based on the 2022 salmon run, and preliminary discussions with partners, the Kuskokwim River will likely see conservation measures in place for the 2023 salmon season.
2. The YDNWR implemented its first-ever winter moose hunt (FM1803), 54 tags were issued for the hunt in the area known as zone two of the Kuskokwim area.
3. We are continuing our meetings with communities and Tribal councils to receive input from local users on Mulchatna caribou management, lead shot outreach and exchange, Emperor goose management, and Kuskokwim salmon management.
4. Refuge Information Technicians are working hard giving presentations to local schools on waterfowl, fish, and moose.

Spring, 2023 Yukon Delta National Wildlife Refuge Update- continued

Waterfowl



Above- The 2023 waterfowl field crew pause for a photo on Kigiak Island

Refuge staff will participate in 9 waterfowl projects during the 2023 field season from May 14 – August 25, 2023. They include:

1. Emperor Goose Nesting Ecology and Survival.
2. Emperor Goose Transmitter Deployment.
3. Avian Influenza Sampling and Monitoring.
4. Black Brant Colony Survey.
5. Environmental Monitoring and Habitat Sampling on Kigigak Island.
6. Black Brant, Cackling Goose, and Emperor Goose Banding.
7. Tule Goose Telemetry.
8. Kgun Lake Duck Banding
9. Stellers eiders molt survey

Spring, 2023 Yukon Delta National Wildlife Refuge Update- continued

Fisheries Program



Kwethluk Freshwater Production Survey

Top Left- Kwethluk screw trap in operation, Spring 2022

The Kwethluk Freshwater Production Survey is a cooperative study between the Kuskokwim River Intertribal Fish Commission and the US Fish and Wildlife Service to understand the relationships between smolt abundance, adult returns, and environmental drivers. Understanding environmental factors, especially in times of rapid climate change, can help managers understand factors that affect salmon productivity.



Bottom Left- Kwethluk River Weir meeting in the Organized Village of Kwethluk.

Methods involve utilizing a rotary screw trap to capture juvenile salmon out-migrating in Spring (end of April - the end of June), to mark, and then recapture to estimate the number of smolt. The study is a continuation of work done in 2015-2018, where brood year fall water temperature was correlated with smolt production. As brood year fall temperatures

Spring, 2023 Yukon Delta National Wildlife Refuge Update- continued

increased the condition and production of migrating juvenile salmon decreased (Boersma et al. 2019). This project is planned to continue in year 2023 and possibly longer pending funding and support.

Staff Changes at the Refuge



Above- Big Game Biologist (Aaron Webber, left) and Supervisory Biologist (Spencer Rearden, right) while taking a break during moose surveys.

1. Big game biologist Aaron Webber has moved on to work for Forest Service.
2. The new Deputy Project Leader is named Laurie Boeck and she will start on March 12th. Laurie is moving to the refuge from the Alaska Department of Fish and Game. She has about 30 years of experience working in Alaska (mostly in the Fairbanks area).
3. Spencer Rearden has decided to move back into the Big Game/Mammal Biologist position so he can spend more time with his family, We have started the process to advertise his old Supervisory Biologist position.
4. We are in the process of hiring a fish biologist, visitor services manager, and more refuge information technicians.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Togiak National Wildlife Refuge
P.O. Box 270
Dillingham, Alaska 99576
Phone 907-842-1063
Fax 907-842-5402



INFORMATION BULLETIN - January 2023

Kanektok River salmon weir removal Contact: Pat Walsh

The Alaska Department of Fish and Game operated a salmon weir on Togiak Refuge on the Kanektok River from 2002-2015. The weir has been inoperative since 2016 due to lack of funding. In spring 2022, ADF&G began removing the weir materials and field camp. It is anticipated that weir removal will be complete by spring 2023.

Aerial Salmon Survey Contact: Truett Cawfield

The Fish and Wildlife service has initiated an aerial survey of the Salmon River which flows into the Kuskokwim Bay. The aim of this survey is to establish a baseline for salmon run timing and run size for this system. A weir will be constructed on the Salmon River in 2023 and will be managed by the Kenai Fish and Wildlife Conservation Office, who is partnering with the Togiak Refuge staff on this project. The weir will be utilized to ensure the accuracy and precision of aerial surveys.

Arctic Char Population Inventory Contact: Truett Cawfield

Togiak Refuge has developed a multi-year study to inventory Arctic char populations throughout the Refuge. This species was previously confirmed to occur in 27 lakes. Since the beginning of the study 34 lakes have been sampled, and Arctic char occurrence has been documented in 13 new lakes. We have collected size and genetic information from 355 fish and provided the UAF museum with voucher specimens. If you have any first-hand knowledge of small or unique Arctic char populations and would be willing to share that information please contact Truett Cawfield at the Togiak Refuge office.

Mulchatna Caribou Contact: Andy Aderman

Togiak Refuge assisted ADF&G with telemetry and law enforcement flights, satellite data acquisition, data entry and database management. A June 2022 post-calving survey estimated the Mulchatna herd at 12,112 caribou, slightly down from 12,850 estimated in 2021, and well below the population objective of 30,000-80,000 caribou.

Togiak Refuge Manager Moos, under authority delegated by the Federal Subsistence Board, closed caribou hunting and closed Federal public lands in the RC503 hunt area for caribou hunting.

ADF&G staff radiocollared 12 caribou in April 2022 in the area from Cape Newenham north to the Arolik River. On June 23, 2022 we located 11 collars in 8 groups and 1 collar that was a recent mortality. We also observed 9 uncollared groups ranging from 1-7 caribou. The combined total for all groups was a minimum of 470 caribou. A composition survey in early October 44.4 bulls and 46 calves per 100 cows. Thus far these caribou have remained in the general proximity of where they were captured. We plan to deploy additional radiocollars on caribou in this area in March 2023.

Nushagak Peninsula Caribou Contact: Andy Aderman

A photocensus of the Nushagak Peninsula Herd on June 25, 2022 found a minimum of 359 caribou in 7 groups which resulted in a total population estimate of 442 +/- 118 (359-560) caribou at the 95% confidence interval. A similar effort in 2021 found a minimum of 258 caribou in 2 groups resulting in an estimate of 287 +/- 47 (258-334) caribou. A composition survey in early October estimated 41.3 bulls and 63.3 calves per 100 cows. The calf to cow ratio was highest since 1994. The bull to cow ratio was similar to 2021.

The Nushagak Peninsula Caribou Planning Committee met via teleconference July 27, 2022 and reviewed results of previous hunts, population and lichen monitoring, and the harvest strategy. Following the Harvest Strategy adopted in 2019, the Committee favored having a hunt with a total of 48 permits, with 8 permits going to each of the 6 communities: Aleknagik, Clark's Point, Dillingham, Manokotak, Togiak and Twin Hills. Refuge Manager Moos' decision was to open the Federal caribou hunt on the Nushagak Peninsula from August 1-March 15 with a harvest objective of 48 caribou, a harvest limit of 1 caribou per hunter, and 8 permits going to each of the 6 communities. As of January 5, 2023, hunters reported taking 3 caribou. We plan to deploy additional radiocollars on caribou in this area in March 2023.

Nushagak Peninsula Lichen Monitoring Contact: Andy Aderman

Lichen cover on the Nushagak Peninsula declined from 48.1% in 2002 to 18.7% by 2022. Surveys estimated cover had declined 2.3% from 2002 to 2007; 6.3% from 2007 to 2012; 8.9% from 2012 to 2017, and 11.4 from 2017 to 2022. The declining trend from 2002 on, suggests lichen cover could decrease to a low enough level in the next 10 years, such that caribou may abandon the Nushagak Peninsula. It is likely Nushagak Peninsula caribou would leave the peninsula before lichens were depleted. What is not known is if caribou leave the peninsula will it be temporary, seasonal, or long term.

Moose Contact: Andy Aderman

In 2022, 14 of 19 collared adult cows produced a minimum of 25 calves (3 singles and 11 sets of twins) suggesting a production rate of 131.6 calves per adult 100 cows. Adult twinning rate was 78.6%. Three of 8 2-year old cows had a single calf. Calf survival from birth to November was 28% which was higher than 2021 (11%) and 2019 (22.5%).

During the 2021-2022 fall moose hunts in Unit 17A (RM 571, RM 573, and DM 570), hunters reported harvesting 60 moose (57 bulls, 3 cows) which was similar to the 60 moose (55 bulls, 5 cows) taken the previous year. During the 2021-2022 winter moose hunts in Unit 17A (RM 575 and RM 576), hunters reported harvesting 86 moose (28 bulls, 58 cows). In southern Unit 18, hunters reported harvesting 7 bulls in the RM 617 hunt and 12 bulls in the RM 620 hunt. Harvest was down 5 moose for the RM 617 hunt and no change for the RM 620 hunt.

Togiak Refuge and ADF&G-Dillingham staff conducted a moose survey in Unit 17A and southern Unit 18 (south of and including the Goodnews River drainage) from October 17-23, 2022. In Unit 17A the population estimate was 1,976 \pm 358 (1,618-2,334) which was 7.6% lower than the October 2019 estimate of 2,139 \pm 495 (1,644-2,634). In the Goodnews drainage the moose population estimate was 464 \pm 106 (358-570). Togiak Refuge and ADF&G-Bethel staff conducted a moose count in southern Unit 18 (south of and including the Goodnews River drainage) from February 27-28, 2020 and counted a minimum of 450 moose.

The relationships of wolf and brown bear predation with moose population density and growth at Togiak National Wildlife Refuge and BLM Goodnews Block, Alaska Contact: Pat Walsh

In summer 2014, Togiak Refuge, the USFWS Genetics Lab, ADF&G, and BLM initiated a study to understand the effects of wolf and brown bear predation in regulating the populations of moose. The study relies on radio telemetry and stable isotope analysis. Our approach is to relate the predation impact by

wolves and bears on moose at varying levels of moose population density. This requires having population estimates of both bears and wolves. We estimate the brown bear population totals approximately 855 bears (95% confidence limits: 664 – 1,154). Using radio telemetry, we estimate the wolf population varies widely but averages 90-100 wolves consisting of approximately 12 packs averaging 7 wolves plus approximately 10% of wolves unaffiliated with packs. Using these demographic data, we will model wolf and bear predation on moose based on the diet composition of both species determined through analysis of carbon and nitrogen isotopes occurring in wolf and bear tissues. Lab analyses are complete and modelling is currently underway.

Walrus Contact: Pat Walsh

The Togiak Refuge has annually monitored the number and timing of Pacific walrus at haul-outs since 1985, using ground counts (1985-2008), aerial surveys (2003-2011) and time lapse photography (2010-2022). Overall, walrus numbers observed at haul-outs on Togiak Refuge have declined, with the greatest declines at Cape Peirce and Cape Newenham. Peak annual haul-out counts have varied greatly, ranging from >12,000 in 1985 to <300 in 2002. Since 2002, peak counts have averaged 1,615. However, in fall 2021, a group of approximately 7,500 walrus hauled out on Hagemeister Island (Fig. 1), which was the greatest number of walrus using Togiak Refuge since 1998.

Seabirds Contact: Jannelle Trowbridge

The abundance of black-legged kittiwakes, common murre, and pelagic cormorants has been monitored at Cape Peirce since 1990. Monitoring was not conducted in 2015 and 2020. This year's average number of birds counted on study plots was 669 kittiwakes, 241 murre, and 28 cormorants. Over the past 30 years, the average number of birds counted on study plots are 1,040 kittiwakes (range = 238-1,906), 2,437 murre (range = 53-4,490), and 84 cormorants (range = 14-149). Abundance has been below average for kittiwakes since 2021, murre since 2014, and cormorants since 2016.

Signs of avian influenza were observed at Cape Peirce this year, although lab tests were not possible in most cases. About 230 black brant were found dead along Nanvak Bay this spring. Symptoms of bird flu such as swimming in circles were also observed in living black brant. At Cape Peirce 4 glaucous-winged gulls, 1 glaucous gull, 1 raven, 1 common eider, and 1 jaeger were also found dead.

Invasive Aquatic Plant Surveys Contact: Kara Hilwig

Elodea spp. is a highly invasive and difficult to control aquatic plant implicated in the degradation and loss of fish habitat across the world. It was confirmed present in Alaska in 2009 and is now found in several waterbodies across the State. Refuge and Park staff are cooperating to complete the fifth *Elodea* survey within the Togiak Refuge, Wood-Tikchik State Park and the surrounding area. Twenty-five annual monitoring sites have been established in high use areas such as lodge docks, boat ramps, and popular float plane destinations. In 2022, field crews visited 33 lakes, ponds, and rivers. Crews sampled 9 locations in the Park, 15 in the Refuge, and 6 in the outlying area from June 29 to September 26, 2022. These included 3 fishing lodges located in the Park. Sampling effort included overflights of 7 lakes, 25 fragment searches, and an intensive sampling effort in Mission Bay at Lake Aleknagik. In total, 2,072 rake samples were collected. No *Elodea* or other invasive aquatic plants were detected.

Water Temperature Monitoring Contact: Truett Cawfield

Stream temperature monitoring has been conducted at 21 locations on 14 rivers in Togiak Refuge since August 2001. Continuous hourly water temperatures were recorded at each site. Over 2.4 million temperature records were collected, quality-graded, and digitally stored in a database. The warmest month each year was July. The warmest temperatures were observed in the Kukaktlim Lake outlet and the coolest temperatures were observed in the Weary River. Project reports are available upon request.

In addition to the stream temperature monitoring, we monitored lake temperature using moored all-season temperature arrays to record hourly temperatures throughout the water column in 2 lakes since 2011. The lakes differed significantly in surface area, water volume, and elevation with Ongivinuk Lake being smaller and at higher elevation than Snake Lake. We observed variation in lake ice timing and fewer days of ice cover on Snake Lake than on Ongivinuk Lake. We observed that both lakes turn over in spring and fall. We observed water temperatures in excess of standards for fish rearing and migration habitats during summer down to 12.5 m in Snake Lake and down to 5 m in Ongivinuk Lake. Project reports are available upon request.

Quantifying River Discharge Contact: Pat Walsh

Togiak Refuge and the USFWS Water Resources Branch have worked cooperatively since 1999 to acquire hydrologic data of the flow regime (magnitude, duration, timing, frequency, and rate of change) and water quality on rivers throughout the Refuge. A network of stream discharge gages collected stream flow data from 1999-2005 at 20 locations. A subset of five of these stations continued to collect data through fall 2009, after which three of the five stations were removed. We continue to monitor discharge in the Togiak and Kulukak Rivers, although due to Covid-19 travel restrictions, the gages were inoperative in 2020-2021. Both stations were brought back into operation in July 2022.

Education and Outreach Contact: Terry Fuller

At the time of this writing, Togiak Refuge's education and outreach efforts have slowly started to resume. Togiak Refuge normally has a very active education and outreach program. From an education standpoint, during a normal school year, Refuge staff conducts an average of 60+ classroom visits throughout 12 Bristol Bay villages annually. Classroom visits include lessons about the Migratory Bird Calendar, National Wildlife Refuge Week, careers in natural resource conservation, and numerous teacher requested classroom presentations. The Refuge works with several school districts and private schools including the Southwest Region, Lower Kuskokwim, Dillingham City school districts and the Dillingham 7th Day Adventist School. Some topics often include bird walks, wilderness survival skills, archery, salmon life cycles, aquatic resources, and bear safety. School visits started back up early in 2022 and we anticipate even more during the new school year. The refuge website, one of our educational tools, is undergoing a migration to a new platform, and we are excited about better access it will allow and the content it will provide.

Togiak Refuge, in partnership with ADF&G and the Southwest Region School District, also conducts hunter safety courses throughout western Bristol Bay Villages. Classes have impacted more than 100 students in Manokotak, Dillingham, Twin Hills, Togiak, Aleknagik and Quinhagak. The refuge plans to continue these courses, as requested, in 2023 and is in the planning stages to add a National Archery in School Program to its offerings in the future, pending a return to normal outreach efforts.

The Refuge education program also produces Bristol Bay Field Notes, an award-winning weekly radio program on KDLG 670 AM that covers an array of outdoor-related topics (past episodes can be found on KDLG's website). Togiak Refuge has an active and heavily followed Facebook page which disseminates information on a daily basis to a rapidly growing global audience.

The Refuge normally hosts an Open House event, in celebration of National Public Lands Day and National Hunting and Fishing Day. This year that event was pushed back to October 2022. Approximately 100 people attended; on hand were a wide range of displays, hands on activities, food and beverages.

Togiak Refuge staff continues to work with the Alaska Migratory Bird Co-Management Council and the ADF&G to conduct household subsistence waterfowl surveys. Refuge staff and volunteers conduct surveys in a number of southwest Alaska communities, Aleknagik, Dillingham, Togiak, Clark's Point, Newhalen,

Chignik Lake and Chignik Lagoon. Due to budgetary constraints those surveys are on hold for this year. .

Also, the Refuge partners with others to conduct three environmental education camps. As with other Service sponsored education camps, those camps were cancelled for 2021 due to covid-19 related concerns. Summer 2022 saw a partial return of camp offerings.

Cape Peirce Marine Science and Yup'ik Culture Camp Contact: Terry Fuller

This camp was scheduled to happen in July 2022 but was cancelled due to weather. Most recent camp: In July 2019 an enthusiastic group of seven area junior high students representing three villages (Dillingham, Togiak and Platinum) traveled to Cape Peirce for this camp. Students were able to observe seabirds, marine mammals, and learn how field work is conducted, as well as learning about the food webs and ecological relationships found at the Cape Peirce area. Students also learned about traditional Yup'ik uses of animals and plants and about Native survival skills. This camp is designed to help students gain a better understanding of the biological diversity of a marine ecosystem. It also strengthens their sense of stewardship for local natural resources. Other topics at this camp included tide pools, wilderness survival skills, archery, bear safety, Leave No Trace camping practices and careers with USFWS. Refuge Interpreter Jon Dyasuk spoke with students about traditional resource uses. A special offering for this year's camp was the chance for the students to try their hand drawing with Colorado pastel artist Penny Creasy. Traditional councils and school districts from throughout western Bristol Bay are cooperators with this camp.

Southwest Alaska Science Academy (Salmon Camp) Contact: Terry Fuller

*Note: Was not held during 2022. Most recent: In July 2019, Togiak Refuge helped with the 19th year of a summer camp aimed at teaching middle and high school students about fisheries science and the importance of salmon to our ecosystem. Students were selected from the Bristol Bay region. During the camp students worked in the field alongside fisheries professionals. Cooperators with the Refuge on this project included the Bristol Bay Economic Development Corporation, Bristol Bay Science and Research Institute, University of Alaska, University of Washington School of Fisheries, the Dillingham City and Southwest Region school districts, and ADF&G.

Summer Outdoor Skills and River Ecology Float Camp Contact: Terry Fuller

This camp was a modified camp held during mid-August 2022. The camp still used rafting as one of the major activities, but it was a stationary camp at Pungokepek Lake for six junior high students. Students observed and learned about the many fish, wildlife and plant species found around Pungokepek Lake. Rafting skills, water safety, different angling practices (Catch and Release), Leave No Trace camping practices and bear safety were topics during the trip. Students also participated in other outdoor activities such as wilderness survival skills. This camp helps students grasp the biological diversity of riparian ecosystems and the importance of salmon as a nutrient source, while developing a deeper sense of stewardship for local natural resources. Traditional councils and school districts in western Bristol Bay are cooperators with this camp.

Division of Refuge Law Enforcement Contact: Derek Thompson

Federal Wildlife Officers work to protect wildlife and habitat and make refuges safe places for visitors and staff. Regional Law Enforcement Specialist (RLES) Derek Thompson is stationed in Dillingham, AK. He is the Officer responsible for patrolling Togiak NWR and providing Regional assistance and guidance for the AK Division of Refuge Law Enforcement (DRLE).

Visitation and use in 2022 within Togiak NWR was at pre-covid levels, with many local and non-local users in the Refuge. Mulchatna caribou are a local and regional priority. RLES Thompson is the Federal team lead for patrolling and monitoring the Eastern Mulchatna herd. This winter AK DRLE will again team up

with up with ADF&G, AWT, BLM, and FWS OLE to enforce the Mulchatna caribou hunting closure. Nushagak Peninsula caribou permits have been increased for the 2022-2023 season. RLES Thompson reminds hunters who obtain a permit for this hunt to be familiar with the permit conditions and designated hunter permits and conditions. Please call if you have any questions.

RLES Thompson encourages anyone with questions regarding USFWS law enforcement to contact him; and reminds all who enjoy and rely upon the resources in the Bristol Bay Region the USFWS Division of Refuge Law Enforcement is here to help protect those resources for future generations.

Staff Update

The Fisheries Biologist position was filled by Jonathan Cawfield (aka Truett) in May. Truett comes from South Texas, having completed an acoustic telemetry study on marine fishes in fulfillment of a Master of Science degree in 2021.

Budget Analyst Yong Ellis has retired from the Service effective 12/30/2022. We are happy to have LoRae Helms as our new Budget Analyst. LoRae moved to Dillingham in November from Montana. We are excited to have her as part of our refuge team and she will also provide budget coverage for the Alaska Region Fire Program.

Subsistence Regional Advisory Council Correspondence Policy

The Federal Subsistence Board (Board) recognizes the value of the Regional Advisory Councils' role in the Federal Subsistence Management Program. The Board realizes that the Councils must interact with fish and wildlife resource agencies, organizations, and the public as part of their official duties, and that this interaction may include correspondence. Since the beginning of the Federal Subsistence Program, Regional Advisory Councils have prepared correspondence to entities other than the Board. Informally, Councils were asked to provide drafts of correspondence to the Office of Subsistence Management (OSM) for review prior to mailing. Recently, the Board was asked to clarify its position regarding Council correspondence. This policy is intended to formalize guidance from the Board to the Regional Advisory Councils in preparing correspondence.

The Board is mindful of its obligation to provide the Regional Advisory Councils with clear operating guidelines and policies, and has approved the correspondence policy set out below. The intent of the Regional Advisory Council correspondence policy is to ensure that Councils are able to correspond appropriately with other entities. In addition, the correspondence policy will assist Councils in directing their concerns to others most effectively and forestall any breach of department policy.

The Alaska National Interest Lands Conservation Act, Title VIII required the creation of Alaska's Subsistence Regional Advisory Councils to serve as advisors to the Secretary of the Interior and the Secretary of Agriculture and to provide meaningful local participation in the management of fish and wildlife resources on Federal public lands. Within the framework of Title VIII and the Federal Advisory Committee Act, Congress assigned specific powers and duties to the Regional Advisory Councils. These are also reflected in the Councils' charters. (*Reference: ANILCA Title VIII §805, §808, and §810; Implementing regulations for Title VIII, 50 CFR 100 __.11 and 36 CFR 242 __.11; Implementing regulations for FACA, 41 CFR Part 102-3.70 and 3.75*)

The Secretaries of Interior and Agriculture created the Federal Subsistence Board and delegated to it the responsibility for managing fish and wildlife resources on Federal public lands. The Board was also given the duty of establishing rules and procedures for the operation of the Regional Advisory Councils. The Office of Subsistence Management was established within the Federal Subsistence Management Program's lead agency, the U.S. Fish and Wildlife Service, to administer the Program. (*Reference: 36 CFR Part 242 and 50 CFR Part 100 Subparts C and D*)

Policy

1. The subject matter of Council correspondence shall be limited to matters over which the Council has authority under §805(a)(3), §808, §810 of Title VIII, Subpart B §____.11(c) of regulation, and as described in the Council charters.
2. Councils may, and are encouraged to, correspond directly with the Board. The Councils are advisors to the Board.
3. Councils are urged to also make use of the annual report process to bring matters to the Board's attention.

4. As a general rule, Councils discuss and agree upon proposed correspondence during a public meeting. Occasionally, a Council chair may be requested to write a letter when it is not feasible to wait until a public Council meeting. In such cases, the content of the letter shall be limited to the known position of the Council as discussed in previous Council meetings.
5. Except as noted in Items 6, 7, and 8 of this policy, Councils will transmit all correspondence to the Assistant Regional Director (ARD) of OSM for review prior to mailing. This includes, but is not limited to, letters of support, resolutions, letters offering comment or recommendations, and any other correspondence to any government agency or any tribal or private organization or individual.
 - a. Recognizing that such correspondence is the result of an official Council action and may be urgent, the ARD will respond in a timely manner.
 - b. Modifications identified as necessary by the ARD will be discussed with the Council chair. Councils will make the modifications before sending out the correspondence.
6. Councils may submit written comments requested by Federal land management agencies under ANILCA §810 or requested by regional Subsistence Resource Commissions (SRC) under §808 directly to the requesting agency. Section 808 correspondence includes comments and information solicited by the SRCs and notification of appointment by the Council to an SRC.
7. Councils may submit proposed regulatory changes or written comments regarding proposed regulatory changes affecting subsistence uses within their regions to the Alaska Board of Fisheries or the Alaska Board of Game directly. A copy of any comments or proposals will be forwarded to the ARD when the original is submitted.
8. Administrative correspondence such as letters of appreciation, requests for agency reports at Council meetings, and cover letters for meeting agendas will go through the Council's regional coordinator to the appropriate OSM division chief for review.
9. Councils will submit copies of all correspondence generated by and received by them to OSM to be filed in the administrative record system.
10. Except as noted in Items 6, 7, and 8, Councils or individual Council members acting on behalf of or as representative of the Council may not, through correspondence or any other means of communication, attempt to persuade any elected or appointed political officials, any government agency, or any tribal or private organization or individual to take a particular action on an issue. This does not prohibit Council members from acting in their capacity as private citizens or through other organizations with which they are affiliated.

Approved by the Federal Subsistence Board on June 15, 2004.

Fall 2023 Regional Advisory Council Meeting Calendar

Last updated 11/7/2022

Due to travel budget limitations placed by Department of the Interior on the U.S. Fish and Wildlife Service and the Office of Subsistence Management, the dates and locations of these meetings will be subject to change

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Aug. 13	Aug. 14 Window Opens	Aug. 15	Aug. 16	Aug. 17	Aug. 18	Aug. 19
Aug. 20	Aug. 21	Aug. 22	Aug. 23	Aug. 24	Aug. 25	Aug. 26
Aug. 27	Aug. 28	Aug. 29	Aug. 30	Aug. 31	Sep. 1	Sep. 2
Sep. 3	Sep. 4 Labor Day Holiday	Sep. 5	Sep. 6	Sep. 7	Sep. 8	Sep. 9
Sep. 10	Sep. 11	Sep. 12	Sep. 13	Sep. 14	Sep. 15	Sep. 16
Sep. 17	Sep. 18	Sep. 19	Sep. 20	Sep. 21	Sep. 22	Sep. 23
		KARAC (King Cove)				
Sep. 24	Sep. 25	Sep. 26	Sep. 27	Sep. 28	Sep. 29	Sep. 30
Oct. 1	Oct. 2	Oct. 3	Oct. 4	Oct. 5	Oct. 6	Oct. 7
	SCRAC (Kenai)		EIRAC (Tok or Fairbanks)			
Oct. 8	Oct. 9 Columbus Day Holiday	Oct. 10	Oct. 11	Oct. 12	Oct. 13	Oct. 14
		YKDRAC (Anchorage or Bethel)				
		WIRAC (Fairbanks)				
Oct. 15	Oct. 16	Oct. 17	Oct. 18	Oct. 19	Oct. 20	Oct. 21
	NWARAC (Kotzebue)					
Oct. 22	Oct. 23	Oct. 24	Oct. 25	Oct. 26	Oct. 27	Oct. 28
		BBRAC (Dillingham)				
		SEARAC (Sitka)				
Oct. 29	Oct. 30	Oct. 31	Nov. 1	Nov. 2	Nov. 3 Window Closes	Nov. 4
			NSRAC (Utqiagvik)			
			SPRAC (Nome)			

Winter 2024 Regional Advisory Council Meeting Calendar

Last updated 12/22/2022

Due to travel budget limitations placed by Department of the Interior on the U.S. Fish and Wildlife Service and the Office of Subsistence Management, the dates and locations of these meetings will be subject to change

Sunday	Monday	Tuesday	Wednesday-	Thursday	Friday	Saturday
<i>Mar. 3</i>	<i>Mar. 4 Window Opens</i>	<i>Mar. 5</i>	<i>Mar. 6</i>	<i>Mar. 7</i>	<i>Mar. 8</i>	<i>Mar. 9</i>
<i>Mar. 10</i>	<i>Mar. 11</i>	<i>Mar. 12</i>	<i>Mar. 13</i>	<i>Mar. 14</i>	<i>Mar. 15</i>	<i>Mar. 16</i>
<i>Mar. 17</i>	<i>Mar. 18</i>	<i>Mar. 19</i>	<i>Mar. 20</i>	<i>Mar. 21</i>	<i>Mar. 22</i>	<i>Mar. 23</i>
<i>Mar. 24</i>	<i>Mar. 25</i>	<i>Mar. 26</i>	<i>Mar. 27</i>	<i>Mar. 28</i>	<i>Mar. 29 Window Closes</i>	<i>Mar. 30</i>

Fall 2024 Regional Advisory Council Meeting Calendar

Last updated 12/22/2022

Due to travel budget limitations placed by Department of the Interior on the U.S. Fish and Wildlife Service and the Office of Subsistence Management, the dates and locations of these meetings will be subject to change

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Aug. 18	Aug. 19 Window Opens	Aug. 20	Aug. 21	Aug. 22	Aug. 23	Aug. 24
Aug. 25	Aug. 26	Aug. 27	Aug. 28	Aug. 29	Aug. 30	Aug. 31
Sep. 1	Sep. 2 Labor Day Holiday	Sep. 3	Sep. 4	Sep. 5	Sep. 6	Sep. 7
Sep. 8	Sep. 9	Sep. 10	Sep. 11	Sep. 12	Sep. 13	Sep. 14
Sep. 15	Sep. 16	Sep. 17	Sep. 18	Sep. 19	Sep. 20	Sep. 21
Sep. 22	Sep. 23	Sep. 24	Sep. 25	Sep. 26	Sep. 27	Sep. 28
Sep. 29	Sep. 30	Oct. 1	Oct. 2	Oct. 3	Oct. 4	Oct. 5
Oct. 6	Oct. 7	Oct. 8	Oct. 9	Oct. 10	Oct. 11	Oct. 12
Oct. 13	Oct. 14 Columbus Day Holiday	Oct. 15	Oct. 16	Oct. 17	Oct. 18	Oct. 19
Oct. 20	Oct. 21	Oct. 22	Oct. 23	Oct. 24	Oct. 25	Oct. 26
Oct. 27	Oct. 28	Oct. 29	Oct. 30	Oct. 31	Nov. 1 Window Closes	Nov. 2

**Department of the Interior
U. S. Fish and Wildlife Service**

Western Interior Alaska Subsistence Regional Advisory Council

Charter

1. **Committee's Official Designation.** The Council's official designation is the Western Interior Alaska Subsistence Regional Advisory Council (Council).
2. **Authority.** The Council is renewed by virtue of the authority set out in the Alaska National Interest Lands Conservation Act (ANILCA) (16 U.S.C. 3115 (1988)) Title VIII, and under the authority of the Secretary of the Interior, in furtherance of 16 U.S.C. 410hh-2. The Council is regulated by the Federal Advisory Committee Act (FACA), as amended, (5 U.S.C., Appendix 2).
3. **Objectives and Scope of Activities.** The objective of the Council is to provide a forum for the residents of the Region with personal knowledge of local conditions and resource requirements to have a meaningful role in the subsistence management of fish and wildlife on Federal lands and waters in the Region.
4. **Description of Duties.** Council duties and responsibilities, where applicable, are as follows:
 - a. Recommend the initiation, review, and evaluate of proposals for regulations, policies, management plans, and other matters relating to subsistence uses of fish and wildlife on public lands within the region.
 - b. Provide a forum for the expression of opinions and recommendations by persons interested in any matter related to the subsistence uses of fish and wildlife on public lands within the Region.
 - c. Encourage local and regional participation in the decision-making process affecting the taking of fish and wildlife on the public lands within the region for subsistence uses.
 - d. Prepare an annual report to the Secretary containing the following:
 - (1) An identification of current and anticipated subsistence uses of fish and wildlife populations within the Region;
 - (2) An evaluation of current and anticipated subsistence needs for fish and wildlife populations within the Region;

- (3) A recommended strategy for the management of fish and wildlife populations within the Region to accommodate such subsistence uses and needs; and
 - (4) Recommendations concerning policies, standards, guidelines, and regulations to implement the strategy.
 - e. Appoint one member to the Gates of the Arctic National Park Subsistence Resource Commission in accordance with section 808 of the ANILCA.
 - f. Make recommendations on determinations of customary and traditional use of subsistence resources.
 - g. Make recommendations on determinations of rural status.
 - h. Provide recommendations on the establishment and membership of Federal local advisory committees.
- 5. **Agency or Official to Whom the Council Reports.** The Council reports to the Federal Subsistence Board Chair, who is appointed by the Secretary of the Interior with the concurrence of the Secretary of Agriculture.
- 6. **Support.** The U.S. Fish and Wildlife Service will provide administrative support for the activities of the Council through the Office of Subsistence Management.
- 7. **Estimated Annual Operating Costs and Staff Years.** The annual operating costs associated with supporting the Council’s functions are estimated to be \$180,000, including all direct and indirect expenses and 1.15 Federal staff years.
- 8. **Designated Federal Officer.** The DFO is the Subsistence Council Coordinator for the Region or such other Federal employee as may be designated by the Assistant Regional Director – Subsistence, Region 11, U.S. Fish and Wildlife Service. The DFO is a full-time Federal employee appointed in accordance with Agency procedures. The DFO will:
 - (a) Approve or call all Council and subcommittee meetings;
 - (b) Prepare and approve all meeting agendas;
 - (c) Attend all committee and subcommittee meetings;
 - (d) Adjourn any meeting when the DFO determines adjournment to be in the public interest; and

(e) Chair meetings when directed to do so by the official to whom the advisory committee reports.

9. Estimated Number and Frequency of Meetings. The Council will meet 1-2 times per year, and at such times as designated by the Federal Subsistence Board Chair or the DFO.

10. Duration. Continuing.

11. Termination. The Council will be inactive 2 years from the date the charter is filed, unless prior to that date, the charter is renewed in accordance with provisions of section 14 of the FACA. The Council will not meet or take any action without a valid current charter.

12. Membership and Designation. The Council's membership is composed of representative members as follows:

Ten members who are knowledgeable and experienced in matters relating to subsistence uses of fish and wildlife and who are residents of the region represented by the Council.

To ensure that each Council represents a diversity of interests, the Federal Subsistence Board in their nomination recommendations to the Secretary will strive to ensure that seven of the members (70 percent) represent subsistence interests within the region and three of the members (30 percent) represent commercial and sport interests within the region. The portion of membership representing commercial and sport interests must include, where possible, at least one representative from the sport community and one representative from the commercial community.

The Secretary of the Interior will appoint members based on the recommendations from the Federal Subsistence Board and with the concurrence of the Secretary of Agriculture.

For geographic membership balance, it is a Council goal to seat three members who reside in the Northern Koyukuk area (Unit 24), three members who reside in the Middle Yukon (Unit 21A-D), three members who reside in the Upper Kuskokwim area (Unit 19), and one member who resides in the Grayling/Anvik/Shageluk/Holy Cross area (GASH-Unit 21E).

Members will be appointed for 3-year terms. Members serve at the discretion of the Secretary.

If appointments for a given year have not yet been announced, a member may continue to serve on the Council following the expiration of his or her term until such appointments have been made. Unless reappointed, the member's service ends on the date of announcement even if that member's specific seat remains unfilled.

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