NORTHWEST ARCTIC SUBSISTENCE REGIONAL ADVISORY COUNCIL MEETING MATERIALS October 16-17, 2023 Kotzebue, Alaska



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On the cover...

A rainbow arcs over the Selawik River with early fall foliage on the tundra.



#### NORTHWEST ARCTIC SUBSISTENCE REGIONAL ADVISORY COUNCIL

Northwest Arctic Heritage Center Kotzebue October 16-17, 2023 Convening at 9:00 am daily

- **TELECONFERENCE:** call the toll-free number: 1-833-436-1163, then when prompted enter the Conference ID: 21846368#.
- **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. 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. Written comments may also be emailed to subsistence@fws.gov.

#### AGENDA

\*Asterisk identifies action item.

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**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

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( <i>Jamie Fronstin</i> , <i>Wildlife Biologist</i> )	48
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• Western Arctic/ Western Region: January 26—29, 2024, Kotzebue	

e. Subsistence Resource Commissions (SRC) updates and appointments\*

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**To call** into the meeting, dial the toll-free number: 1-833-436-1163, then when prompted enter the Conference ID: 21846368#.

#### 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 Lisa Hutchinson-Scarbrough 907-310-4097, lisa\_hutchinson@fws.gov, or 800-877-8339 (TTY), by close of business on September 12, 2023.

Roster

# REGION 8 Northwest Arctic Regional Advisory Council

Se at	Yr. Appointed <i>Term</i>	Member Name & Community	Represents
1	2022 2025	Hannah P. Loon Kotzebue	Subsistence
2	2019 2025	Thomas C. Baker Kotzebue Chair	Subsistence
3	2019; 2022 <b>2025</b>	Tristen S. Pattee Ambler	Commercial/ Sport
4	2010 2025	Michael C. Kramer Kotzebue Vice Chair	Subsistence
5	2013 2023	Calvin D. Moto II Deering	Subsistence
6	2020 2023	<b>Wilbur M. Howarth, Sr.</b> Noorvik	Subsistence
7	2020 2023	Robert J. Schaeffer Kotzebue	Subsistence
8	2020 2025	<b>Elmer Armstrong, Jr.</b> Noorvik	Subsistence
9	2011-2017; 2020 <b>2024</b>	<b>Vern J. Cleveland, Sr.</b> Noorvik	Subsistence
10	2022 2025	Raymond Woods Kotzebue/ Shungnak	Subsistence

# NORTHWEST ARCTIC SUBSISTENCE REGIONAL ADVISORY COUNCIL Meeting Minutes

Hybrid Teleconference March 7-8, 2023

#### Invocation:

Chair Thomas Baker called a moment of silence for those that have recently passed.

#### Call to Order, Roll Call, and Quorum Establishment:

The Northwest Arctic Subsistence Regional Advisory Council (Council) was scheduled to meet at the Nullagvik Hotel Conference Room March 6-7, 2023. Due to a blizzard that hit the Kotzebue region and caused canceled flights, the Council meeting started a day later than scheduled, on March 7. Most Council members met together in Kotzebue with local agency staff at the Nullagvik Hotel Conference room, and most OSM staff and other presenters calling in telephonically from a conference room at the NPS regional office in Anchorage, or by individual phones.

The meeting was called to order at 9:30 am on March 7, 2023, by Chairman Thomas Baker. Council members Elmer Armstrong, Michael Kramer, Wilbur Howarth, Hannah Loon, Tristen Pattee, Robert Schaeffer, Raymond Woods, and Chairman Thomas Baker were present. Council members Verne Cleveland and Calvin Moto were unable to make the meeting due to weather conditions and job duties and were excused. With 8 out of 10 members present, **the quorum was established.** 

#### Attendees:

#### In person in Kotzebue at Nullagvik Hotel Conference Room

- **Council Members**: Elmer Armstrong and Wilbur Howarth (Noorvik), and Vice Chair Michael Kramer, Hannah Loon, Robert Schaeffer, Raymond Woods, and Chairman Thomas Baker (Kotzebue).
- U.S. Fish and Wildlife Service (FWS): Selawik NWR: Wilhelm Wiese, Bill Carter, Brittany Sweeney (Kotzebue)
- National Park Service (NPS), Western Arctic National Parklands: Emily Creek, Annie Carlson, Joe Dallemolle, Martha Fronstin (Kotzebue)
- Alaska Department of Fish and Game (ADF&G): Alex Hansen, Christie Osburn (Kotzebue); Alaska Department of Fish and Game
- State of Alaska Wildlife Troopers: Trooper Cantine (Kotzebue)

#### In Person in Anchorage at National Park Service Conference Room-via Teleconference

- Office of Subsistence Management (OSM): Tom Plank, Dr. Hannah Voorhees, Scott Ayers, Lisa Hutchinson-Scarbrough (Anchorage)
- US Geological Services: Dr. Carey (USGS)

- NPS- Regional Office: Jon O'Donnell, Victoria Florey (Anchorage)
- National Park Service (NPS), Western Arctic National Parklands: Justin Junge (Kotzebue).
- Court Recorder: Tina Hile (Anchorage)

#### *Via Teleconference*:

- Office of Subsistence Management (OSM): Karen Hyer, Robbin Lavine, Orville Lind, Katya Wessels (Anchorage)
- Interagency Staff Committee (ISC): Jill Klein (FWS) (Anchorage); Chris McKee (BLM); Greg Risdahl (USFS); Glen Chen (BIA)
- USFWS: Ray Hander (Fairbanks)
- NPS, Gates of the Arctic National Park and Preserve: Kyle Joly, Marcy Okada (Fairbanks); Ken Adkisson, (Nome/Fairbanks)
- Bureau of Land Management (BLM): Bruce Seppi, Walter Gussey, Craig Townsend, (Anchorage)
- Alaska Department of Fish and Game (ADF&G): Alex Hansen, Christie Osburn (Kotzebue); Morgan Urquia, Helen Cold, Brian Scanlon (Fairbanks); Carmen Daggett (Barrow); Mark Burch (Palmer)
- NANA Regional Corporation: Robbie Kirk, Elizabeth Ferguson (Kotzebue)
- **Tribal Governments**: Emily Murray, Native Village of Elim and Norton Bay Tribal Watershed Council
- Northwest Arctic Borough: Clay Nordlum

#### Welcome of new and reappointed Council members:

Council Coordinator Lisa Hutchinson-Scarbrough welcomed newly appointed Council members Hannah Loon, Tristen Pattee, and Raymond Woods and congratulated reappointed Council members, Elmer Armstrong, Thomas Baker, Michael Kramer.

#### **Review and Adopt Agenda:**

Motion by Member Kramer, seconded by Member Howarth, to approve the agenda.

The motion passed on a unanimous vote.

#### **Election of Officers:**

Motion by Member Armstrong, seconded by Member Loon, to nominate Thomas Baker as Chair.

The motion passed on a unanimous vote.

Motion by Member Loon to nominate Michael Kramer as Vice Chair.

The motion passed on a unanimous vote.

Motion by Member Armstrong to nominate Hannah Loon as Secretary.

#### The motion passed on a unanimous vote.

#### **Review and Approve Previous Meeting Minutes:**

Motion by Member Kramer, seconded by Member Loon, to approve their fall 2022 meeting minutes.

#### The motion passed on a unanimous vote.

#### **Council Member and Chair Reports:**

Secretary <u>Hannah Loon</u> (Kotzebue) spoke about her daughter helping to get fish for her right after the ice went out. They like to go to the slough, where the whitefish are plentiful. She thanked the Native Village of Selawik for providing fuel for their SnoGo (snow machine) so they could go out and fish. She is also being sent whitefish that was harvested in the fall from under the ice and dried fish if there is enough. She talked about ice fishing and going for pike, which were notably absent this year. Her daughter collected greens and noted the salmonberries, blueberries, and blackberries were not good last year. She spoke about how the caribou are no longer passing through to Selawik and the impacts it is having on the community. Normally the herd goes through Kiana and the mountains and then to Selawik in the fall.

<u>Tristen Pattee</u> (Ambler) noted a concern about Caribou showing up later each year. When they did finally arrive on October 9 this past season, folks were able to harvest what they needed. In previous years, locals had not been able to get their caribou because of how late the caribou had been showing up. Folks are spending a lot of time and money on fuel trying to hunt. Some folks were able to get moose, but not everyone. He reported a lot of sheefish had been harvested and folks in Ambler had been hanging salmon and gathering fish to offset the lack of caribou. He noted that he traveled the river from Ambler to Kiana during the summer and fall and had not seen much wildlife.

Vice Chair <u>Michael Kramer</u> (Kotzebue) heard reports and concerns from moose and caribou hunters that had been having issues with bears and wolves. It was reported that bears had taken caribou out of hunter's' boats and wolves approached hunters and there were packs hanging near camps. Folks were afraid to take one in self-defense because of the paperwork. He spoke about a gentleman who reported a nuisance bear within the city of Kotzebue to the troopers; after the troopers took no action, he took it upon himself to dispatch the bear, and when he turned it into Fish and Game he was cited. He spoke to the need for either more Law Enforcement or the ability for folks to dispatch animals that are harassing the public. He was most concerned for the safety of children in the community. He spoke about submitting a proposal to have a "no closed season and no bag limit" for bears and requesting that ADF&G do more bear and wolf studies. He also talked about empty shelves at the grocery stores, the lack of caribou, and the increasing costs of everything. The pandemic and the storms this past winter had hit the community hard. He spoke about folks pooling their money so they could afford to go out and harvest the food they needed and sometimes they came back with nothing. The caribou no longer travel through their community and the moose population within in the RM880 hunt area had dropped. He hadn't gotten a caribou or moose the past year. He reported seeing successful trappers the past season. He and his

brother harvested sheefish and sent to elders in Anchorage. He is interested in having a pre-meeting with the rest of the Council members as they have done in the past, which allowed them to talk through issues in advance and work on proposals. He'd like to look into doing that again if possible.

#### Calvin Moto (Deering) was absent.

<u>Wilbur Howarth</u> (Noorvik) said that it's been a tough season for caribou. They traveled up to Onion Portage where it was already snowing. He reported that fish were plentiful. Pike moved through earlier than normal possibly due to the high water, so they missed them. He reported that there were four different types of hybrid fish in the nets. Oogruk (bearded seal) hunting was good. He took a few young men out Oogruk hunting so they could harvest the seal oil. Moose were plentiful this year; he was able to get one and saw other moose on the landscape. He noted that by the time the season opened the moose had already begun moving north towards Kiana and stayed in the area around Noorvik. He said they were healthy and growing by two's right now. People from Noorvik had to go to Onion Portage to be able to get caribou as there weren't any that came through locally. He reported that the caribou were scattered and didn't move south because of the warm weather. He thought he saw roughly 30 caribou that traveled below Noorvik during the fall.

<u>Robert (Bobby) Schaeffer</u> (Kotzebue) congratulated the newly elected officers. He wanted to see more communication between Council members and suggested sending concerns to Chair Baker for distribution to the rest of the Council. He sees better communication helping with future meetings so that everyone is well prepared when the meetings start. He had been working for the tribe and the Alaska Observation Program; he has been observing local environmental changes and being an elder is able to compare what is happening today with what it used to be. He requested that anyone who observes changes to communicate them with him.

<u>Elmer Armstrong</u> (Noorvik) reported that he was able to get his net out in July and harvest salmon. Due to work, he was only able to get out a few times for moose and was unfortunately unsuccessful in harvesting one. In October the ice was eight inches thick, but he was able to put out a net under the ice for whitefish. He reported he still had whitefish and salmon in the freezer. He was gifted several caribou, which is good because the caribou didn't show up in the lower Kobuk. He has noted friends taking their kids out for rabbits and ptarmigan.

#### Vern Cleveland (Noorvik) was absent.

<u>Raymond Woods</u> (Kotzebue/Shungnak) would like to know about the caribou herd that just showed up at the headwaters of the Kobuk. They have been showing up in that area in February the past few years, and he wanted to know where this heard was coming from. Typically, caribou had shown up in their area in the fall. There had been very good fishing in the upper Kobuk. Folks were finally getting out on the landscape again after the pandemic. He had been working with the school district to help get kids out fishing and hunting. It is important to him to educate the kids on their cultural activities, and he is concerned about handing down knowledge about practices to future generations. Moose harvest had been pretty good this past year near the upper Kobuk.

Chairman <u>Thomas Baker</u> reported the caribou hadn't made their annual trek across the Kotzebue Sound, which generally happened mid-November to mid-December. Most local caribou hunters were not successful. Caribou hunters had tried traveling down to Buckland and upriver by snowmachine. In the

fall, most folks that went for moose were successful. People had harvested sheefish around Kotzebue and had been doing so for the past month or so.

#### Public and Tribal Comment on Non-Agenda Items:

Marlene Moto from Deering expressed concern about sport hunting in Deering and the northern Seward Peninsula. They are becoming more and more desperate for caribou, and she is particularly concerned about the Kiwalik River where the herd migrates through. She thought nonresidents shouldn't be allowed in that area. She reported that National Geographic has been in the area for years and she believes they should be required to have hunting licenses. She noted that more gold mining operations are occurring above the Candle area and Deering, and she is concerned on the effects on salmon and belugas.

#### **Old Business:**

#### 2023 North American Caribou Workshop & Arctic Ungulate Conference

Dr. Hannah Voorhees (OSM) followed up with the Council about the May 2023 North American Caribou Workshop and Arctic Ungulate Conference they discussed last fall, including an overview for the new members. Some Council members were unfamiliar with the word "ungulate," which should be taken into consideration by OSM and other Conference/workshop planning authorities. She also introduced the list of potential topics that Councils suggested to be included at the conference. The Council Chair noted that for Unit 23, he'd like to see the topic of what effect hunter placement has on migration routes, as there is a lot of transporter traffic in the region. Ms. Loon noted that there is a lack of indigenous knowledge and representation regarding the issues that affect people living on the land, to which Lisa Grediagin (OSM) provided feedback over the phone. The topics fit well with potential topic item #2 (user conflict), with the addition of sport hunter "placement" to that topic, and # 17 (honoring and incorporating TEK into harvest management).

#### **New Business:**

#### Moose, Sheep, Caribou, and other Wildlife Updates for GMU 23

Will Wiese (FWS) and Alex Hansen (ADF&G) provided an overview of the December 2022 Western Arctic Caribou Herd (WACH) Working Group meeting, including the recommendations made at that meeting. They also voted to submit a proposal to limit all residents who harvest WACH animals to 4 caribou per year, only one of which may be a cow. There was also a proposal to adjust the amount necessary for subsistence (ANS). A third motion was passed to ask agencies to work together with local residents and Tribes to do a better job collecting harvest data. Many development projects were discussed, with support for a letter to Secretary of Interior to protect calving grounds of WACH from development.

Ms. Loon made a recommendation to the WACH that they meet in Kotzebue so that local voices can be incorporated into their discussions. She said that folks were taken aback in the smaller communities when she informed them that there was a proposal to limit caribou harvest to 4 per year (from 5 per day). Mr. Wiese said that this has been a topic raised by the WACH and the agencies are in support of meetings in locations other than Anchorage.

Brittany Sweeney (FWS) noted that a draft summary of the last WACH working group meeting was just posted to their website and that she would provide that information to the Council and their Coordinator for further distribution.

Christie Osburn (ADF&G) provided an update on moose, Dall sheep, and other wildlife for GMU 23. Council members had questions on sheep harvest opportunities, which were answered by Marcie Okada (NPS).

Joelle Hepler (ADF&G) provided an update on an ongoing moose study in the lower Kobuk River study area. They will be capturing and tagging moose in the coming month.

#### Closure Review Process and Call for Federal Wildlife Proposals

Tom Plank (OSM) provided an overview of the closure review process, followed by an overview of WCR24-19 (Muskox in Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage). Council members had questions about how to deal with muskox when they become nuisances at camps, airports, etc. The Council also had concerns if the population objectives and harvest regimes for muskoxen take into account what is sustainable to the local people.

Mr. Plank (OSM) introduced the call for Federal Wildlife Proposals and opened the floor for Council action.

Motion made by Member Kramer, seconded by Member Woods, to submit the following special action request:

• Wildlife Temporary Special Action request for the 2023 season (to match the proposals submitted by the Kotzebue Advisory Council and the Western Arctic Caribou Herd Working Group (WACHWG) to limit harvest in Unit 23 to 4 caribou (3 bulls and 1 cow or 4 bulls) per year. The Western Arctic caribou herd (WACH) has continued to decline with the most recent estimate being 164,000 caribou. The Council is greatly concerned about the precipitous decline of the WACH and feel that immediate action is needed to slow the decline and prevent the herd from reaching a point of no return. The request for a temporary special action will be followed with a wildlife proposal also to be submitted by the Council for regulatory change during the 2024-2026 Wildlife cycle. The Council feels that the harvest recommendations set forth by the WACH working group would be a starting point for the conservation of the WACH while still allowing some harvest. The Council recognizes that federally qualified subsistence users are already facing food insecurities, but this drastic reduction of caribou harvest is a means to help protect the caribou herd while still allowing some harvest.

#### Motion passed on a unanimous vote.

Motion made by Member Kramer and seconded by Member Howarth to submit the following two proposals to the Federal Subsistence Board in the 2024-2026 wildlife regulatory cycle:

• Limit harvest in Unit 23 on Federally managed lands to 4 caribou (3 bulls and 1 cow or 4 bulls) per year. The Council's justification for requesting this change to reduce the caribou harvest limit in Unit 23 to 4 caribou (either 4 bulls or 3 bulls and 1 cow). The Council's justification for the proposal is over their concerns that the Western Arctic

caribou herd (WACH) has continued to decline with the most recent estimate being 164,000 caribou. The Council is greatly concerned about the precipitous decline of the WACH and feel that immediate action is needed to slow the decline and prevent the herd from reaching a point of no return. This proposal for regulatory change will follow the Council's request for a Special Action and if adopted would be in effect during the 2024-2026 Wildlife cycle. The Council feels that the harvest recommendations set forth by the WACH working group would be a starting point for the conservation of the WACH while still allowing some harvest. The NWARAC recognizes that federally qualified subsistence users are already facing food insecurities, but this drastic reduction of caribou harvest is a means to help protect the caribou herd while still allowing some harvest.

• A closure to non-Federally qualified users for the harvesting of caribou on Federal land of Unit 23 for the month of August, September, and October due to the declining WACH population and to curtail the harvest by nonresidents and sport hunters. This proposal is in support of what the North Slope Regional Advisory Council also submitted. The Western Arctic Caribou Herd population has been in decline for years and the low population level in 2022 is cause for concern. The Council wishes to adopt this proposal to close hunting of the herd to non-federally qualified subsistence users to help with conservation, while providing a meaningful subsistence priority for federally qualified subsistence users.

#### Motions passed on unanimous vote.

#### State Board of Game Call for Proposals

Christie Osburn (ADF&G) provided an overview of the Alaska Board of Game (BOG) call for proposals.

Motion made by Member Kramer, seconded by Member Loon, to submit the following proposal to the BOG for the Arctic/Western Region cycle:

• Limit harvest in Unit 23 on State managed lands to 4 caribou (3 bulls and 1 cow or 4 bulls) per year. The Western Arctic caribou herd (WACH) has continued to decline with the most recent estimate being 164,000 caribou. The Council is greatly concerned about the precipitous decline of the WACH and feel that this action is needed to slow the decline and prevent the herd from reaching a point of no return. The Council feels that the harvest recommendations set forth by the WACH working group would be a starting point for the conservation of the WACH while still allowing some harvest. The Council recognizes that subsistence users are already facing food insecurities, but this drastic reduction of caribou harvest is a means to help protect the caribou herd while still allowing some harvest.

#### Motion passed on a unanimous vote.

Motion made by Member Loon, seconded by Member Kramer, to submit the following proposal:

• Change the brown bear season on State lands in Unit 23 to a year-round season to match Federal regulations. The Council's justification for this proposal was based on that

brown bear populations have increased in GMU 23, and there is currently no conservation concern for hunting in June and July, which is when many area residents are at remote subsistence camps yet do not have opportunities to hunt brown bear then. Open hunting year-round would also encourage hunting and assist with the recovery of the declining caribou and moose populations that often fall prey to bears and increase safety of residents. The current bag limit for residents is 2 bears per regulatory year of which can be taken in the general hunt or by permit. This regulation change would also match the Federal Regulations for Unit 23.

#### Motion passed on a unanimous vote.

Motion made by Member Armstrong, seconded by Member Howarth to submit the following proposal:

• Close Unit 23 to hunting caribou by nonresident hunters to protect the declining caribou and to protect the lands to which the herd migrates. This will allow local people to harvest the caribou. There was some concern that limiting nonresident harvest would affect local residents that receive meat from the sport hunters. The Council and the stated that The Western Arctic Caribou Herd (WACH) population has been in decline for years and the low population level in 2022 is cause for concern. They are asking to close hunting of the WACH on Federal public lands in Units 23 to non-federally qualified subsistence users to help with conservation, while providing a meaningful subsistence priority for federally qualified subsistence users.

The motion passed with 5 votes in favor to 1 against.

#### 2021 Council Charter Review

Ms. Hutchinson-Scarbrough provided an overview of review process for the 2021 Northwest Arctic Council Charter. Ms. Loon offered a friendly recommendation to ensure the Council had representation from the communities of Noatak, Kivalina, and Buckland.

Ms. Sweeney (FWS) offered the Council options that they could use to address Ms. Loon's recommendation. Katya Wessels (OSM) offered further clarification on this topic, noting that the Council could add to the charter their desire to have a representative from all communities in the Northwest Arctic region (but could not designate zones or specific communities for individual seats on the Council).

The Council took the following actions:

Motion made by Member Armstrong, seconded by Member Howarth, to redistrict the Council's area to get desired representation. The area would include the (1) Upper Noatak/Kivalina area, (2) Kotzebue area, (3) Kiana/Noorvik/Selawik area, (4) Seward Peninsula area, Buckland/Deering, and (5) Upper Kobuk (Ambler/Kobuk/Shugnak).

#### Motion passed on a unanimous vote.

Motion made by Member Howarth, seconded by Member Armstrong, to write a letter to all of the communities in the region to solicit applications to the Regional Advisory Council.

Motion passed on a unanimous vote.

#### FY 2022 Annual Report

Ms. Hutchinson-Scarborough provided the Council with an overview of their draft FY 2022 annual report and requested feedback on any changes that they may have. It was noted that the dates of the meeting in the intro to the letter need to be updated as the Winter 2023 meeting was shifted by one day.

Motion made by Member Armstrong, seconded by Member Loon, to accept the annual report with an amendment to modify the dates of the meeting dates referenced in the letter.

#### Motion passed on a unanimous vote.

#### Subsistence Regional Advisory Council Correspondence Policy

Ms. Wessels (OSM) provided the Council with an overview of the proposed changes to the Subsistence Regional Advisory Council Correspondence Policy and offered them an opportunity to comment. The Council was concerned about having to follow guidelines that limited their ability to communicate with who they want and felt restricted.

#### 2020 Hunting and Trapping Regulations on National Preserves in Alaska

Emily Creek (NPS) provided the Council with an overview of the proposed changes to 2020 Hunting and Trapping regulations on National Preserves in Alaska and asked if the Council had any input to share. A Council member talked about how harvesting swimming caribou is a cultural practice. There was a reply from NPS that subsistence users are still allowed to use this method and that this would only apply to sport hunters. There was a discussion on what are considered navigable waters, differences in State and the BLM definitions, and where State jurisdiction is related to mean high water marks. There was also a reminder that this applies to National Preserves, and for this Council the Noatak Preserve in particular.

#### Subsistence Resource Commission Updates and Appointments

Ms. Creek (NPS) informed the Council that the NPS Subsistence Resource Commission (SRC) meetings that were intended to happen earlier this year have been postponed due to poor weather and will be rescheduled to a later date.

Justin Junge (NPS) asked the Council to appoint a representative to the Kobuk Valley SRC.

Motion made by Member Loon, seconded by Member Armstrong, to appoint Tristen Pattee to the Kobuk Valley SRC.

#### Motion passed on a unanimous vote.

Marcy Okada (NPS) asked the Council to appoint someone to the Gates of the Arctic SRC. The Council is going to wait until their fall meeting to discuss any appointments to this SRC.

#### **OTZ** Telecom Microwave Tower Input

Ms. Sweeny (FWS) and Bruce Seppi (BLM) introduced a request for input on impacts to subsistence of proposed OTZ Telecom Microwave Tower project and asked the Council for feedback on how this project might affect subsistence resources. The project is looking to bring improved internet services to rural communities. The project plans to start and complete this year. The Council discussed aspects of the project, including why they plan to use propane instead of diesel to power the towers.

# **OSM** Fisheries Updates

Dr. Voorhees (OSM) introduced the Fisheries Resource Monitoring Program (FRMP) update and provided a general overview of the FRMP process. Following this update, Ray Hander and Bill Carter (FWS) provided a summary of the findings from the long term FRMP project, Selawik River Inconnu Spawning Population Age Structure Evaluation and Spawner Recruitment Response to a 2004 Permafrost Thaw Slump, that is funded by OSM's FRMP.

Karen Hyer (OSM) provided a briefing that updated the Council in the Partners for Fisheries Monitoring Program. She also updated the Council on the most recent fisheries regulatory cycle, noting that there were no fish proposals for this region, and spoke about the next cycle in 2024.

# Northwest and Arctic Beaver Studies

Dr. Ken Tape (UAF) provide an update to the Council on his project to look at changes in beaver populations over time in the region, noting that there has been a substantial increase in the number of beaver in the region as identified by historic photographs and current monitoring.

Ms. Helen Cold (ADF&G) spoke about a project to collect Indigenous Knowledge across the region that is occurring concurrently with the work from Dr. Tape.

Dr. Mike Carey (USGS) discussed research to examine the effects of the beaver expansion on thawing of permafrost, fish community structure, bioaccumulation of mercury in fish, and disease vectors.

Dr. Carey (USGS) also provided the Council with an overview of a new project to examine the recent increase in orange coloration in Arctic streams associated with iron release from thawing permafrost soils. The project will continue throughout the region for the next few years.

# **Other Reports**

- Mr. Will Wiese (USFWS) provided an update on activities of the Selawik National Wildlife Refuge staff.
- Ms. Annie Carlson (NPS) provided an update on activities of the Western Arctic Parklands Parks staff.
- Ms. Marcy Okada (NPS) provided an update on activities of the Gates of the Arctic National Park and Preserve Park staff.
- Mr. Joe Dallemolle (NPS) provided an overview of commercial use operations and sport hunting for the Western Arctic Parklands. The information pertained primarily to the past three years. This covered commercial operations (transporters, air taxies, etc.) and sport hunting information from past seasons. State Wildlife Trooper Canteen also contributed to the discussion.
- Mr. Tom Sparks (BLM) provided an update, including the Ambler Road EIS, staffing changes, transporter activity, and an EIS for lifting of land orders.
- Ms. Morgan Urquia and Ms. Helen Cold (ADF&G, Division of Subsistence) provided an overview of the ongoing projects in the region, including updates and results. Projects include the Arctic Beaver Observation Network, Western Arctic Caribou Herd Harvest Assessment, and the Kiana Community Subsistence Harvest Assessment.
- Mr. Scott Ayers (OSM) provided the OSM update.

### **Future Meeting Dates**

The Council confirmed its Fall 2023 meeting to be held October 16-17 in Kotzebue.

The Council selected preferred dates for the Winter 2024 All-Council: first choice week of March 11 and second choice week of March 25.

The Council selected its Fall 2024 meeting to be held October 28-29 in Kotzebue.

### **Closing Comments**

Mr. Schaeffer: A lot has happened since the last meeting. It's been great to see the updates to the studies that have been taking place, especially the beaver studies. He noted that he's still concerned about the algae that they are seeing and hopes to see more information about this at future meetings. He also talked about the presentation on the Selawik slump and the rusting of Arctic streams presentations. He's impressed with the advancements with everything. Thanks to everyone that helped put the meeting on and participated.

Mr. Pattee: Thanks to everyone who provided reports. He's glad to be on the Council and be appointed to the Kobuk Valley SRC. He looks forward to the next meeting.

Mr. Armstrong: Thanked all the agencies for the reports that share what is really going on with the animals and waters. Thanks to the Council for talking about issues and hearing their reports as we try to work together to make the best-informed decisions in a way to protect the animals and fish that we live off.

Mr. Howarth: It's been a real good meeting. Thanks to everyone who participated. We need to educate our younger generation about hunting. The next meeting is probably going to be even better with all of the information given to us. He looks forward to providing this information at his next local tribal meeting.

Chairman Baker: Thanks for sticking it out. It's been a long couple of days. Thanks to the Council for the efforts. Hope everyone has a safe and successful harvesting season. Looking forward to seeing everyone in the fall.

The meeting adjourned at 4:43 pm on March 8, 2023.

Lisa Hutchinson-Scarbrough, DFO USFWS Office of Subsistence Management

Mr. Thomas Baker, Chair Northwest Arctic Subsistence Regional Advisory Council These minutes will be formally considered by the Northwest Arctic Subsistence Regional Advisory Council at its Fall 2023 meeting October 16-17, in Kotzebue, 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 Lisa Hutchinson-Scarbrough at: 1-800-478-1456 or 907-310-4097, email: lisa\_hutchinson@fws.gov.



# Federal Subsistence Board Meeting Advisory



Forest Service

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

**For Immediate Release:** August 3, 2023

**Contact:** Robbin La Vine (907) 786-3353 or (800) 478-1456 robbin\_lavine@fws.gov

# **Results from the Federal Subsistence Board Work Session**

During its August 2-3, 2023, work session, the Federal Subsistence Board (Board) discussed and approved responses to Regional Advisory Council (Councils) FY22 annual reports, reviewed Council recommendations for changes to Council charters, and received briefings on updates to the Regional Advisory Council Correspondence Policy and a letter from the Southeast Council to the Board on transboundary river watersheds.

The Board voted to recommend the Secretaries of the Interior and Agriculture (Secretaries) adopt the Councils' requests to modify their Council charters s to add language authorizing a non-voting young leader seat to the Membership and Designation Section of all ten Councils' charters. The Board also voted to recommend that the Secretaries adopt charter language submitted by the Northwest Arctic Council to improve geographic representation on the Council. The Board also approved individual customary and traditional use determination proposals ICTP23-01 and ICTP23-02 pertaining to areas managed by the National Park Service in Unit 13.

In addition to the public work session, the Board held an executive session on Thursday, August 3, 2023. The purpose of this meeting was to develop recommendations to the Secretaries of Interior and Agriculture for appointments to the Regional Advisory Councils. A summary of the executive session will be made available to the Councils and, upon request, to the public.

Information about the Federal Subsistence Management Program may be found on the web at <u>www.doi.gov/subsistence</u> or by visiting <u>www.facebook.com/subsistencealaska</u>.

**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 <u>fws-fsb-subsistence-request@lists.fws.gov</u>.

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FISH and WILDLIFE SERVICE BUREAU of LAND MANAGEMENT NATIONAL PARK SERVICE BUREAU of INDIAN AFFAIRS

> In Reply Refer To OSM.23111

# **Federal Subsistence Board**

1011 East Tudor Road, MS 121 Anchorage, Alaska 99503 - 6199



FOREST SERVICE

AUG 18 2023

Thomas Baker, Chair Northwest Alaska Subsistence Regional Advisory Council 1011 E. Tudor Road, MS 121 Anchorage, Alaska 99503

Dear Chair Baker:

The Federal Subsistence Board (Board) met on January 31–February 3, 2023, in Anchorage, Alaska to consider fisheries closure reviews and proposed changes to Federal subsistence management regulations for the harvest of fish, shellfish, and wildlife in Federal public lands and waters in Alaska. This letter provides a report on the actions taken by the Board on proposals and closure reviews affecting federally qualified subsistence users.

Section 805(c) of the Alaska National Interest Lands Conservation Act (ANILCA) provides that the Board will accept the recommendations of Subsistence Regional Advisory Councils (Councils) regarding take unless, (1) the recommendation is not supported by substantial evidence, (2) the recommendation violates recognized principles of fish and wildlife management, or (3) adopting the recommendation would be detrimental to the satisfaction of subsistence needs. When a Council's recommendation is not adopted, the Board is required by Secretarial regulations to set forth the factual basis and reasons for the decision.

The Board acted on 16 fisheries proposals and 19 fisheries closure reviews during the 2023–25 fisheries regulatory cycle, four deferred wildlife proposals WP22-07, WP22-08, WP22-10, and WP22-40 from the 2022–2024 wildlife regulatory cycle, and a threshold assessment of proposal NDP25-01 for rescinding a nonrural determination. The Board agreed with the recommendations of the Regional Advisory Councils (Councils), in whole or with modifications, on all 16 fisheries proposals. The Board accepted the recommendations of the Councils on 17 of 19 fisheries closure reviews. The Board also agreed with the affected Council's recommendations and adopted deferred wildlife proposal WP22-40. Lastly, the Board agreed with the affected Council's recommendation to move forward with a full analysis of the nonrural determination proposal NDP25-01.

Details of these actions and the Board's deliberations are contained in the meeting transcriptions. Copies of the transcripts may be obtained by calling the toll-free number 1-800-478-1456 and are available online at the Federal Subsistence Management Program website, https://www.doi.gov/subsistence/library/transcripts/federal-subsistence-board.

The Board uses a consensus agenda on those proposals and closure reviews where there is agreement among the affected Council(s), a majority of the Interagency Staff Committee, and the Alaska Department of Fish and Game concerning a proposed regulatory action. These proposals and closure reviews were deemed non-controversial and did not require a separate discussion. The Board did not address any fisheries proposals, either on the consensus or non-consensus agenda, affecting the Northwest Arctic Region.

The Board appreciates your Council's active involvement in and diligence with the regulatory process. The ten Councils continue to be the foundation of the Federal Subsistence Management Program, and the stewardship shown by the Council Chairs and their representatives at the Board meeting was noteworthy.

If you have any questions regarding the summary of the Board's actions, please contact Lisa Hutchinson-Scarbrough, Council Coordinator, at 907-310-4097 or lisa\_hutchinson@fws.gov.

Sincerely,

Inthony Chrust

Anthony Christianson Chair

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



FISH and WILDLIFE SERVICE BUREAU of LAND MANAGEMENT NATIONAL PARK SERVICE BUREAU of INDIAN AFFAIRS

OSM 23067

# Federal Subsistence Board

1011 East Tudor Road, MS 121 Anchorage, Alaska 99503 - 6199



FOREST SERVICE

AUG 02 2023

Thomas Baker, Chair Northwest Arctic Subsistence Regional Advisory Council c/o Office of Subsistence Management 1101 East Tudor Road, MS 121 Anchorage, Alaska 99503-6199

Dear Chair Baker:

This letter responds to the Northwest Arctic Subsistence Regional Advisory Council's (Council) Fiscal Year 2022 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

# 1. <u>Understandable information reaching to and from the village level</u>

The Council expressed concerns that information that Federal agencies provide to communities in their region, and which is posted on the Federal Subsistence Management Program website, is often not expressed verbally, or written in ways that are understandable to community members, particularly to elders, bilingual, and Iñupiaq speakers. In addition, the Council expressed the need for resource managers and other relevant agency staff to visit the communities, hold meetings there, and gather information from and listen to village level concerns.

#### **Response**:

This is a valid concern. Your same sentiments have recently been expressed at public hearings and Tribal consultations. The Federal Subsistence Management Program relies on the participation of rural Alaskan residents. The Board understands that for our Program to succeed we must present information in a way that is meaningful to participants. In 2010, Congress passed the Plain Language Act, requiring government documents be written in a way that the public can understand and use. Based on this Act, your guidance, and a need for our program to be more inclusive, the

Board will direct staff to brainstorm ways to clarify and make more understandable program outreach materials, documents, and presentations. Additionally, we agree that in person communications are more understandable and meaningful than written communications. The Board encourages your Council and the communities in your region to reach out to local field staff or the Office of Subsistence Management to request visits to specific communities.

Further, the Board recognizes how much is missed when Indigenous speakers cannot share knowledge in their own language. The Board is aware that the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council arranges for translators and the use of translation devices during their regular Council meetings for that very purpose. Such an option is tremendously rewarding for Council members and public participants who can share traditional knowledge and observations in their own language. It is even more rewarding to staff who benefit from the expertise they would miss without the translation option. Your Council may submit a request to the Office of Subsistence Management to have English-Iñupiaq translation services provided during your meetings if you feel it would be a benefit to Council members and other participants.

#### 2. <u>Federal, State, and cross regional coordination of caribou management that engages</u> <u>Tribes and communities</u>

The Council acknowledges that scientific and Traditional Ecological Knowledge research continues to be conducted on the Western Arctic Caribou Herd (WACH) and recognizes the importance of the WACH Working Group, for which the Council now has representation. In addition, many of the communities and local subsistence hunters are volunteering to take fewer animals than they need in an effort to help reduce the decline of the herd. However, the Council expressed the need for cross regional coordination of caribou management between the Federal and State agencies that better engages the local Tribes, regional Native organizations, and communities.

#### **Response**:

The Board supports the Council's desire for more cross regional coordination of caribou management. As mentioned, the Western Arctic Caribou Herd (WACH) working group is an important avenue for coordination amongst user groups across the range of the WACH, although Tribes and Native organizations are not directly involved. The North American Caribou Workshop and Arctic Ungulate Conference held in May 2023 in Anchorage brought together agency staff, academic researchers, and traditional knowledge holders from across the Arctic to share information on caribou herds and their management. OSM sponsored a member from each Council to attend the conference.

Council meetings are another great way to coordinate between entities. The Board encourages the Council to work with their Council Coordinator to invite representatives from Federal and State agencies, Tribes, Native corporations, and local communities to their meetings to discuss caribou management. The All-Council meeting scheduled for March 2024 will also be a wonderful opportunity for coordination on caribou management amongst affected Councils. Tribes and ANCSA corporations may also request government-to-government consultation with the Board at any time.

### 3. <u>Concern for the declining caribou herds, diseases of caribou, and other causes of</u> <u>mortality</u>

The Council appreciates that the Board recognizes residents of most communities in their region have been unable to harvest caribou during the traditional harvest period due to changes in migration patterns and other stressors on the caribou population. The Council would like to see continuing research and findings communicated to them on causes of caribou mortality, including diseases, starvation, predation, calf survival, hunting pressures, and effects of climate change. The Council received a report from the Alaska Department of Fish and Game at their fall 2022 meeting that the Western Arctic Caribou Herd was estimated at 164,000 caribou in July 2022, a decline of 24,000 from the 2021 population count. The Council members are extremely concerned regarding this report's findings and want additional research conducted on the causes of this decline. With caribou being a primary resource utilized by all the communities in the region, and with the herd size now below sustainable management goals, the Council is concerned that this will decrease food security and increase health problems in their communities as well as lessen their ability to use and teach traditional practices for obtaining, processing, preserving, sharing, and consuming this vital resource.

#### **Response**:

The Board shares the Council's concerns about the decline in the Western Arctic Caribou Herd (WACH). Federal and State biologists and other researchers are working together on multiple research topics pertaining to the WACH and other Alaskan and international caribou herds. During the May 2023 North American Caribou Workshop and Arctic Ungulate Conference, your Council's representative attended symposiums and presentations on ongoing caribou research projects and recent findings on causes of caribou mortality, including diseases, starvation, predation, calf survival, hunting pressures, and effects of climate change. Research is expected to continue to help further understand the root causes of caribou declines.

The continuation of the subsistence way of life and the health of wild resources necessary to meet these needs are of the highest priority. The Board recommends that the Council continues to work with your Council Coordinator to invite local Federal and State agency staff to your meetings to present their latest research and discuss priority research needs. The Board also requests that the Council continue providing traditional and local knowledge, as well as harvest data to help researchers refine and improve study methods and, ultimately, a better understanding of fish and wildlife ecology and management.

The Board encourages the Council members to communicate with the subsistence hunters in their region the importance of providing timely and accurate harvest reports, which in turn would allow for the more effective management of the WACH.

# 4. <u>Climate change effects on local resources and access for subsistence</u>

The Council continues to have many concerns over climate change causing anxiety about food security and food sovereignty in the region's communities. The Council is very concerned over the notable effects of climate change over the last few years to the environment, especially on the

local fish, wildlife, and plant resources utilized for subsistence. The Council also noted that the weather has become unpredictable with less freezing of sea and river ice, warmer temperatures year around, increases in severe storms causing erosion to beaches and coastal communities, and thawing of the permafrost. They've also noticed colored mineral seepage into local streams and are worried that it may be harmful for fish populations. Changes to the environment and unpredictable weather make it more difficult and dangerous for subsistence users to access traditional hunting, fishing, and gathering areas. The Council has also noticed the damage climate change is having on caribou and local take of caribou. For example, freezing rain has become more common, and when it freezes on top of the tundra, it is difficult for caribou to feed, leading to starvation or out-migration.

#### **Response**:

The Board shares your concern regarding the effects of climate change on the environment, including its effects on resources used for subsistence, and its resulting impact to food security and food sovereignty. The Federal Subsistence Management Program supports adaptation to changing climatic and environmental conditions by ensuring a regulatory process that facilitates flexibility. A responsive regulatory process can also ensure that people continue to access healthy local and traditional foods during times of unexpected shortage. The Special Action process provides an avenue for responding to unexpected issues and changes, and the Board will continue to be responsive to the need for quick action on out of cycle requests. Flexibility can also be built into the subsistence management system by delegating authority to local land managers. Delegation of authority enables managers to respond more quickly to changes in the timing and availability of subsistence resources.

More persistent changes to the seasonality and availability of resources due to issues like climate change can also be accommodated through the regulatory process. Closures to non-federally qualified users or ANILCA Section 804 prioritizations among federally qualified subsistence users may become necessary if shortages of traditional subsistence resources continue to be prevalent. Other species may also become more abundant and important to subsistence economies with shifts in environmental conditions. In this case, the Federal Subsistence Management Program can assist communities in determining seasons, harvest limits, and methods and means for harvesting these resources.

The Board also notes that the Council can invite representatives from State, Federal, nongovernmental, and other research organizations to give presentations on climate change effects and mitigation at its regular meetings. Some organizations to consider include:

- Alaska Center for Climate Assessment and Policy
- Alaska Climate Adaptation Science Center
- Alaska Department of Environmental Conservation: Climate Change in Alaska
- Experts identified through the U.S. Climate Resilience Toolkit
- Scenarios Network for Alaska + Arctic Planning
- The Alaska Native Tribal Health Consortium
- Conservation of Arctic Flora and Fauna (CAFF)

• Exchange for Local Observations and Knowledge in the Arctic (ELOKA)

# 5. Full Council membership including alternates and better geographic distribution

The Council continues to be concerned about vacancies on the Council and is hopeful that it will have full membership in 2023. While the Council appreciates all members, they expressed concern over the lack of representation from many of the communities within the region. The Council would like to see additional outreach conducted in unrepresented communities, particularly personal visits, to provide information on the Federal Subsistence Management Program and the Council. The Council also would like to have alternate Council members that could serve at the meetings in the event a Council member could not attend or resigned before their term ended.

### **Response**:

For the last few years, the Board has also been concerned with decreasing numbers of Council member applications and the vacant seats on the Northwest Arctic and other Councils across Alaska. In the 2023 Council appointment cycle, three seats will be open on your Council for the Secretaries of the Interior and Agriculture (Secretaries) appointment of new members or reappointment of incumbents. This year your subsistence region received more applications than in recent years, which should allow the Secretaries to fill all the seats. The Board will meet for an executive session in August 2023 to make recommendations to the Secretaries on appointments; subsequently, the Secretaries will make their decision on appointments, likely by the end of 2023.

The Board will request that OSM conduct additional outreach during the 2024 Council appointment cycle to unrepresented communities in the Northwest Arctic Region to solicit applications. The Board would also like to encourage the members of the Council to reach out to their contacts across the region and request community representatives apply or nominate them. Council members can nominate potential candidates themselves.

Currently, your Council charter only allows alternate members to be appointed when a Council member vacates a seat by resigning, retiring, moving out of the region, or passing away prior to the end of their term. If the Council would like to suggest a change to their charter to allow an alternate member to be able to attend meetings when a primary seated Council member cannot attend, the Council could ask for this change during their winter 2025 charter review.

# 6. Predator concerns, interfering with subsistence activities and safety of communities

The Council has concerns about a notable increase in bear and wolf populations in the area, and their impact on the declining caribou population. In addition, communities are reporting more and more encounters with bears in their communities, which is a safety concern, particularly for their children. The Council would like to see more research conducted on predators and their effects on subsistence resources, increased predator management, and more bear hunting opportunities. The Council would like to see more research on best management practices.

#### **Response**:

Outreach in villages about bear and wolf safety is important, especially for the security of children. Reasons other than higher population levels may account for increased sightings of wolves and bears within and surrounding villages. For instance, when prey populations are lower, predators travel further for food, and take more risks. Therefore, while predator populations may not be increasing, their densities in certain areas could be increasing. These areas could overlap with villages and places where humans and predators share the same resources, increasing human-predator encounters even though region-wide predator populations have not increased (Fronstin 2023, pers. comm.; Joly 2023, pers. comm.)<sup>1</sup>. The Board encourages the Council to coordinate with local Federal and State agency staff to develop predator safety outreach programs and discuss best management practices.

Multiple studies have been published on brown bears that focused on the southern slopes of the Brooks Range from 2014-2017. During these studies researchers observed these bears are relatively small, do not produce a lot of young, live at relatively low densities, and mature at older ages than coastal populations (Joly 2023, pers. comm.). Surveys conducted in 2021 suggest that the Seward Peninsula population is stable. A Lower Noatak bear survey is currently scheduled to begin in the summer of 2024 (Fronstin 2023, pers. comm.). The National Park Service (NPS) planned to conduct wolf den surveys in April/May and den visits in June/July of this year<sup>2</sup>. Additionally, a pilot study began in 2020 using genetic and observational methods to gain more information on wolf demographics and behavior. Aerial wolf surveys in Noatak National Preserve have consistently found four to five active groups every year since 2020 (Fronstin 2023, pers. comm.). The Council can invite NPS staff to present on this research findings at future meetings. You may also consider inviting the Alaska Department of Fish and Game to present on the topic of predator management.

The Council can submit proposals to the Board and the Alaska Board of Game to change bear and wolf harvest regulations under Federal and State regulations, respectively. Predator management is not part of the Federal Subsistence Management Program but could be addressed through the State regulatory process.

In closing, I want to thank you and your Council for your continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and am confident that the Federally qualified subsistence users of the Northwest Arctic Region are well represented through your work.

Sincerely,

<sup>&</sup>lt;sup>1</sup> Fronstin, R. 2023. Wildlife Biologist, Western Arctic National Parklands. Personal communication: e-mail NPS. Kotzebue, AK. Joly, K. 2023. Wildlife Biologist, Gates of the Arctic National Park and Preserve. Personal communication: e-mail NPS. Fairbanks, AK.

 $<sup>^{2}</sup>$  Den surveys are observations via trail cameras, drones, remote sensing, or by staff using binoculars, den visits are physical visits by biologist to the den to do a count or inspection and/or installation of collars or tracking tags.

Anthony Christianson

Chair

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



# Federal Subsistence Board News Release



Forest Service

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

**For Immediate Release:** June 12, 2023

Contact: Robbin La Vine Policy Coordinator (907) 786-3353 or (800) 478-1456 robbin\_lavine@fws.gov

# The Federal Subsistence Board Rejects Temporary Wildlife Special Action Requests WSA22-05 and WSA22-06 (Western Arctic Caribou)

The Federal Subsistence Board (Board) met by public teleconference on June 8, 2023. The Board voted to reject Wildlife Special Action requests WSA22-05 and WSA22-06. The Board stated that an immediate reduction to four caribou per year would be detrimental to subsistence needs. The Board acknowledged the need to focus on caribou conservation and that reductions in harvest limits may be needed in the future. Four proposals affecting the Western Arctic Caribou herd have been submitted for the 2024-2026 Federal wildlife regulatory cycle and will be considered by the Board at its spring 2024 wildlife regulatory meeting.

**Temporary Wildlife Special Action Request WSA22-05**, submitted by the Northwest Arctic Subsistence Regional Advisory Council, requested the Board to reduce the caribou harvest limit in Unit 23 from five caribou per day to four caribou per year, only one of which may be a cow, for the remainder of the 2022-2024 regulatory cycle.

**Temporary Wildlife Special Action Request WSA22-06**, submitted by the Western Interior Alaska Subsistence Regional Advisory Council, requested the Board to reduce the caribou harvest limit across the range of the Western Arctic Caribou Herd from five caribou per day to four caribou per year, only one of which may be a cow, for the remainder of the 2022-2024 regulatory cycle. Specifically, reduce the harvest limit in Units 21D remainder, 24A remainder, 24B remainder, 24C, 24D, and all caribou hunt areas within Units 22, 23, and 26A.

Information about the Federal Subsistence Management Program may be found on the web at <u>www.doi.gov/subsistence</u> or by visiting <u>www.facebook.com/subsistencealaska</u>.

**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.

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1011 East Tudor Road MS-121 • Anchorage, Alaska 99503-6199 • subsistence@fws.gov • (800) 478-1456 / (907) 786-3888 This document has been cleared for public release # 2606092023. Federal Subsistence Board's Proponent Letter to NWARAC on Decision on Emergency Special Action Request WSA22-05



FISH and WILDLIFE SERVICE BUREAU of LAND MANAGEMENT NATIONAL PARK SERVICE BUREAU of INDIAN AFFAIRS

> In Reply Refer To: OSM.23092

# **Federal Subsistence Board**

1011 East Tudor Road, MS 121 Anchorage, Alaska 99503 - 6199



FOREST SERVICE

JNN 53 5053

Northwest Arctic Subsistence Regional Advisory Council c/o Office of Subsistence Management 1011 E. Tudor Road, MS 121 Anchorage, AK 99503

Dear Council:

This letter responds to your Emergency Special Action Request WSA22-05, requesting the Federal Subsistence Board (Board) to reduce the Federal subsistence caribou harvest limit in Unit 23 from five caribou per day to four caribou per year, only one of which may be a cow, for the remainder of the 2022-2024 regulatory cycle.

The Board voted to reject Wildlife Special Action request WSA22-05. The Board stated that feedback from Tribal consultation and the two public hearings held for this special action indicated that an immediate reduction to four caribou per year would be detrimental to subsistence needs. The Board acknowledged the current caribou conservation concerns and that reductions in harvest limits may be needed in the near future.

Four proposals affecting the Western Arctic Caribou herd have been submitted for the 2024-2026 Federal wildlife regulatory cycle and will be considered by the Board at its spring 2024 wildlife regulatory meeting. The Board wants a more robust discussion of potential harvest reduction alternatives. The Board acknowledged that the Federal regulatory proposal process will ensure an analysis is reviewed by the public, all affected Regional Advisory Councils, and our Federal and State agency partners in the range of the Western Arctic Caribou Herd, resulting in formal recommendations to the Board and informed deliberation by the Board.

The enclosed copy of the staff analysis, including the Interagency Staff Committee recommendation, provides further information and justification for this action. If you have any questions, please contact Kendra Holman, Acting Wildlife Division Supervisor, Office of Subsistence Management, at (907) 786-3357.

Sincerely,

Chritmany Christ

Anthony Christianson Chair

#### Enclosure

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






## 2023 Photocensus Results

- Rivest Estimate: <u>Pending</u>
  - +/- ? (95% CI)
- Minimum Count: <u>Pending</u>
- 2022 164,000 2021 188,000

- 2016 201,000













# Recommended Harvest

			•			•			•		
	Increasing	Adult Cow Survival >88%	Calf Recruitment >22:100	Pop: 200,000+	Harvest: 14,000+	Pop: 150,000- 200,000	Harvest: 10,000- 14,000	Pop: 100,000- 150,000	Harvest: 6,000- 10,000	Pop: <100,000	Harvest: <6,000
Population Trend	Stable	Adult Cow Survival 80%-88%	Calf Recruitment 15-22:100	Pop: 230,000+	Harvest: 14,000+	Pop: 170,000- 230,000	Harvest: 10,000- 14,000	Pop: 115,000- 170,000	Harvest: 6,000- 10,000	Pop: <115,000	Harvest: <6,000
	Declining	Adult Cow Survival <80%	Calf Recruitment <15:100	Pop: 265,000+	Harvest: 14,000+	Pop: 200,000- 265,000	Harvest: 10,000- 14,000	Pop: 130,000- 200,000	Harvest: 6,000- 10,000	Pop: <130,000	Harvest: <6,000
	Management	Level		Liberal		Conservative		Preservative		Critical	

Recommended harvest rate at the preservative declining level • ~ 4.6% at 130,000 • ~ 5% at 200,000

Ö

- 4.8% harvest of 164,000 combination of bulls/cows/calves
- What about harvest ratios?
- GMU 23 harvest is approximately 70% bulls and 30% cows
- At 164,000 treating calves as adults, the plan recommends a harvest of up to... 7,872 caribou
  70% = 5,511 bulls
  30% = 2,361 cows



# Management Plan: Harvest Recommendations

Conservative Management (orange)

- 1. Encourage voluntary reduction in calf harvest... $\lambda$
- 2. No non-resident cow harvest 🔪
- 3. Restrict nonresident bull harvest  $\sqrt{}$
- 4. Encourage voluntary reduction in resident cow harvest  $\sqrt{}$
- 30 bulls: 100 cows Limit subsistence harvest of bulls only if < 5.

Preservative Management (yellow)

- . <u>No harvest of calves</u>
- Limit harvest of cows by residents through permit hunts and/or village quotas N.
- Limit subsistence harvest of bulls to maintain at least 30 bulls:100 cows . .

<u>Harvest restricted to residents only, according to State and federal law, closure of</u> V

<u>some federal public lands may be necessary</u>

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<u>Net reduction of harvest is necessary</u>

- Cow harvest highest priority
- <u>Bull harvest maintain healthy bull:cow</u>

•

## <u>Get accurate harvest data</u>

- Through permits
- Other tools as needed

<u>Increase understanding of mortality causes</u>

Mitigate if possible

### **Continued Monitoring**



## Harvest Reporting

# Western Arctic Herd Subsistence Harvest

2,000 caribou per year —with an average of 1,000 reported harvests each year, Long-term subsistence harvest for the Western Arctic Herd is estimated to be only a small fraction of caribou harvest is currently being documented.



### Summary

### <u>Biological Concerns:</u>

- Approaching the Critical level (WAH WG Plan)
- Short-yearling recruitment average
- Calving above average
- <u>Adult cow survival below average</u>
- <u>Harvestable Surplus below long-term average harvest</u> ē
- Non-local/Nonresident harvest is a very small part of total harvest
- Better understanding of resident harvest is necessary





### **Northwest Arctic RAC Meeting**

### Species and Survey Update - Fall 2023

Fish and Game and the NPS completed abundance surveys of moose in the Lower Noatak survey area and of muskoxen within the Cape Thompson Core area. Results from these surveys will be presented during the Federal Wildlife Update.

### Bear

### <u>Harvest</u>

- Total harvest was lower this fall than previous years.
- For the fall hunt, 16 bears were harvested by nonresidents and 5 were harvested by Alaska residents.
- Residents reported harvest of 16 bears this spring. There was no nonresident spring harvest.

### Sheep

### <u>Surveys</u>

- A minimum count survey was completed in the central De Long mountains last July. In total, 97 sheep were observed. Composition ratios in the central De Longs were up from last year at 30 lambs:100 ewe-like and 50 rams:100 ewe-like. However, fewer ewe-like were observed relative to previous surveys which may be skewing these compositions.
- Counts remain low, with very no full-curl rams observed.

### <u>Research</u>

- A study to investigate factors that are limiting these populations is planned to begin late October.
- This study will utilize collared animals to monitor mortality and movement in adults and to assess lamb production.
- Health assessments will be conducted at time of collaring to determine nutritional condition and survey for disease and parasite presence.
- A project update will be provided at the spring meeting.

### Miscellaneous

• Ptarmigan and Grouse- the small game program is looking to collect wings and heads of harvested birds for species and age data. If you're interested in donating samples, envelopes for samples are provided at the Kotzebue F&G office.

### Western Arctic National Parklands Wildlife Report – Fall 2023

National Park Service U.S. Department of the Interior



### CAPE KRUSENSTERN NATIONAL MONUMENT NOATAK NATIONAL PRESERVE KOBUK VALLEY NATIONAL PARK

### Caribou

- The WACH has declined by 2/3's over the past 20 years. The 2022 census showed the herd declined to 164,000 animals.
- Winter 2023 was one of the most difficult ever for adult female survival. 15% of the collared animals died (85% survival) between Dec 2022 and Apr 2023 (a 5-month period). In the past, winter wasn't typically a season of low survival. If we include May and June, the survival rate for this 7-month period is just 77% (23% mortality). Only four other years have had lower survival rates than this since 1987. This is very concerning, because adult female survival is a main driver of the population; this may indicate continued decline of the herd.
- ADFG and NPS deployed 58 collars in the spring.
- ADFG successfully completed the photo census in July 2023, results are pending.
- Regulatory changes are currently in debate and will be decided by the FSB in the coming months. One proposal under consideration would limit harvest in GMU23 to 4 caribou / person / year, only one of which can be a cow.

	2017	2019	2021	2022
Herd Count (estimated)	259,000	244,000	188,000	164,000
Calf Production	83%	81%	68%	-
Calf Survival	42%	-	-	-
Yearling Recruitment	22:100	18:100	17:100	
Herd Mgmt. Level	Conservative Stable	Conservative Declining	Preservative Declining	Preservative Declining

Table 1. Western Arctic Herd demographics for 2017 - 2022



Caribou crossing Kobuk River at Onion Portage 2019 by Kyle Joly, NPS

### Moose

ADFG and NPS conduct rotating moose surveys in 6 areas in GMU 23. This year the Lower and Upper Noatak areas were surveyed.

- ADFG & NPS completed an abundance survey in the Lower Noatak (LN) in April, population estimate was 789 (90% CI: 622-955) with 14% recruitment and 16 calves to 100 adults.
- The results suggest that the LN population has been stable since 2018. Recruitment and calf ratio is the highest we have seen since 2013.
- A trend count was completed in the Upper Noatak this spring. A total of 280 moose were observed, with 30 calves to 100 adults and 23% recruitment. Due to the historically low numbers of moose (2010 = 100 moose), low hunting pressures, lack of nearby communities, and logistical challenges, the Upper Noatak is not surveyed as regularly as the other areas. The recent increase will prompt an increase in efforts to monitor the area.
- ADFG and NPS plan on surveying the Upper Kobuk next.

Year	Survey Area	Calf: Adult	Population #	Trend
2010	Upper Noatak		100	
2023	Upper Noatak*	30:100	280	Increase
2018	Lower Noatak	13:100	886	
2023	Lower Noatak	16:100	789	Stable
2017	Lower Kobuk	15:100	1346	
2022	Lower Kobuk	15:100	1517	Stable
2016	Selawik/Tagagawik	14:100	940	
2021	Selawik/Tagagawik	10:100	1036	Stable
2014	Upper Kobuk	7:100	727	
2019	Upper Kobuk	23:100	601	Stable
2015	23SW	15:100	310	
2020	23SW	22:100	433	Stable

**Table 2.** Moose demographics by survey area and year.\*Trend count vs. the normal GeoSpatial Population Estimate.



### **Dall Sheep**

- NPS & ADFG have been surveying sheep annually since the population crashed in 2014 and have observed very little change in the population status. An emergency closure on harvest has been in place since then.
- Funding was received to develop a more precise, faster, and less expensive method of monitoring sheep. This 3year project will begin in 2024.
- ADFG is beginning a sheep collaring project this year to better understand movement, health, and mortality in the Bairds and DeLong sheep populations (see ADFG presentation).



Figure 1. Dall's sheep survey areas in Noatak National Preserve. 1600







### Potential reasons for sheep decline in WEAR:

- The small local population lives at the northwestern edge of the species range and therefore already exist at the limit of their physiological and biological tolerance. This makes them even more susceptible to small changes in conditions.
- Research has linked large-scale declines to severe weather events such as icing events, deep snow, and extreme cold. These events along with changes in forage due to climate change can affect access to resources and increase vulnerability to predation.

### Muskoxen

NPS and ADFG conduct annual muskox surveys in the CAKR core area.

2022

- 2022 CAKR Core estimated population was 343 individuals (95% CI: 273-468). The variation observed among this period is believed to be due to group movement between the core and expanded area. The expanded area showed growth between 2016 and 2020.
- 2022 CAKR Core sex-age composition was 30 mature bulls to 100 cows; proportion of bulls was 14% (95% CI: 12-15%). Short yearling proportion was 14% (95% CI: 13-15%). Both measures have been stable throughout the core area.

### 2023

- NPS & ADFG surveyed the CAKR Core population for abundance and composition in March.
- Abundance estimates are pending; however, the minimum count results (159 individuals) were the lowest observed in recent history. Preliminary composition results were similar to 2022 and suggest population stability.
- The low minimum count is believed to be due to animal movement in response to unusually deep snow in their normal habitat as opposed to mortality.





**Figure 5.** Total estimated muskox population in core Cape Thompson (CAKR) survey area by year, from 2011-2020. Distance sampling was used to obtain estimates in all surveys.

### **Brown Bears**

### 2023

- NPS, ADFG, and the Wildlife Conservation Society collaborated to complete a successful brown bear survey for the Seward Peninsula in May 2021.
- Estimates suggest the Seward Peninsula population is stable, neither increasing nor decreasing. Cub numbers were substantially higher than in 2015 however, litter size and cub survival vary greatly over time making them less reliable for predicting population change.
- Currently, the Lower Noatak bear survey is slated for summer 2024.



**Figure 7.** Brown bear population estimates for the Seward Peninsula study area, which includes Bering Land Bridge National Preserve. Gray error bars indicate 95% Bayesian Credible Intervals.

Survey Area	Year	Estimated # of Adults in Area
Seward Peninsula	2015	462
Seward Peninsula	2021	527
Lower Noatak Drainage	2016	1694
Upper Noatak Drainage	2017	720
Gates of the Arctic NP	2018	515

**Table 3.** Brown Bear abundance estimates per surveyarea and year.



**Figure 6.** Map of Seward Peninsula brown bear survey area.



Photo by Tina Greenawalt

### Wolves

- In 2020 we began a pilot study titled 'Evaluating the Feasibility of Mixed DNA Sampling to Obtain Wolf Population Demographics in Northwest Alaska'. The purpose of the study is to gain more knowledge about wolf demographics in Noatak National Preserve, using genetic and observational methods.
- Historic studies in NW Alaska found a mean territory size of 902,500 acres and a mean density of 6 wolves per 241,000 acres. Given this, NOAT at 6.7 million acres, can support an average of 7 territories or 166 wolves.

### 2023

- See Table 4 for annual survey results.
- NPS completed additional den surveys in April/May and den visits in July this year.
- This year we began collaborating with a lab to analyze collected fecal and fur samples for DNA analysis.
- During our den visit, we were able to collect 10 samples for sample calibration, results are pending.
- Our plans are to continue collecting enough data and samples to obtain information on population estimates and health. We are also looking into putting den cameras at den sites that are known to be re-used annually.
- Once we have the DNA analyses calibrated, we will reach out to local villages and subsistence users for their help in sample collection and local knowledge.

Year	Aerial Search Time (Hrs.)	No. of Active Groups (Spring/Early Summer)
2020	71	4 - 5
2021	42	5
2022	35.75	5
2023	35.28	4

**Table 4**. Active wolf family groups found in Noatak NP,minimum count from spring aerial den surveys.



Raime Fronstin collecting wolf scat for DNA analysis. Photo by Annie Carlson 2023



Two of six pups from this year's litter. Photo by Annie Carlson 2023



Adult wolf kindly letting us know we were unknowingly too close to the den. We moved further away. Photo by Annie Carlson 2023

### **Contact and Relevant web addresses**

- **Contact:** Dr. Raime Fronstin, Wildlife Biologist, Western Arctic National Parklands -Raime\_Fronstin@nps.gov
- Western Arctic National Parklands Facebook https://www.facebook.com/KotzebueMuseum/
- Arctic Network Inventory and Monitoring Program https://science.nature.nps.gov/im/units/arcn/
- Cape Krusenstern National Monument http://www.nps.gov/cakr/index.htm
- Kobuk Valley National Park http://www.nps.gov/kova/index.htm
- Noatak National Preserve https://www.nps.gov/noat/index.htm

### **Presentation Procedure for Proposals and Closure Reviews**

- 1. Introduction and Presentation of Draft Staff Analysis
- 2. Report on Board Consultations:
  - a. Tribes
  - b. ANCSA Corporations

### 3. Agency Comments:

- a. ADF&G
- b. Federal
- c. Tribal

### 4. Advisory Group Comments:

- a. Other Regional Advisory Council(s)
- b. Fish and Game Advisory Committees
- c. Subsistence Resource Commissions
- 5. Summary of Written Public Comments
- 6. Public Testimony
- 7. Regional Council Recommendation (motion to support)

### 8. Discussion/Justification

- Is the recommendation consistent with established fish or wildlife management principles?
- Is the recommendation supported by substantial evidence such as biological and traditional ecological knowledge?
- Will the recommendation be beneficial or detrimental to subsistence needs and uses?
- If a closure is involved, is closure necessary for conservation of healthy fish or wildlife populations, or is closure necessary to ensure continued subsistence uses?
- Discuss what other relevant factors are mentioned in OSM Draft Staff Analysis

### 9. Restate final motion for the record

**10.** Council's Vote

	WCR24-19 Executive Summary
Closure Location and Species	Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage—Muskox
Current Regulation	Unit 23–Muskox
	Unit 23, south of Kotzebue Sound and west of and including Aug. 1- Mar. 15 the Buckland River drainage - 1 bull by Federal permit or State permit Federal public lands are closed to the taking of musk oven
	except by federally qualified subsistence users hunting under these regulations
OSM Preliminary Conclusion	Retain the Status Quo
Seward Peninsula Subsistence Regional Advisory Council Recommenda tion	
Northwest Arctic Subsistence Regional Advisory Council Recommenda tion	
Interagency Staff Committee Comments	

WCR24-19 Executive Summary					
ADF&G Comments					
Written Public Comments	None				

### FEDERAL WILDLIFE CLOSURE REVIEW

### WCR24-19

**Issue**: Wildlife Closure Review WCR24-19 reviews the closure to muskox hunting by non-Federally qualified users in Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage (Unit 23 SW).

**Closure Location and Species:** Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage—Muskox (**Figure 1**)

### **Current Federal Regulation**

### Unit 23-Muskox

Unit 23, south of Kotzebue Sound and west of and including the Buckland Aug. 1- Mar. 15 River drainage - 1 bull by Federal permit or State permit

Federal public lands are closed to the taking of musk oxen except by federally qualified subsistence users hunting under these regulations

### Closure Dates: Year-round

### **Current State Regulation**

### Unit 23-Muskox

*Residents: Seward Peninsula west of and including the Buckland* TX106 Aug. 1-Mar. 15 *River drainage - One bull by permit* 

### **Regulatory Year Initiated:** 1995

### **Extent of Federal Public Lands/Waters**

Unit 23 is comprised of 71% Federal public lands and consist of 40% National Park Service (NPS) managed lands, 22% Bureau of Land Management (BLM) managed lands, and 9% US Fish and Wildlife Service (USFWS) managed lands.

Unit 23 SW is comprised of 50% Federal public lands and consist of 34% BLM managed lands and 16% NPS managed lands (**Figure 1**).



Figure 1. Map of Federal muskox hunt area Unit 23 SW.

### **Customary and Traditional Use Determination**

Residents of Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage have a customary and traditional use determination (C&T) for muskoxen in Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage.

### **Regulatory History**

In 1991, the BLM submitted and then withdrew Proposal P91-94 to add "no open season" and "no customary and traditional use determination" to muskox regulations in Unit 23. BLM submitted the proposal because the population estimate of 123 muskoxen did not support a viable hunt (OSM 1991).

A cooperative muskox management effort for the Seward Peninsula was begun in 1993 with the creation of the Seward Peninsula Muskox Cooperators Group (Cooperators). Muskox management efforts were guided by recommendations from this group, and the Seward Peninsula Cooperative Muskox Management Plan (1994) established the guiding management goals for muskoxen in this region.

In 1995, the Seward Peninsula Subsistence Regional Advisory Council (Council) submitted Proposal P95-44 to establish muskox hunts in Units 22D and 22E because the muskox population could withstand a harvest of 15 bulls as recommended by the Seward Peninsula Cooperative Muskox Management Plan (OSM 1995a). The Federal Subsistence Board (Board) adopted Proposal P95-44 with modification to establish the first Federal muskox hunt on the Seward Peninsula. The Board established a season of Sep. 1–Jan. 31 for Units 22D, 22E, and 23 west of and including the Buckland River drainage (Unit 23 SW), with a harvest limit of one bull by Federal permit and a quota of 3% of the population within each subunit from the most recent census and closed Federal public lands to the harvest of muskoxen except by Federally qualified subsistence user (FSB 1995a).

In 1998, the Seward Peninsula Council submitted Proposal P98-89 to extend the muskox season three months to Aug. 1–Mar. 31 for Units 22D, 22E, and Unit 23 SW. However, as part of the consensus agenda, the Board adopted Proposal P98-89 with modification to extend the season to Aug. 1–Mar. 15 in these areas. This modification was made due to biological concerns that hunting in late March could stress cows shortly before the calving season.

A shared Federal and State permit system for muskox on the Seward Peninsula was supported by the Seward Peninsula and Northwest Arctic Councils and adopted by the Board in 1998 (FSB 1998). In January 1998, the Cooperators met to discuss options for a combined Federal and State muskox harvest on the Seward Peninsula. The group reached consensus involving management on a subunit basis, allowing for continued growth of the population and increased harvest opportunities, with the intent that the Muskox Management Plan would be amended in the future to reflect these changes. Six affected villages (Brevig Mission, Buckland, Deering, Shishmaref, Teller, and Wales) considered allowing State harvest to increase harvest opportunities. Individual villages made decisions on the percent harvest rate and how the harvest should be divided between the State and Federal systems within their respective subunits. Village recommendations were summarized in a resolution written and supported by the Council in 1998 and subsequently presented to the Alaska Board of Game (BOG), which approved a Tier II subsistence muskox hunt for the Seward Peninsula with the assumption that this would be part of a combined Federal/State harvest program. Also in 1998, the Board followed the recommendations of the Seward Peninsula and Northwest Arctic Councils and approved a special action (WSA97-14) establishing these regulations for the 1998/99 Federal subsistence muskox season (FSB 1998).

In 1999, Proposal WP99-46 put the temporary regulations in WSA97-14 into codified regulation. Due to the long traveling distances needed to reach Federal lands and the poor travel/snow conditions during that time, the six affected villages supported the combination of the State and Federal harvest systems to create more harvest opportunities due to declining hunter success rates under the Federal subsistence hunt. The BOG adopted the combined Federal and State harvest into permanent State regulation in 1998. The consensus was to manage on a subunit basis within Unit 22 and Unit 23SW to allow for continued growth of the muskox population in this region and to increase harvest opportunities. Sharing the harvest quota between Federal and State systems helped meet local subsistence needs that may not have been met under only the Federal or State system separately. The

cooperative management dispersed hunting pressure over an entire area regardless of land ownership to create a more biologically sound management approach (OSM 2001).

In 2001, the Board adopted Proposal WP01-35, changing the Unit 23 SW harvest limit from one bull to one muskox. However, cows could only be taken from Jan. 1–Mar. 15 and no more than 8 cows could be harvested. Total harvest could not exceed 13 muskoxen. The Cooperators unanimously supported submitting the proposal to provide more subsistence opportunity, to better coordinate between State and Federal hunts, and because there were no conservation concerns (OSM 2001). The BOG adopted similar regulations.

In 2002, the Board adopted Proposal WP02-37 with modification, which delegated authority to the Superintendent of the Western Arctic National Parklands (WEAR) to announce harvest quotas and any needed closures in consultation with the Alaska Department of Fish and Game (ADF&G) and the Bureau of Land Management (BLM) in Units 22B, 22D SW, 22D remainder and 22E. This resulted in more efficient management of the Seward Peninsula muskox population. The modification to this proposal was to make minor adjustments to the regulatory language, as recommended by the Seward Peninsula and Northwest Arctic Councils.

In 2006, the Board adopted Proposal WP06-55, establishing a designated hunter permit for muskox in Unit 23 SW.

In 2008, the BOG made several regulatory changes affecting muskox in Unit 22B, 22D and 23 SW by adopting Proposal 77 with modification. Notably, registration permits were required for residents, rather than Tier II hunts, with permit distribution limited to vendors in Unit 22. This also opened a nonresident season via draw permit in Unit 22D southwest and remainder (Gorn 2011, Hughes 2018, pers. comm.). Trophy destruction was required for all skulls removed from Unit 22.

In 2010, the Board adopted Proposal WP10-84 with modification, clarifying the regulatory language and requiring a Federal permit or a State Tier I permit (instead of Tier II) to harvest muskox in Unit 23 SW. The Board revised permit requirements to maintain consistency with recent changes under State regulations.

In 2011, the BOG adopted Proposal 23, making the muskox hunting regulations in Unit 22 part of a threshold-based hunt regime conditioned on the relationship between the Amount Necessary for Subsistence (ANS) and the available harvestable portion for the Seward Peninsula muskox population, which includes all of Unit 22 and Unit 23 SW (Dunker 2018, pers. comm.). The regulatory thresholds defined conditions for Tier II hunts (harvestable portion below the ANS), Tier I registration hunts (harvestable portion within the ANS range) and registration/drawing hunts (harvestable portion above ANS). This change was in response to significant muskox population declines, low bull:cow ratios, and high harvest of mature bulls documented by ADF&G. Based on the implementation of the new harvest guidelines intended to address the high harvest of mature bulls and the decline in bull:cow ratios and based on further population declines revealed in March 2012 population surveys, State Tier II hunts were required in Unit 22B, 22D and 23 SW (22E retained use of RX104) for 2012-2013 regulatory

year due to the reduction of the harvestable surplus being below the lower end of the ANS (Dunker 2018, pers. comm.).

In 2014, the Board adopted Proposal WP14-41 with modification, eliminating the cow muskox hunt in Unit 23 SW because of conservation concerns. This proposal also authorized Federal managers to limit the number of Federal muskox permits available. This closure was also reviewed as part of Proposal WP14-41, and the Council decided to maintain status quo.

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 presented to Councils who then decided whether to maintain the closure or to submit a regulatory proposal to modify or eliminate the closure.

Also in 2020, WCR20-19 reviewed the Federal public lands closure in Unit 23 SW. The Board voted to maintain status quo because of the low harvestable surplus, to maintain a Federal subsistence priority, and to protect the muskox population.

In 2022, Temporary Wildlife Special Action WSA22-01a was approved by the Board for the 2022-2024 seasons. This special action changed the Federal muskox permit system for all six of the Seward Peninsula muskox hunt areas from a Federal registration permit to a Federal drawing permit (WSA22-01b addressed the Cape Thompson muskox population). Language in the Delegation of Authority letters (DALs) to the BLM and NPS in-season managers was standardized and clarified, and the inseason manager for the Seward Peninsula muskox hunt area in Unit 23 was changed from the WEAR superintendent to the BLM Anchorage Field Office manager to better reflect land status. Permits had been being distributed via a draw system for years, and unclear language in the DALs had been misinterpreted. The Board adopted the request to allow for effective and flexible hunt management and to ensure the sustainable harvest of muskoxen and equitable distribution of Federal permits.

### Closure last reviewed: 2020 - WCR20-19

### **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 Board's intent was to provide subsistence opportunity for hunting muskox in Unit 23 SW, maintaining a subsistence priority as mandated by ANILCA. The closure began in 1995when the initial C&T and hunt were established by Proposals P95-43 and P95-44, respectively.

### **Council Recommendation for Original Closure:**

The Northwest Arctic Council opposed Proposal P95-44, stating "let the State season and the system work for a year to see if it meets the needs of the local people. If it does not, the Regional Council could always initiate a proposal to deal with the situation." However, at the Board meeting, the Chair of the Council supported modified Proposal P95-44, which established a muskox hunt for Federally qualified subsistence users in Unit 23 SW (and closed the area to non-Federally qualified subsistence users) (FSB 1995).

### **State Recommendation for Original Closure:**

The State was neutral on the original closure (P95-44). While the State agreed with the intent of the cooperative muskox management effort, it recommended postponing a decision on P95-44 until the BOG decided on State regulations for muskox in Units 22 and 23 (OSM 1995a). The State submitted a request for reconsideration, R95-05, requesting that the Board rescind their decision on P95-44. The Board rejected R95-05.

### **Biological Background**

### Seward Peninsula Muskox Population

Muskoxen are adapted for survival in arctic habitats. Their large body size, thick undercoat and long guard hairs allow muskoxen to stay warm in arctic climates and conserve energy (Klein 1992). However, their thick fur does not allow them to regulate their body temperature, especially following high exertion activities, such as running. Their lower chest height and smaller hooves make travelling through deep snow difficult (Klein 1992; Ihl and Klein 2001); therefore, they tend towards wind swept areas with reduced snow depth (Dau 2005). These adaptations limit suitable habitat and lead muskox groups to remain localized during winter months (Klein 1992). Therefore, disturbance to muskox groups during the winter by hunters or predators could decrease survival through increased energetic requirements and movement to unsuitable habitat (Nelson 1994; Hughes 2018).

Muskoxen were extirpated in Alaska by the late 1800s, and perhaps hundreds of years earlier on the Seward Peninsula (Gorn and Dunker 2015). Muskoxen were reintroduced to Units 22C and 22D in 1970 and have since expanded their range to the north and east (Gorn and Dunker 2015). Currently, muskoxen from the Seward Peninsula population occupy suitable habitat in Units 22, 21D and the southern portion of Unit 23.

Muskox management on the Seward Peninsula has been guided by recommendations developed by the Cooperators. The group was composed of staff from NPS, BLM, USFWS, ADF&G, Bering Straits Native Corporation, Kawerak Inc., Reindeer Herders Association, Northwest Alaska Native Association, residents of Seward Peninsula communities and representatives from other interested groups or organizations. The Cooperators Group has not met since January of 2008 and is now defunct (Braem 2022, pers. comm.). The following management goals formed the basis of the cooperative interagency management plan for Seward Peninsula muskoxen developed from 1992 through 1994

(Nelson 1994): 1) manage populations to allow for growth while providing for harvest; 2) protect habitats; and 3) encourage cooperation and information sharing among agencies.

Aerial survey methods used to monitor the Seward Peninsula muskox population include minimum counts, distance sampling and composition surveys. Survey areas include the core count area of Units 22B, 22C, 22D, 22E, and 23 SW, and the expanded count area, which include the core count area as well as northern Unit 22A, southeastern Unit 23, western Unit 21D, and western Unit 24. Beginning in 2010, distance sampling techniques, conducted during the winter, were implemented to estimate abundance of Seward Peninsula muskox. This methodology replaced the minimum count surveys used since 1980. The minimum count surveys assumed 100% coverage but had varying effort from year to year. The distance sampling protocol was developed because it was believed that these estimates would provide more useful data and improve long-term monitoring efforts (Gorn and Dunker 2015). Surveys of the expanded count area were also implemented in 2010 to better understand the eastward migration of muskoxen from the Seward Peninsula, their current distribution and total population. Composition surveys, completed in the spring after distance sampling, document large scale patterns in age and sex structure of the population.

After reintroduction, the Seward Peninsula muskox population experienced periods of growth between 1970 and 2000 (14% annual rate of increase) and 2000 and 2010 (3.8% annual rate of increase), peaking at 2,903 muskoxen in 2010 (Gorn 2011). However, a 23.4% decrease in abundance occurred in 2012 and since 2015, the muskox population has experienced an annual rate of decline of 2%, to an estimated 2,071 (95% CrI: 1,686–2,562) muskoxen in 2021 (**Figure 2**) (Osburn, C. 2022, pers. comm.). It was hypothesized the decline was related to the high mortality rates of adult cows and declines in the number of short yearlings (10–12-month-old muskoxen) (Gorn 2012); however, some caution should be used when interpreting these mortality rates as they are based on a small sample size (Gorn 2011).

Composition surveys indicated declines in mature bulls across the Seward Peninsula between 2002 and 2011 (**Figure 3**), which prompted changes to the method of determining sustainable harvest rates (Gorn 2011). Research suggested that selective harvest of mature bulls on the Seward Peninsula could be a driver of reduced population growth. The theory is young male muskoxen may be less effective at maintaining a harem, leading to extended calving seasons which in turn may decrease calf survival and reduce recruitment. Younger males may also be less effective than mature bulls at defending their harem from predatory attacks, leading to more predation mortality. Therefore, annual harvest was restricted to less than 10% of the estimated number of mature bulls in the interest of conservation (Schmidt and Gorn 2013). Following this change in harvest management, the mature bull:cow ratio of Seward Peninsula muskoxen has increased over the 2011 low of 29:100 and remained stable through 2021 at an average of 38:100 (Dunker 2017a, 2022 pers. comm.).

Short yearlings (SY) are muskox between 10 and 12 months old and provide a measure of recruitment and population growth. Composition surveys indicate a decrease in short yearlings Seward Peninsulawide between 2002 and 2015, from 44:100 to 17:100, with low recruitment rates of particular concern (Gorn and Dunker 2015; Dunker 2022, pers. comm.). Between 2002 and 2021, SY:cow ratios for the entire Seward Peninsula muskox population ranged from 17-44 SY:100 cows (**Figure 3**). Ratios have been increasing since 2015 to almost as high as 2002 levels, peaking in 2021 at 42:100.

### Unit 23 SW Muskox Population

Between 1992 and 2017, the number of muskox in Unit 23 SW ranged from 134-255 muskox, averaging 205 muskox (**Figure 4**) (Gorn and Dunker 2015; Dunker 2017a). Over the same period, the percentage of the Seward Peninsula muskox population occupying Unit 23 SW ranged from 6%-27%, averaging 13% of the population. In 2017, 10% of the Seward Peninsula muskox population occupied Unit 23 SW.

From 2002–2021, mature bull (MB):100 cow ratios for muskox in Unit 23 SW ranged from 19–33 MB:100 cows and was 22 MB:100 cow in 2021(**Table 1**). In Unit 23 SW, the MB:100 cow ratio decreased from 2015–2017 but increased slightly in 2021 (**Table 1**) (Gorn and Dunker 2015; Dunker 2017b; Dunker 2022, pers. comm.).

Between 2002 and 2021, the ratio of short-yearlings (SY) to 100 cows in Unit 23 SW ranged from 10– 39 SY:100 cows, with the highest ratio occurring in 2021 (**Table 1**) (Gorn and Dunker 2015; Dunker 2017b; Dunker 2022, pers. comm.).



**Figure 2.** Population estimates for Seward Peninsula muskox. The results pre-2010 are from the minimum count surveys and post-2010 are from distance sampling technique. The core count area includes Units 22B, 22C, 22D, 22E, and 23 SW. The expanded count area includes the core count area, northern Unit 22A, southeastern Unit 23, western Unit 24, and western Unit 21D (Gorn and Dunker 2015; Dunker 2017a, 2022).



**Figure 3.** Population composition for Seward Peninsula muskox. Ratios are the number of mature bulls:100 cows and short yearlings:100 cows. Mature bulls are  $\geq$  4 years old. Short yearling are muskoxen between 10 and 12 months old. pSY and pMB are the proportion of short yearlings and mature bulls (respectively) in the estimate (Gorn and Dunker 2015; Dunker 2017b, 2022).



**Figure 4**. Population estimates for muskoxen in Unit 23SW (Gorn and Dunker 2015; Dunker 2017a; Osburn 2023, pers. comm.).

Year	# Groups	# Muskox	MB:100Cow	SY:100Cow
2002	10	162	33	31
2010	11	157	19	18
2011	8	127	22	10
2012	20	318	25	20
2015	6	96	32	26
2017	8	145	20	18
2021	9	170	22	39

**Table 1.** Mature bull:100 cow and short yearling:100 cow ratios for Unit 23 SW (Dunker 2022, pers. comm.)

### **Cultural Knowledge and Traditional Practices**

In Iñupiaq, muskoxen are called *umingmak*, "the one with hair like a beard" (Lent 1999). The earliest archaeological evidence for use of muskoxen in arctic Alaska dates to Birnirk culture, beginning in approximately 600 A.D. (Lent 1999). In comparison to caribou, the availability of muskoxen was more predictable in time and space (Klein 1989). Muskoxen were likely always present at relatively low numbers, and their use was limited but continuous over approximately 1500 years.

Historically, muskoxen provided fat when caribou were lean in late winter and early spring and provided an alternative food source in years when caribou were scarce. Muskoxen were more heavily hunted following the introduction of firearms, and were also intensively harvested by whalers, trappers, and traders in the 1800s. In Alaska, muskoxen persisted the longest in the eastern Brooks Range, where they were extirpated by the 1890s (Lent 1998). According to ethnohistoric research, the last muskoxen in Northwestern Alaska were hunted in the late 1850s around Wainwright, but the exact timing of their local extirpation further south in the Northwest Arctic and Seward Peninsula regions is difficult to determine (Lent 1999).

While muskoxen are not a major source of food in relation to other subsistence resources, they have become more important within some families. A harvested muskox yields a large amount of meat and is shared with the community. Muskoxen represent both a valuable subsistence harvest and a potential nuisance or threat to communities and hunters (Lent 1999, Mason 2015, NWARAC 2021a, 2021b, 2022). Across their range in northern Alaska, the presence of muskoxen is also reported to deter caribou and prevent successful caribou harvests (Kutz et al. 2017). Harvest of muskoxen is more important for Northwest Arctic communities in years when there are fewer caribou (NWARAC 2021b and 2022).

Under the current closure, only residents of Unit 23 south of Kotzebue Sound and west of and including the Buckland River drainage may participate in the Federal subsistence hunt for muskoxen in Unit 23 SW. This area includes the primarily Iñupiat communities of Buckland and Deering. In 2019, the estimated population of Buckland was 580 and the estimated population of Deering was 185 (ADLWD 2022).

Buckland and Deering have been the subject of multiple subsistence surveys by ADF&G, Division of Subsistence, the results of which are included in the Community Subsistence Information System (CSIS) database (ADF&G 2022, **Table 2**). These data include estimates of all muskoxen harvested by residents of the communities under any hunt opportunity (State or Federal) and in any location during the survey year. **Table 2** indicates that Buckland harvested an estimated average of 3.7 muskoxen per study year, and Deering harvested an estimated average of one muskox per study year.

**Table 2**. Three measures of muskox harvest and use by communities with a customary and traditional use determination in Unit 23 south of the Kotzebue Sound and west of and including the Buckland River drainage (ADF&G 2022). Values for estimated number of muskoxen harvested are rounded to whole numbers.

Community	Survey year	Estimated number of muskoxen harvested	Estimated pounds per person harvested	Percent using
Buckland	2003	6	9.2	13%
	2009	4	5.2	7%
	2018	1	0.5	6%
	Average	3.7	5.0	9%
Deering	2007	2	5.9	13%
	2013	1	2.3	9%
	2017	0	0	2%
	Average	1	2.7	8%

### **Harvest History**

### Seward Peninsula Muskox Range-wide Harvest

Prior to 2012, muskox harvest rates on the Seward Peninsula were calculated as 3% of the total population size. The harvest quota for each hunt area was determined based on the percentage of the range-wide muskox population occurring within that hunt area, with the harvest rate reaching up to 8% of a population in some subunits (OSM 2014). However, following declines in recruitment, bull:cow ratios, and overall population size, managers reassessed this strategy. Consequently, a new harvest management strategy was implemented in 2012. Since 2012, Seward Peninsula muskox harvest rates have been based primarily on the number of mature bulls in the population. Specifically, harvest quotas are calculated as 10% of the estimated number of mature bulls within the hunt area, and range-wide harvest targets are set at 2% of the estimated population size (Gorn and Dunker 2013; Gorn and Dunker 2015).

This shift in harvest management was accompanied by a significant reduction in harvest. Range-wide, harvest declined from 111 muskox in 2011 (5.5% of the total population) to 26 muskoxen in 2012 (1.2% of the total population). Total reported harvest has remained below 2% of the total population, which has likely been influential in the subsequent increase in mature bulls (Gorn and Dunker 2015).
Between 1995 and 2011, the realized harvest rate for Seward Peninsula muskox ranged from .7%-5.8%, peaking in 2009 (**Figure 4**) (Gorn and Dunker 2015; Dunker 2022, pers. comm.). After the population decline in 2012 and Schmidt and Gorn (2013) reported on the importance of mature bull muskoxen in a population, the realized harvest rate has remained below 2% of the range-wide population estimate, ranging from 1%–1.7% with an average of 1.3% between 2012 and 2021 (Dunker 2022, pers. comm.).

Harvest of muskoxen on the Seward Peninsula by Federal permit has remained low with most muskox harvest occurring by State permit (**Table 4**). From 2001–2012 Federal permit harvest averaged 5.3 muskoxen per year. From 2013- 2021, after the change in harvest management, Federal permit harvest averaged 3.4 muskoxen per year. From 2001- 2020, Federal permit harvest of muskox ranged from 0-15 muskoxen harvested per year, with an average success rate of 27%. Since 2012, harvest by Federal permit has accounted for 3.4%- 25% of overall muskox harvest on the Seward Peninsula, averaging 10% (**Table 5**) (OSM 2022).

### Unit 23 SW Muskox Harvest

Muskox harvest in Unit 23 SW occurs by Federal permit, FX2302 and by State Tier II permit, TX106. Between 1995 and 2011, the muskox harvest quota in Unit 23 SW ranged from 6–18 muskox (OSM 2014). Between 1995 and 2021, annual harvest ranged from 0–18 muskox (**Figure 5**) (Dunker 2018, pers. comm.; Dunker 2022, pers. comm.; Germain 2022, pers. comm.). Most of this harvest (82%) occurred by State permit. Since 2008, 4 muskoxen have been reported harvested by Federal permit in Unit 23 SW (**Table 4**) (Adkisson 2018, pers. comm.: Hughes pers. comm. 2022). Often, the more accessible muskoxen are found on State lands, so the harvest quota may already be reached before Federally qualified subsistence users have an opportunity to access Federal lands (Adkisson 2018, pers. comm.). Since 2012 over half the muskox harvest in Unit 23 SW has been from Kotzebue and Noorvik residents hunting under State permits (ADF&G 2018).



**Figure 5**. Reported harvest by State permit and realized harvest rate as percentage of herd population for Seward Peninsula muskox by subunit (Gorn and Dunker 2015; Dunker 2022; Germain 2022, pers. comm.).

	U	nit 22	Unit 23		Total	
Regulatory Year	Issued	Harvested	Issued	Harvested	Harvested	
2001	25	10	6	3	13	
2002	37	7	3	0	7	
2003	31	12	6	2	14	
2004	18	3	5	1	4	
2005	21	7	2	1	8	
2006	20	8	3	1	9	
2007	16	2	6	1	3	
2008	23	1	5	0	1	
2009	13	0	4	0	0	
2010	2	0			0	
2011	1	0			0	
2012	9	2	0	0	2	
2013	12	10	0	0	10	
2014	9	4	4	0	4	
2015	5	3	2	0	3	
2016	9	2	2	0	2	
2017	6	3	1	0	3	
2018	8	2	2	0	2	
2019	12	1	3	2	1	
2020	11	2	3	1	2	
2021			3	1		
2022			3			
Total	288	79	50	9	88	
Success	27	7.40%	18	3.00%	26.00%	

**Table 3.** Federal permits issued and reported Federal muskox harvestfor Seward Peninsula 2001- 2021 (OSM 2022). Blanks indicate nodata present.

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**Table 4**. Federal and State muskox harvest in Unit 23 SW (Dunker 2018, pers. comm.; Dunker 2022,pers. comm.; Adkisson 2018, pers. comm.; OSM 2022).

Year	FX2302 Issued	FX2302 Harvest	Tier II TX106 Issued	Tier II TX106 Harvest	RX106 Issued	RX106 Harvest	DX106 Issued	DX106 Harvest	Total Harvest
1995	7	6	0	0	0	0	0	0	6
1996	9	3	0	0	0	0	0	0	3
1997	6	1	0	0	0	0	0	0	1
1998	7	1	2	1	0	0	0	0	2
1999	8	0	1	1	0	0	0	0	1
2000	4	1	8	5	0	0	0	0	6
2001	6	3	11	6	0	0	0	0	9
2002	3	0	9	9	0	0	0	0	9
2003	6	2	10	3	0	0	0	0	5
2004	5	1	12	6	0	0	0	0	7
2005	2	1	8	3	0	0	0	0	4
2006	3	1	13	3	0	0	0	0	4
2007	6	1	30	10	0	0	0	0	11
2008	5	0	0	0	49	16	2	0	16
2009	4	0	0	0	27	17	1	1	18
2010	0	0	0	0	25	6	0	0	6
2011	0	0	0	0	8	7	0	0	7
2012	0	0	4	0	1	0	0	0	0
2013	0	0	5	2	0	0	0	0	2
2014	4	0	4	3	0	0	0	0	3
2015	2	0	4	3	0	0	0	0	3
2016	3	0	3	1	0	0	0	0	1
2017	1	0	3	3	0	0	0	0	3
2018	2	0	3	2	0	0	0	0	2
2019	3	2	3	3	0	0	0	0	5
2020	3	1	3	3	0	0	0	0	4
2021	3	1							1

### Effects

If the closure were retained, there would be no change in how the hunt is currently managed. Only Federally qualified subsistence users would be allowed to harvest muskoxen on Federal public lands in Unit 23 SW by either Federal or State permit. The muskox population that currently exists in the area would remain protected from overharvest due to the limited number of permits issued and the conservative management strategy.

One option would be to rescind the closure opening Federal public lands in Unit 23 SW to the harvest of muskoxen by anyone hunting under State regulations. Over-harvest would not be a concern, as harvest would still be managed by a shared quota with a limited number of permits issued. However, Federally qualified subsistence users would experience increased competition on Federal public lands from people hunting under State regulations. However, currently, there are fewer Federal permits available for Unit 23 SW than when the closure was first initiated.

Another option would be to modify the closure by closing muskox harvest in Unit 23 SW to all users, including federally qualified subsistence users. However, this would mean that federally qualified subsistence users would unnecessarily lose the opportunity to harvest muskoxen under Federal regulations in Unit 23 SW.

### **OSM PRELIMINARY CONCLUSION:**

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

### Justification

The current closure, in conjunction with decreased harvest quotas, have slowed or stalled the decline in muskox populations in this portion of the Seward Peninsula. This closure should remain in place to ensure conservation of the muskox populations, and to allow for the continuation of subsistence uses by providing for a Federal subsistence priority and ensuring opportunities to harvest this subsistence resource into the future.

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WP24-28/29 Executive Summary			
General Description Proposed Regulation	<ul> <li>Proposal WP24-28 requests a reduction in the caribou harvest limit across the range of the Western Arctic caribou herd to four caribou per year, only one of which may be a cow.</li> <li>Submitted by: The Western Arctic Caribou Herd Working Group</li> <li>Proposal WP24-29 requests a reduction in the caribou harvest limit in Unit 23 to four caribou per year, only one of which may be a cow.</li> <li>Submitted by: The Northwest Arctic Subsistence Regional Advisory Council</li> <li>Units 21D, remainder; 24B, remainder; 24C; 24D; and all caribou hunt areas within Units 22, 23, and 26A: four caribou per year,</li> </ul>		
	only one of which may be a cow		
OSM Preliminary Conclusion	Support Proposal WP24-29.		
	Support Proposal WP24-28 with modification to portion of Unit 26A north and east of a line runnin east/north bank of Wainwright Inlet to the headwar Ketik River, to the headwaters of the Awuna River River at Umiat then east to the Dalton Highway at The modified regulation for Unit 26 should read: Unit 26—Caribou Unit 26A - north and east of a line running from the east/north bank of Wainwright Inlet to the headwaters of the Ketik River, to the headwaters of the Awuna River to the Colville River at Umiat then east to the Dalton Highway at Sagwon- 5 caribou per day by State registration permit as follows: Calves may not be taken.	exclude that g from the ters of the to the Colville Sagwon.	
	Bulls may be harvested	July 1-Oct. 14. Dec. 6-June 30	
	Cows may be harvested; however, cows accompanied by	July 16-Mar.	

	calves may not be taken July 16-Oct. 15	15.
	Noatak National Preserve is closed to caribou hunting from Aug. 1-Sep. 30 for the 2022-24 regulatory cycle, except by federally qualified subsistence users hunting under these regulations.	
	Unit 26A remainder - <del>5 caribou per day</del> <b>4 caribou per year, only 1 may be</b> <b>a cow</b> by State registration permit as follows: Calves may not be taken.	
	Bulls may be harvested	July 1-Oct. 15.
		Dec. 6-June 30.
	<i>Up to 3 cows per day</i> <b>Only 1</b> <b>cow</b> may be harvested; however, cows accompanied by calves may not be taken July 16-Oct. 15	July 16-Mar. 15.
Fastern Interior Alaska		
Subsistence Regional		
Advisory Council		
Western Interior Alaska		
Subsistence Regional		
Advisory Council		
Seward Peninsula Subsistence		
Regional Advisory Council		
Northwest Arctic Subsistence		
Regional Advisory Council		
North Slope Subsistence		
Regional Advisory Council		
Recommendation		

Interagency Staff Committee	
Comments	
ADF&G Comments	
Written Public Comments	None

# DRAFT STAFF ANALYSIS WP24-28/29

## ISSUES

Wildlife Proposal WP24-28, submitted by the Western Arctic Caribou Herd Working Group, requests a reduction in the caribou harvest limit across the range of the Western Arctic caribou herd to four caribou per year, only one of which may be a cow. Specific areas include Units 21D, remainder; 24B, remainder; 24C; 24D; and all caribou hunt areas within Units 22, 23, and 26A.

Wildlife Proposal WP24-29, submitted by the Northwest Arctic Subsistence Regional Advisory Council (Northwest Arctic Council), requests a reduction in the caribou harvest limit in Unit 23 to four caribou per year, only one of which may be a cow.

## DISCUSSION

### WP24-28

The Western Arctic Caribou Herd Working Group (WACH Working Group) at its annual meeting in December 2022 assigned the management level "Preservative, Declining" to the herd based on the most recent census (within the range of 130,000-200,000) and adult cow survival rate of less than 80%. The WACH Working Group sees the need to address the current herd decline by limiting the harvest of both bulls and cows to allow the herd to begin a recovery. Data received by the WACH Working Group from an Alaska Department of Fish & Game (ADF&G) biologist illustrated that there has been continued decline in the Western Arctic Caribou Herd (WACH).

## WP24-29

The WACH has continued to decline with the most recent estimate being 164,000 caribou. The Northwest Arctic Council is greatly concerned about the precipitous decline of the WACH and feels that action is needed to slow the decline and prevent the herd from reaching a point of no return. The Northwest Arctic Council feels that the harvest recommendations proposed by the WACH Working Group are a starting point for the conservation of the WACH while still allowing some harvest. The Northwest Arctic Council recognizes that federally qualified subsistence users are already facing food insecurities, but this large reduction of caribou harvest is a means to help protect the caribou herd over the long term, while still allowing some harvest.

## **Existing Federal Regulation**

Unit 21D—Caribou

Unit 21D, remainder— 5 caribou per day, as follows: Calves may not

be taken. Bulls may be harvested. Cows may be harvested. July 1-Oct. 14. Feb. 1-June 30. Sep. 1-Mar. 31.

### Unit 22—Caribou

Unit 22B that portion west of Golovnin Bay and west of a line along the west bank of the Fick and Nivelach Biyers to the mouth of the Likhy	Oct. 1-Apr. 30.
the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage - 5 caribou per day by State registration permit. Calves may not be taken.	May 1-Sep. 30, a season may be announced.
Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the Kuzitrin River drainage (excluding the Pilgrim River drainage), and the Agiapuk River drainages, including the tributaries, and Unit 22E, that portion east of and including the Tin Creek drainage - 5 caribou per day by State registration permit. Calves may not be taken.	July 1–June 30.
Unit 22A, remainder - 5 caribou per day by State registration permit. Calves may not be taken	July 1-June 30, season may be announced.
Unit 22D, that portion in the Pilgrim River drainage - 5 caribou per day by State registration permit. Calves may not be taken	Oct. 1-Apr. 30. May 1-Sep. 30, season may be announced
Units 22C, 22D remainder, 22E remainder - 5 caribou per day by State registration permit. Calves may not be taken	July 1-June 30, season may be announced

#### Unit 23-Caribou

Unit 23—that portion which includes all drainages north and west of, and including, the Singoalik River drainage—5 caribou per day by State registration permit as follows:

Bulls may be harvestedJuly 1–June 30Cows may be harvested. However, cows accompanied by calves may not be<br/>taken July 15–Oct. 14.July 15–Apr. 30

## Unit 23-Caribou

*Unit 23, remainder—5 caribou per day by State registration permit as follows:* 

Bulls may be harvestedJuly 1–June 30Cows may be harvested. However, cows accompanied by calves may not be<br/>taken July 31–Oct. 14.July 31–Mar. 31

Federal public lands within a 10-mile-wide corridor (5 miles either side) along the Noatak River from the western boundary of Noatak National Preserve upstream to the confluence with the Cutler River; within the northern and southern boundaries of the Eli and Agashashok River drainages, respectively; and within the Squirrel River drainage are closed to caribou hunting except by federally qualified subsistence users hunting under these regulations.

Bureau of Land Management managed lands between the Noatak and Kobuk Rivers and Noatak National Preserve are closed to caribou hunting from Aug. 1-Sep. 30 for the 2022-24 regulatory cycle, except by federally qualified subsistence users hunting under these regulations.

## Unit 24—Caribou

*Unit 24B remainder - 5 caribou per day, as follows: Calves may not be taken.* 

Bulls may be harvested.	July 1-Oct. 14.
	Feb. 1-June 30.
Cows may be harvested.	July 15-Apr. 30.
Units 24C, 24D - 5 caribou per day, as follows: Calves may not be taken.	

Bulls may be harvested. July 1-Oct. 14. Feb. 1-June 30.

### Unit 23-Caribou

Cows may be harvested	Sep. 1-Mar. 31.
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### Unit 26—Caribou

Unit 26A - that portion of the Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River drainage - 5 caribou per day by State registration permit as follows: Calves may not be taken

	Bulls may be harvested	July 1-Oct. 14.
		Dec. 6-June 30.
	Cows may be harvested; however, cows accompanied by calves may not be taken July 16-Oct. 15	July 16-Mar. 15.
	Noatak National Preserve is closed to caribou hunting from Aug. 1-Sep. 30 for the 2022-24 regulatory cycle, except by federally qualified subsistence users hunting under these regulations.	
Unit 20 follows	5A remainder - 5 caribou per day by State registration permit as : Calves may not be taken	
	Bulls may be harvested	July 1-Oct. 15.
		Dec. 6-June 30.
	<i>Up to 3 cows per day may be harvested; however, cows accompanied by calves may not be taken July 16-Oct. 15</i>	July 16-Mar. 15.

## **Proposed Federal Regulation**

Unit 21D—Caribou

Unit 21D, remainder— 5 caribou per day 4 caribou per year, only 1 may be a cow, as follows: Calves may not be taken.

Bulls may be harvested.	July 1-Oct. 14. Feb. 1-June 30.
Cows may be harvested.	Sep. 1-Mar. 31.

### Unit 22—Caribou

Unit 22B that portion west of Golovnin Bay and west of a line along	Oct. 1-Apr. 30.
the west bank of the Fish and Nukluk Rivers to the mouth of the Libby River and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage - 5 caribou per- day 4 caribou per year, only 1 may be a cow by State registration permit. Calves may not be taken.	May 1-Sep. 30, a season may be announced.
Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the Kuzitrin River drainage (excluding the Pilgrim River drainage), and the Agiapuk River drainages, including the tributaries, and Unit 22E, that portion east of and including the Tin Creek drainage - 5 caribou per day 4 caribou per year, only 1 may be a cow by State registration permit. Calves may not be taken.	July 1–June 30.
Unit 22A, remainder - <del>5 caribou per day</del> <b>4 caribou per year, only 1</b> may be a cow by State registration permit. Calves may not be taken	July 1-June 30, season may be announced.
Unit 22D, that portion in the Pilgrim River drainage - <del>5 caribou per day</del> <b>4 caribou per year, only 1 may be a cow</b> by State registration permit. Calves may not be taken	Oct. 1-Apr. 30. May 1-Sep. 30, season may be announced
Units 22C, 22D remainder, 22E remainder - <del>5 caribou per day</del> <b>4</b> <b>caribou per year, only 1 may be a cow</b> by State registration permit. Calves may not be taken	July 1-June 30, season may be announced

### Unit 23–Caribou

Unit 23—that portion which includes all drainages north and west of, and including, the Singoalik River drainage— 5 caribou per day 4 caribou per year, only 1 may be a cow by State registration permit as follows:

Bulls may be harvested

July 1–June 30

Cows may be harvested. However, cows accompanied by calves may not be July 15–Apr. 30 taken July 15–Oct. 14.

*Unit 23, remainder*— <u>5 caribou per day</u> **4 caribou per year, only 1 may be a cow** by State registration permit as follows:

Bulls may be harvestedJuly 1–June 30Cows may be harvested. However, cows accompanied by calves may not beJuly 31–Mar. 31

taken July 31–Oct. 14.

Federal public lands within a 10-mile-wide corridor (5 miles either side) along the Noatak River from the western boundary of Noatak National Preserve upstream to the confluence with the Cutler River; within the northern and southern boundaries of the Eli and Agashashok River drainages, respectively; and within the Squirrel River drainage are closed to caribou hunting except by federally qualified subsistence users hunting under these regulations.

Bureau of Land Management managed lands between the Noatak and Kobuk Rivers and Noatak National Preserve are closed to caribou hunting from Aug. 1-Sep. 30 for the 2022-24 regulatory cycle, except by federally qualified subsistence users hunting under these regulations.

#### Unit 24—Caribou

Unit 24B remainder - 5 caribou per day 4 caribou per year, only 1 may be a cow as follows: Calves may not be taken.

Bulls may be harvested.	July 1-Oct. 14.
	Feb. 1-June 30.
Cows may be harvested.	July 15-Apr. 30.
Units 24C, 24D - <del>5 caribou per day</del> <b>4 caribou per year, only 1 may be</b> <b>a cow</b> as follows: Calves may not be taken.	

Bulls may be harvested.	July 1-Oct. 14.
	Feb. 1-June 30.
Cows may be harvested	Sep. 1-Mar. 31.

### Unit 26—Caribou

Unit 26A - that portion of the Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River drainage - 5 caribou per day 4 caribou per year, only 1 may be a cow by State registration permit as follows: Calves may not be taken.

Bulls may be harvested	July 1-Oct. 14.	
	Dec. 6-June 30.	
Cows may be harvested; however, cows accompanied by calves may not be taken July 16-Oct. 15	July 16-Mar. 15.	
Noatak National Preserve is closed to caribou hunting from Aug. 1-Sep. 30 for the 2022-24 regulatory cycle, except by federally qualified subsistence users hunting under these regulations.		
Unit 26A remainder - <del>5 caribou per day</del> <b>4 caribou per year, only 1</b> <b>may be a cow</b> by State registration permit as follows: Calves may not be taken.		
Bulls may be harvested	July 1-Oct. 15.	
	Dec. 6-June 30.	
<i>Up to 3 cows per day <b>Only 1 cow</b> may be harvested; however, cows accompanied by calves may not be taken July 16-Oct. 15</i>	July 16-Mar. 15.	

### **Existing State Regulation**

### Unit 21D—Caribou

21D remainder

*Residents*—5 *caribou per day, however, calves may not be taken.* 

July 1-Oct. 14 Feb. 1-June 30.

Bulls	
Cove	Sep. 1-Mar. 31.
Cows	1419 1 San 20
Nonresidents—1 bull; however, calves may not	Aug. 1-Sep. 50
be taken	

### Unit 22—Caribou

22A, north of the	Residents—Twenty caribou total, up to 5 per day	
Golsovia River	by permit.	
drainage	Bulls RC800	No closed season
	Cows RC800	July 1-Mar. 31.
	Nonresidents—1 bull	Aug. 1-Sep. 30
22A, remainder	Residents— Twenty caribou total, up to 5 per day by permit. Bulls may not be taken Oct. 15- Jan 31, and cows may not be taken Apr 1- Aug 31. RC800	May be announced
	Nonresidents—1 bull	May be announced
22B, west of Golovnin	Residents— Twenty caribou total, up to 5 per day	
Bay, west of the west	by permit.	
banks of Fish and		
Niukluk rivers below the Libby River,	Bulls RC800	Oct. 1-Apr. 30
(excluding the Libby River drainage and	Cows RC800	<i>Oct. 1-Mar 31.</i>
Niukluk River drainage above, the mouth of the Libby River)	Residents— Twenty caribou total, up to 5 per day by permit. Cows may not be taken Apr 1- Aug 31. RC800	May be announced
	Nonresidents—1 bull	May be announced
22B, remainder	<i>Residents— Twenty caribou total, up to 5 per day by permit.</i>	
	Bulls RC800	No closed season
	Cows RC800	July 1-Mar. 31.

	Nonresidents—1 bull	Aug. 1-Sep. 30
22C	Residents— Twenty caribou total, up to 5 per day by permit. Bulls may not be taken Oct 15-Jan 31, and cows may not be taken Apr 1-Aug 31. RC800	May be announced
	Nonresidents—1 bull	May be announced
22D, Pilgrim River drainage	<i>Residents— Twenty caribou total, up to 5 per day by permit.</i>	
	Bulls RC800	Oct. 1-Apr. 30
	Cows RC800	Oct. 1-Mar. 31.
	Residents— Twenty caribou total, up to 5 per day by permit. Cows may not be taken Apr 1-Aug 31. RC800	May be announced
	Nonresidents—1 bull; however, calves may not be taken	May be announced
22D, in the Kuzitrin River drainage (archuding the Pilgrim	<i>Residents— Twenty caribou total, up to 5 per day by permit.</i>	
River drainage) and the	Bulls RC800	No closed season
ngapan never aramage	Cows RC800	July 1-Mar. 31.
	Nonresidents—1 bull	Aug. 1-Sep. 30
22D, remainder	Residents— Twenty caribou total, up to 5 per day by permit. Bulls may not be taken Oct 15- Jan 31, and cows may not be taken Apr 1 – Aug 31. RC800	May be announced.
	Nonresidents—1 bull	Aug. 1-Sep. 30
22E, east of and including the	<i>Residents— Twenty caribou total, up to 5 per day by permit.</i>	
	Bulls RC800	No closed season

Sanaguich River			
drainage	Cows RC800	July 1-Mar. 31.	
	Nonresidents—1 bull	Aug. 1-Sep. 30	
22E, remainder	Residents— Twenty caribou total, up to 5 per day by permit. Bulls may not be taken Oct 15- Jan 31, and cows may not be taken Apr 1 – Aug 31. RC800	May be announced	
	Nonresidents—1 bull	May be announced	
Unit 23—Caribo	Du		
23, north of and including the Singoalik	Residents—5 caribou per day by permit.		
River drainage	Bulls RC907	No closed season	
	Cows RC907	Jul. 15-Apr. 30	
	Nonresidents—1 bull	Aug. 1-Sep. 30	
23 remainder	<i>Residents—5 caribou per day by permit.</i>		
	Bulls RC907	No closed season	
	Cows RC907	Sep. 1-Mar. 31.	
	Nonresidents—1 bull	Aug. 1-Sep. 30	
Unit 24—Caribo	Du		
24B remainder	Residents—5 caribou per day, however, calves may not be taken.		
	Bulls	July 1-Oct 14 Feb 1-June 30	
	Cows	July 15-Apr. 30.	
	Nonresidents—1 bull, however, calves may not be taken	Aug. 1-Sep. 30	

24C and 24D	<i>Residents—5 caribou per day, however, calves may not be taken.</i>		
	Bulls	July 1-Oct 14 Feb 1-June 30	
	Cows	Sep. 1-Mar. 31.	
	Nonresidents—1 bull, however, calves may not be taken	Aug. 1-Sep. 30	
Unit 26—0	Caribou		

#### 26A, the Colville River *Residents*—5 *caribou per day by permit.* drainage upstream from the Anaktuvuk Bulls RC907 July 1-Oct. 14 Feb. 1-June 30. River, and drainages of the Chukchi Sea south Cows RC907 Jul. 15-Apr. 30 and west of, and including the Utukok *Nonresidents*—1 *bull* July 15-Sep. 30 River drainage 26A remainder *Residents*—5 *caribou per day by permit. RC907* July 1-July 15 Mar 16-June 30. 5 caribou per day three of which may be cows by July 16-Oct 15. permit; cows with calves may not be taken. RC907 Oct 16-Dec 31 3 cows per day by permit. RC907 5 caribou per day three of which may be cows by Jan 1-Mar 15 permit. RC907 *Nonresidents—1 bull; however, calves may not* July 15-Sep. 30 be taken

## **Extent of Federal Public Lands**

Federal public lands comprise approximately 55.7% of Unit 21D and consist of 29.3% U.S. Fish and Wildlife Service (USFWS) managed lands and 26.4% Bureau of Land Management (BLM) managed lands.

Federal public lands comprise approximately 43.5% of Unit 22 and consist of 28.1% BLM managed lands, 12.4% National Park Service (NPS) managed lands, and 3% USFWS managed lands.

Federal public lands comprise approximately 70.5% of Unit 23 and consist of 39.6% NPS managed lands, 21.8% BLM managed lands, and 9.1% USFWS managed lands.

Federal public lands comprise approximately 64.4% of Unit 24 and consist of 21.8% NPS managed lands, and 21.8% USFWS managed lands, and 20.8% BLM managed lands.

Federal public lands comprise approximately 67.5% of Unit 26 and consist of 45.2% BLM managed lands, 17.3% USFWS managed lands, and 5% NPS managed lands.

Federal public lands comprise approximately 72.7% of Unit 26A and consist of 66% BLM managed lands, 6.6% NPS managed lands, and 0.01% USFWS managed lands.

## **Customary and Traditional Use Determinations**

Residents of Units 21B, 21C, 21D, and Huslia have a customary and traditional use determination for caribou in Unit 21D.

Residents of Units 21D west of the Koyukuk and Yukon Rivers, 22 (except residents of St. Lawrence Island), 23, 24, Kotlik, Emmonak, Hooper Bay, Scammon Bay, Chevak, Marshall, Mountain Village, Pilot Station, Pitka's Point, Russian Mission, St. Marys, Nunam Iqua, and Alakanuk have a customary and traditional use determination for caribou in Unit 22A.

Residents of Units 21D west of the Koyukuk and Yukon Rivers, 22 (excluding residents of St. Lawrence Island), 23, and 24 have a customary and traditional use determination for caribou in Unit 22 remainder.

Residents of Units 21D west of the Koyukuk and Yukon Rivers, 22, 23, 24 including residents of Wiseman but not other residents of the Dalton Highway Corridor Management Area, 26A, and Galena have a customary and traditional use determination for caribou in Unit 23.

Residents of Unit 24, Galena, Kobuk, Koyukuk, Stevens Village, and Tanana have a customary and traditional use determination for caribou in Unit 24.

Residents of Unit 26, Anaktuvuk Pass, and Point Hope have a customary and traditional use determination for caribou in Unit 26A.

## **Regulatory History**

See Appendix 1

## **Current Events**

### 2024-26 Federal Wildlife Proposals

The Northwest Arctic Council and North Slope Subsistence Regional Advisory Council (North Slope Council) submitted Proposals WP24-30 and WP24-31, respectively, to close caribou hunting to non-federally qualified users in Unit 23 from Aug. 1-Oct. 31.

## WSA22-05/06

Temporary Wildlife Special Action WSA22-05, submitted by the Northwest Arctic Council, requested a reduction in the caribou harvest limit in Unit 23 to four caribou per year, only one of which may be a cow for the remainder of the 2022-24 regulatory cycle (see regulatory history, **Appendix 1**).

Temporary Wildlife Special Action WSA22-06, submitted by the Western Interior Subsistence Regional Advisory Council (Western Interior Council), requested a reduction in the caribou harvest limit across the range of the WACH to four caribou per year, only one of which may be a cow for the remainder of the 2022-24 regulatory cycle. Specific areas include Units 21D, remainder; 24A, remainder; 24B, remainder; 24C; 24D; and all caribou hunt areas within Units 22, 23, and 26A (see regulatory history, **Appendix 1**).

A public hearing was held for WSA22-05/06 on April 26, 2023, in Kotzebue, and for WSA22-06 only on May 2, 2023, via teleconference. In addition, consultations with tribes and Alaska Native Claims Settlement Act (ANCSA) corporations were held on May 15, 2023, via teleconference. Summaries of these hearings and consultations are presented here.

## April 26, 2023 public hearing summary (WSA22-05 and WSA22-06)

OSM held a public hearing on WSA22-05 and WSA22-06 on April 26, 2023, in person in Kotzebue and via teleconference. Fourteen people testified. The majority of participants spoke in favor of the need for conservation of caribou but in opposition to the four caribou per year as proposed in the special action request. Speakers, almost unanimously, stressed that caribou is their dietary staple and an integral aspect of their cultural identity. They stated that the limit, as proposed, would disrupt a basic aspect of the subsistence economy, the ability to harvest for others who can't hunt for themselves. Climate change was acknowledged as a reason for changing caribou migration patterns. However, other phenomena were discussed. The effects of sport hunters and their use of airplanes is a major cause of concern because it is perceived as a disruption to caribou migration patterns. A couple of speakers said that migrations are interrupted when sport hunters don't follow local conservation practices such as letting the caribou leaders pass so the herd will follow. Speakers told of other local conservation practices and indigenous ways of showing respect, including letting caribou pass in the spring when they are skinny, not hunting cows in times of low numbers and using all parts of the caribou they harvest. One person noted that caribou population crashes are part of Indigenous Knowledge and these practices are enacted during these times.

One of the most pervasive themes was the short amount of time between the Northwest Arctic Council's request submission and public hearing, and the lack of village outreach. The lack of outreach is a major point of contention because, the participants said, those are the people who are the hunters and who make their living off of the land. Most speakers talked about the high cost of living in the region and that residents are not able to just stop hunting. Participants from the North Slope stated that this proposal is not relevant for them because they harvest from the Teshekpuk herd and not the WACH.

As noted, many participants spoke of the need to take conservation measures to preserve the WACH. The Kobuk Valley National Park Subsistence Resource Commission suggested changing the limit to five bulls per day and no cows so that harvesting for others can be sustained. One speaker, an elder, did not overtly support the proposal but candidly shared his thoughts as to how conservation of the herd should be

addressed. He stated that local hunting patterns have changed because of the presence of sport hunters who prefer to take bulls and disrupt migration routes. He said this led to the need for local hunters to shift to cow harvest. He expressed extreme concern that the use of semi-automatic weapons has taken the place of bolt action rifles among local hunters. He observed that some people shoot into the herd and may kill several caribou and that they don't harvest all of them. He acknowledged natural fluctuation in caribou herd numbers and said that local people are going to have to "tighten their belts." Like other speakers, he feels that the prohibition of fly-in hunting would allow for the restoration of caribou migration routes. He sincerely requested that all agencies come to the table to address local concerns and bring their data to find a viable solution to conserving the WACH.

## May 2, 2023 public hearing summary (WSA22-06 only)

OSM held another public hearing on WSA22-06 on May 2, 2023, via teleconference. Forty-five people provided testimony. The vast majority of testifiers were from North Slope communities and strongly opposed the request. One person from Ambler supported the request, stressing the importance of protecting cows and the need for conservation now to ensure the herd's preservation into the future. Several commenters did not provide an explicit position.

The primary reason people opposed the request was because the proposed harvest limit reduction would not be enough to provide for people's subsistence uses, potentially resulting in starvation across North Slope communities. Many testifiers stated four caribou per year was not enough to feed their families or share with others in their community, including elders, widows, and people unable to hunt for themselves. One testifier commented that his family uses 30-50 caribou each year, while another stated four caribou would only last her family one month. People also emphasized that caribou are vital for their survival; they rely on caribou both nutritionally and culturally. For example, caribou sinew is used to construct whaling boats. Several testifiers stressed that subsistence users only take what they need and harvest sustainably; they should not be criminalized for feeding their families; sport hunters should be restricted first. Additionally, store-bought food is prohibitively expensive and not as healthy as caribou.

Another reason people opposed the request was because most caribou harvested in Unit 26A are from the Teshekpuk (TCH) or Central Arctic caribou (CACH) herds, not the WACH. As the TCH and CACH populations are not declining like the WACH, this harvest limit reduction would be an unnecessary restriction on subsistence uses. Many also commented that the timing of the public hearing was terrible because many of the region's caribou hunters were out whaling. Several others expressed a need for meaningful tribal consultation on the request.

Several testifiers agreed that some conservation measures were needed to address the decline of the WACH, but that the requested restrictions were too drastic, too soon, and did not allow sufficient time or opportunity for input by the subsistence users who would be most affected by these restrictions. Others expressed frustration at the Western Interior Council dictating what harvest regulations should be outside of their area in the North Slope region.

A representative from ADF&G commented that a similar proposal will be addressed by the Alaska Board of Game (BOG) in January 2024 and that outlying subunits occupied by other herds such as the TCH and CACH should be considered for removal from this request.

Following this public hearing, the Western Interior Council indicated via e-mails that they would like to withdraw this request. While Councils cannot formally withdraw special action requests outside of a public forum, the chair spoke to the Board about this issue when they meet to consider this request on June 8th.

### May 15, 2023 Tribal and ANCSA consultation summary

Participants in the Tribal teleconference included representatives of the Inupiat Community of the Arctic Slope (ICAS), Naqsragmiut Tribal Council of Anaktuvuk Pass, and the Arctic Slope Community Foundation.

Participants said that four caribou per household for the year is not enough because hunters harvest for those who cannot hunt, not just their household. They stated that caribou is a staple food, but it is more than that, it is cultural identity and is healthier than store-bought food. Some participants discussed the conflict they face, in that they know WACH caribou needs to be conserved but they also need caribou in order to live. One person described Traditional/Indigenous Knowledge and on-going user conflict, "We know not to overharvest for 10,000 years and now it's all regulated for us. Just difficult to follow your regulations with over 1,000 super cub planes coming to harvest the same caribou."

Discussion of management topics included a request for the State to be at the table with villages and Federal managers to discuss and work out how to conserve the herd. Participants stated that they do not harvest the WACH and asked if enforcement would be herd-specific. OSM staff replied that law enforcement makes no distinction between herds; enforcement occurs according to harvest regulations in specific units and areas.

Participants asked about the timing of the special action and OSM staff replied that the Board is meeting to address it on June 8, 2023. Because this is a temporary special action, if the Board adopted the proposal, it would only last for one regulatory cycle and would end in June 2024. The conflict that hunters face was voiced again when a participant said that he knew he was going against himself but wondered if the closure should last for two cycles in order to save the herd because, he said, "…if we lose them, everything falls apart."

Participants in the Alaska Native Claims Settlement Act (ANCSA) teleconference included representatives of the Inupiat Community of the Arctic Slope (ICAS), Naqsragmiut Tribal Council of Anaktuvuk Pass, and NANA Regional Corporation.

The NANA Corporation representatives stated that NANA does not have an official position on the proposal but wanted to share concerns voiced by NANA shareholders. In general, shareholders have expressed deep and overwhelming worry and a heavy sense of concern. The main concern is that people do not know how they would feed their families and their communities if this special action is adopted. The fast speed of the process and the timing of the public hearings was cited as problematic because communities and families have not had time to discuss the situation among themselves. People expressed worry about shifting harvests away from caribou because other resources are also in decline. The use of the entire caribou for many purposes is also an issue; people will not just lose food, but the ability to make clothing, tools, and art from caribou.

Harvesting caribou for others is a central aspect of Inupiat culture and economy. The ability to harvest for others is a major concern. Participants requested clarification on the designated hunter permit. OSM staff replied that on Federal public lands, any federally qualified user can be a designated hunter for another federally qualified user. One participant asked how law enforcement would deal with several designated hunters in one boat with only their allowed limit of caribou on board. OSM staff replied that it would be permissible as permitted by State or Federal regulations. During the public hearings on April 26 and May 2, 2023, many participants expressed concerns about access to designated hunter permits. OSM staff has contacted U.S. Fish and Wildlife Service Refuge and National Park Service colleagues to identify exactly how to obtain designated hunter permits in hub communities and villages. Per their request, OSM staff has provided preliminary information to NANA representatives.

Participants asked how OSM came to the harvest limit proposed in WSA22-05/06. OSM staff replied that it was proposed by the Western Arctic Caribou Herd Working Group. The Chair of the Western Interior Council, Jack Reakoff, explained further that the Western Interior Council proposal was prompted by the drastic decline of the WACH and the immediate need to conserve caribou cows.

## **Biological Background**

The TCH, WACH, and CACH have ranges that overlap in Units 23, 26A, 24A, and 24B (**Map 1**), and there can be considerable mixing of herds during the fall and winter (Prichard et al. 2020). As the current wildlife proposals focuses on conservation concerns for the WACH, this analysis will focus on the WACH. The TCH primarily occupies Unit 26A, and this analysis will briefly consider TCH biology and range. The CACH, which mostly occurs in Unit 26B, (Dau 2011, 2015; Lenart 2011; Parrett 2011, 2015c, 2015d), will not be considered further in this analysis.

Caribou abundance naturally fluctuates over decades (Gunn 2003; WACHWG 2011). Gunn (2003) reports the mean doubling rate for Alaskan caribou as  $10 \pm 2.3$  years. Although the underlying mechanisms causing these fluctuations are uncertain, climatic oscillations (i.e., Arctic and Pacific Decadal Oscillations) may play an important role (Gunn 2003; Joly et al. 2011). Climatic oscillations can influence factors such as snow depth, icing, forage quality and growth, wildfire occurrence, insect levels, and predation, which all contribute to caribou population dynamics (Joly et al. 2011). Density-dependent reduction in forage availability, resulting in poorer body condition may exacerbate caribou population fluctuations (Gunn 2003).

Caribou calving generally occurs from late May to mid-June (Dau 2013; Cameron et al. 2018). Weaning generally occurs in late October and early November before the breeding season (Taillon et al. 2011). Calves may stay with their mothers through their first winter, which improves calves' access to food and body condition (Holand et al. 2012). Calves orphaned after weaning (October) have greater chances of survival than calves orphaned before weaning (Russell et al. 1991; Joly 2000; Holand et al. 2012, Rughetti and Festa-Bianchet 2014).

Caribou feed on a wide variety of plants including lichens, fungi, sedges, grasses, forbs, and twigs of woody plants. Arctic caribou depend primarily on lichens during the fall and winter, but during summer they feed on leaves, grasses, and sedges (Joly and Cameron 2018; Miller 2003).



Map 1. Herd overlap and ranges of the WACH, TCH, CACH, and PCH.

## Western Arctic Caribou Herd

The WACH has historically been the largest caribou herd in Alaska and has a home range of approximately 157,000 square miles in northwestern Alaska. In the spring, most mature cows move north to calving grounds in the Utukok Hills, while bulls and immature cows lag behind and move toward summer range in the Wulik Peaks and Lisburne Hills (**Map 2**; Dau 2011; WACHWG 2011, 2019). After calving, cows and calves move west toward the Lisburne Hills where they mix with the bulls and non-maternal cows. During the summer, the herd moves rapidly to the Brooks Range. Calving locations of individuals average 35 miles apart from one year to the next, and 90% of females calved within one week from the previous year (Joly et al. 2021). The WACH has used the same general calving grounds for more than 100 years (Cameron et al. 2020).

Except for summer periods, little individual site-specific fidelity is observed from year to year, especially during the winter (Joly et al. 2021). The winter range fluctuates year to year as the WACH demonstrate low fidelity to wintering grounds (Joly et al. 2021). Rut occurs during fall migration (Dau 2011, WACHWG 2011). The fall migration is more variable and shows less fidelity to specific migration routes than the spring migration, while caribou still showed a fidelity to certain regions within the herd's range (Joly et al. 2021).

In recent years, the timing of fall migration has been less predictable (Joly et al. 2021). Reasons for changes in migration phenology are unknown. However, Cameron et al. (2021) found that WACH migrated in response to snow events and cold temperatures but would pause migration when they encountered snow free areas or warmer temperatures. This corresponds with Traditional Ecological Knowledge, which has observed caribou migrating in response to weather (NWARAC 2021b). Caribou migrations are also closely related to the population size and density of the herd (Burch 1972, Joly et al. 2021b).

The proportion of caribou using certain migration paths also varies each year (**Figure 1**, Baltensperger and Joly 2019; Joly and Cameron 2020). Changes in migration paths are likely influenced by multiple factors including food availability, snow depth, rugged terrain, and dense vegetation (Nicholson et al. 2016; Fullman et al. 2017). If caribou travelled the same migration routes every year, their food resources would likely be depleted (NWARAC 2016a). Anthropogenic factors can also influence migration paths. Radio collared caribou data has shown that the Red Dog Mine Road, near Kivalina, has delayed the fall migration along the coast with some caribou turning around rather than crossing the road (Wilson et al. 2016, WACHWG 2021).

The WACH Working Group consists of a broad spectrum of stakeholders, including subsistence users, sport hunters, conservationists, hunting guides, reindeer herders and transporters. The Group is also technically supported by NPS, USFWS, BLM, and ADF&G personnel. The WACH Working Group developed a WACH Cooperative Management Plan in 2003 and revised it in 2011 and 2019 (WACHWG 2011, 2019). The WACH Management Plan identifies nine plan elements: cooperation, population management, habitat, regulations, reindeer, knowledge, education, human activities, and changing climate, as well as associated goals, strategies, and management actions. As part of the population management element, the WACH Working Group developed a guide to herd management determined by population size, population trend, and harvest rate. Population sizes guiding management level determinations were based on recent (since 1970) historical data for the WACH (WACHWG 2011, 2019). Revisions to recommended harvest levels under liberal and conservative management were made in 2015 (WACHWG 2015) and 2019 (WACHWG 2019a, **Table 1**).

The WACH population declined rapidly in the early 1970s, bottoming out at about 75,000 animals in 1976. Aerial photocensuses have been used since 1986 to estimate population size. The WACH population increased throughout the 1980s and 1990s, peaking at 490,000 animals in 2003 (**Figure 2**). From 2003-2016, the herd declined at an average annual rate of 7.1% from approximately 490,000 caribou to 200,928 caribou (Dau 2011, 2014; Caribou Trails 2014; Parrett 2016). In 2017, the herd increased to an estimated 259,000 caribou (Parrett 2017a). However, part of this increase may have been due to improved photographic technology as ADF&G switched from film to higher resolution digital cameras. The 2019 population estimate was 244,000 caribou (Hansen 2019a). No photocensus was completed in 2020, but ADF&G completed a census in 2021 (WACHWG 2020). The 2021 population estimate was 188,000 caribou with a 95% confidence interval of +/- 11,855 and a minimum count of 180,374. This is approximately a 24% decline from the 2019 population estimate (WACHWG 2021). The 2022 population estimate was 164,000 caribou with a 95% confidence interval of +/- 7,271 and a minimum count of 161,034, representing an additional 12% decline (**Figure 2**, WACHWG 2022).

Between 1982 and 2011, the WACH population was within the liberal management level prescribed by the WACH Working Group (**Figure 2, Table 1**). In 2013, the herd population estimate fell below the population threshold for liberal management of a decreasing population (265,000), slipping into the conservative management level. In 2020, as no photocensus was completed, the WACH Working Group voted to maintain the herd's status at the conservative declining level (WACH Working Group 2020). The 2021 population estimate fell below the population threshold for conservative management of a decreasing population (200,000). The WACH Working Group voted to place the herd in the preservative declining level in 2021 and 2022 (WACHWG 2021, 2022).

Between 1970 and 2021, the bull:cow ratio exceeded Critical Management level of 30 bulls:100 cows identified in the 2019 WACH Management Plan (**Figure 3**). (Note: Previous management plans identified 40 bulls:100 cows as the critical management level). However, the average annual number of bulls:100 cows was greater during the period of population growth (54:100 between 1976–2001) than during the recent period of decline (44:100 between 2004-2016). However, in 2017 the bull:100 cow ratio was the highest since 1998 at 54 bulls:100 cows. In 2021, that ratio fell slightly to 47 bulls:100 cows (**Figure 3**, WACHWG 2021). Additionally, Dau (2015) states that while trends in bull:cow ratios are accurate, actual values should be interpreted with caution due to sexual segregation during sampling and the inability to sample the entire population, which likely account for more annual variability than actual changes in composition.

Although factors contributing to the 2003-present decline are not known with certainty, increased adult cow mortality, and decreased calf recruitment and survival played a role (Dau 2011, WACHWG 2022). Since the mid-1980s, adult mortality has slowly increased while recruitment has slowly decreased (**Figure 4**, Dau 2013). Prichard (2009) developed a population model specifically for the WACH using various demographic parameters and found adult cow survival to have the largest impact on population size, followed by calf survival and then parturition rates.

Calf production has likely had little influence on the population trajectory (Dau 2013, 2015). Between 1990 and 2003, the June calf:cow ratio averaged 66 calves:100 cows/year. Between 2004 and 2017, the June calf:cow ratio averaged 72 calves:100 cows/year. In June 2018, 86 calves:100 cows were observed, which approximates the highest parturition level ever recorded for the herd (86 calves:100 cows in 1992) (Dau 2016a, WACH Working Group 2021). The 5-year period from 2015-2019 had the highest (83%) parturition rate of any period since monitoring began. Since 2018, the parturition rates have decreased. In 2022, the calf:cow ratio was 64 calves:100 cows. The long-term average (1992-2022) is 70 calves:100 cows/year (**Figure 5**, WACHWG 2022, NWARAC 2023).

Decreased calf survival through summer and fall and recruitment into the herd may have contributed to the recent population decline (Dau 2013, 2015). Fall calf:cow ratios indicate calf survival over summer. Between 1976 and 2017, the fall calf:cow ratio ranged from 35 to 59 calves:100 cows/year, averaging 47 calves:100 cows/year (**Figure 5**).

Similarly, the ratio of short yearlings (SY, 10-11 months old caribou) to adults provides a measure of overwintering calf survival and recruitment. Between 1998 and 2022, SY:adult ratios ranged from 9-26

and averaged 17 SY:100 adults/year (**Figure 5**). SY:100 adult ratios were high from 2016-2018, ranging from 21-23 SY:100 adults (Dau 2016b, NWARAC 2019a, NWARAC 2023). The 2022 SY:100 adult ratio was on par with the long-term average at 17 SY:100 adults (WACHWG 2022). Over the past seven years the short yearling ratio has been at or above the long-term average. Thus, recruitment does not appear to be a major driver of herd decline.

Cow mortality affects the trajectory of the herd (Dau 2011, 2013, Prichard 2009, NWARAC 2019a). The long-term mortality rate of radio-collared adult cows averaged 19% from 1987-2020 (WACHWG 2022). The annual mortality rate increased from an average of 15% between 1987 and 2003 to 23% from 2004-2014 (Figure 4, Dau 2011, 2013, 2014, 2015). Mortality rates declined in 2015 and 2016, but then increased sharply in 2017. However, the increased mortality rate in 2017 may have been due to a low and aging sample size as few caribou were collared in the previous two years (Prichard et al. 2012, NWARAC 2019a) and/or difficult weather conditions (Gurarie et al. 2020). Prior to 2019, ADF&G and NPS deployed collars on caribou at Onion Portage via boat in September. Only seven collars total were deployed in both 2017 and 2018 due to fewer caribou migrating through Onion Portage at predictable times. ADF&G and NPS begun deploying collars using net gun techniques via helicopter in April 2019 (Joly and Cameron 2021). Since 2018, estimated mortality rates have remained above the long-term average, ranging from 23-36%. Estimated mortality includes all causes of death including hunting (Dau 2011). Dau (2015) states that cow mortality estimates are conservative due to exclusion of unhealthy (i.e. diseased) and yearling cows from collaring. These mortality estimates are influenced by the age at which individuals were collared (which is unknown), sample size and how long the collars have been on individuals (Dau 2015, Prichard et al. 2012).

Cow mortality is low over winter and then increases in the spring/early summer, likely due to the convergence of declining body condition, demands of migration, and lactation prior to the availability of higher quality forage. Conversely, bull mortality spikes during the fall, both naturally from the demands of rut and from targeted human harvest (Dau 2013, 2014). Additionally, Prichard (2009) and Dau (2015) suggest that harvest levels and rates of cows can greatly impact population trajectory.

Increased predation, hunting pressure, deteriorating range condition (including habitat loss and fragmentation), climate change, fall and winter icing events, and disease may be contributing factors to the population decline (Joly et al. 2011; Dau 2014, 2015). Joly et al. (2007) documented a decline in lichen cover in portions of the wintering areas of the WACH, which continued through at least 2015 (BLM, unpublished data).



Map 2. Western Arctic Caribou Herd seasonal range map, 2002-2017 (image from WACHWG 2019a).





**Figure 1.** 2010-2020 distribution of caribou crossing the Noatak River during fall. Histograms depict where collared female caribou crossed the Noatak River, generally from north to south, on their fall migration. Relative percentages (top number) and the absolute number (middle number) of caribou are provided. The river is divided into seven (lowest number) color-coded segments which are displayed in the background. The middle five segments are 100 river kilometers long, while the westernmost segment (red) is 200 km (before extending into the Chukchi Sea) and the easternmost (yellow) runs as far east as WACH caribou are known to migrate (Joly and Cameron 2021).

**Table 1.** WACH management levels using herd size, population trend, and harvest rate (WACHWG**2019b**).

	Population Trend				
Management and Harvest Level	Declining Adult Cow Survival <80% Calf Recruitment	<b>Stable</b> Adult Cow Survival 80%-88% Calf Recruitment	Increasing Adult Cow Survival >88% Calf Recruitment	Harvest Recommendations May Include:	
al	<15:100 Pop: 265,000+	15-22:100 Pop: 230,000+	>22:100 Pop: 200,000+	Reduce harvest of bulls by nonresidents to maintain at least 30 bulls:100 cows	
Libe	Harvest: 14,000+	Harvest: 14,000+	Harvest: 14,000+	<ul> <li>No restriction of bull harvest by resident hunters unless bull:cow ratios fall below 30 bulls:100 cows</li> </ul>	
ervative	Pop: 200,000- 265,000	Pop: 170,000- 230,000	Pop: 150,000- 200,000	<ul> <li>Encourage voluntary reduction in calf harvest, especially when the population is declining</li> <li>No cow harvest by nonresidents</li> <li>Restriction of bull harvest by nonresidents</li> </ul>	
Conse	Harvest: 10,000-14,000	Harvest: 10,000-14,000	Harvest: 10,000-14,000	• Limit the subsistence harvest of bulls only when necessary to maintain a minimum 30:100 bull:cow ratio	
ervative	Pop: 130,000- 200,000	Pop: 115,000- 170,000	Pop: 100,000- 150,000	<ul> <li>No harvest of calves</li> <li>Limit harvest of cows by resident hunters through permit hunts and/or village quotas</li> <li>Limit the subsistence harvest of bulls to maintain at least 30 bulls:100 cows</li> </ul>	
Pres	Harvest: 6,000-10,000	Harvest: 6,000-10,000	Harvest: 6,000-10,000	Harvest restricted to residents only, according to state and federal law. Closure of some federal public lands to non-qualified users may be necessary	
tical	Pop: <130,000	Pop: <115,000	Pop: <100,000	<ul> <li>No harvest of calves</li> <li>Highly restrict the harvest of cows through permit hunts and/or village quotas</li> <li>Limit the subsistence harvest of bulls to maintain at least 30 bulls:100 cows</li> </ul>	
Ŀ	Harvest: <6,000	Harvest: <6,000	Harvest: <6,000	• Harvest restricted to residents only, according to state and federal law. Closure of some federal public lands to non-qualified users may be necessary	



**Figure 2**. The WACH population estimates from 1970–2022. Population estimates from 1986–2022 are based on aerial photographs of groups of caribou that contained radio-collared animals (Dau 2011, 2013, 2014; Parrett 2016, 2017a; Hansen 2019a; WACHWG 2021, 2022).



Figure 3. Bull:cow ratios for the WACH (Dau 2015; ADF&G 2017c; Parrett 2017a; WACHWG 2021).



**Figure 4.** Mortality rate of radio-collared cow caribou in the WACH (Dau 2013, 2015, 2016b; NWARAC 2019a; WACHWG 2020, 2021). Collar Year = 1 Oct-Sep 30. Note: Prior to 2019, collars were deployed via boat in Onion Portage from September to October. Starting in 2019 collars were deployed via net gun techniques in spring (Joly and Cameron 2021).



**Figure 5.** Calf:cow and short yearling (SY):adult ratios for the WACH (Dau 2013, 2015, 2016a; ADF&G 2017c; Parrett 2017a; NWARAC 2019a, 2023; WACHWG 2021, 2022). Short yearlings are 10-11 months old caribou.

## Teshekpuk Caribou Herd

The TCH calving and summering areas overlap with the eastern portion of the National Petroleum Reserve–Alaska (NPR–A). Most of the TCH moves toward Teshekpuk Lake in May to calve in early June. The primary calving grounds of the TCH (approximately 1.8 million acres) occur to the east, southeast and northeast of Teshekpuk Lake (**Figure 6**, Person et al. 2007; Wilson et al. 2012). From late June through July cows and bulls move to seek relief from insects (**Figure 6**, Carroll 2007; Parrett 2007). Fall and winter movements are more variable, although most of the TCH winters on the coastal plain (Carroll 2007). The TCH winters in four relatively distinct areas: the coastal plain between Atqasuk and Wainwright; the coastal plain west of Nuiqsut; the central Brooks Range; and the shared winter ranges with the WACH in the Noatak, Kobuk, and Selawik drainages (**Figure 6**, Parrett 2021).

State management objectives for the TCH include (Parrett 2021):

- Maintain a population of at least 15,000 caribou, recognizing that caribou numbers naturally fluctuate.
- Provide a harvest of at least 900 caribou in a sustainable manner.
- Maintain a population with a range of 25–35 bulls:100 cows, depending upon population level.
- Obtain harvest estimates with sufficient data such that a 15% change in annual harvest is detectable.
- Develop regulations that have broad support among users and cooperating agencies.
- Clarify the relationships between both abundance and vital rates with harvest, habitat, body condition, predation, seasonal mixture with adjacent herds, and immigration between adjacent herds.
- Monitor herd characteristics and population parameters.
- Provide high-quality data on distribution, habitat preferences, and movement patterns to facilitate effective planning and mitigation of oil development and associated infrastructure.

Since 1984, the minimum population of the TCH has been estimated from aerial photocensuses and radiotelemetry data. The TCH population increased from an estimated 18,292 caribou (minimum estimate 11,822) in 1984 to 68,932 caribou (minimum estimate 64,106) in 2008. From 2008 to 2014, the population declined by almost half to 39,000 caribou (Parrett 2015a). Interpretation of population estimates is difficult due to movements and range overlap among caribou herds, which results in both temporary and permanent immigration and emigration (Person et al. 2007). For example, the minimum count in 2013 contained an unknown number of CACH caribou (Parrett 2015a). Following the 2013 census, ADF&G made the decision to manage the TCH based on the minimum count because the bulk of the animals that were estimated rather than counted were with the WACH at the time of the photocensus (Parrett 2015b, pers. comm.). In 2017, the minimum count was 56,255 with a population estimate of 55,614 (SE = 2,909). During 2012–2017, the management objective of maintaining a population of at least 15,000 caribou was met (Parrett 2021). The total minimum count for the 2022 photocensus was 51,225 caribou and the abundance estimate was 61,593 animals (95% CI: 52,188-70,998) (Daggett 2023, pers. comm.).
In 2013 and 2016, the number of bulls:100 cows was 39 bulls:100 cows and 28 bulls:100 cows, respectively (Parrett 2011, 2013, 2015a; Parrett 2017a, pers. comm.). Comparison of bull:cow and calf:cow ratios from 1991-2000 and later years is not possible due to changes in methodology. The calf:cow ratio increased from 18 calves:100 cows between 2009-2013 to 48 calves:100 cows in 2016 (Parrett 2013, 2015a; Parrett 2017a, pers. comm.). In addition, the number of SY:adults declined from an average of 20 SY:100 adults between 1999 and 2008 to an average of 14 SY:100 adults from 2009-2014 (Parrett 2013) and increased in 2016 to 29 SY:100 adults (Parrett 2017a, pers. comm.). From 2018-2021, the SY:adults returned to an average of 14 SY:100 adults. The most recent survey in 2023 decreased to 6.8 SY:100 adults (Daggett 2023, pers. comm.).

The annual mortality of adult radio collared females from the TCH has remained close to the long term (1991-2012) average of 14.5% (range 8–25%) (Parrett 2011, 2015a; Caribou Trails 2014). As the TCH declined, calf weights declined, indicating that poor nutrition may have had a significant effect on this herd (Carroll 2015, pers. comm.; Parrett 2015b, pers. comm.). In 2016 increased calf weights, high adult female survival (92%), high yearling recruitment (29 yearlings:100 adults), high calf production (81%), and a high calf:cow ratio (48 calves:100 cows) suggest that the population may be stable or declining at a slower rate (Parrett 2017a, pers. comm.; Klimstra 2017). In contrast, the body condition of individuals from the WACH, which declined dramatically over the same time period, had remained relatively good, indicating that caribou were still finding enough food within their range (Caribou Trails 2014; Dau 2014). Parturition rates from 2018-2022 peaked at 85% in 2020 and have since declined to 45% in 2022 (Daggett 2023, pers. comm.).



**Figure 6**. Seasonal ranges, 2012–2017, for satellite collared female caribou of the TCH Alaska (Parrett 2021). Note: Utqiaġvik was known as Barrow until 2016.

## **Cultural Knowledge and Traditional Practices**

The potential effects of this proposal span the traditional territory the Iñupiat of the North Slope, Northwest Arctic and the Seward Peninsula, Yup'ik communities in the southern portion of the Seward Peninsula and northern portion of the Yukon region, and the Koyukon Athabascans of the Western Interior (**Map 3**). However, caribou are encountered less frequently by communities on the edges of the WACH's range, particularly during times of population decline (Burch 2012).

Because the communities that would be most directly affected by this proposal are located in traditional Iñupiaq territory, this section focuses on their cultural uses of caribou. Caribou have been a significant resource for the Iñupiat for thousands of years. Archaeological deposits at the Onion Portage site on the Kobuk River document 10,000 years of caribou hunting at this location, which is still used today (Anderson 1968, 1988), and even older archaeological deposits dated to approximately 11,000 years ago occur in the Kivalina River drainage (Buvit et al. 2019).



**Map 3.** Map depicting the overlap of northern Alaska caribou herds and traditional territories of Alaska Native cultural groups.

Iñupiat values are based on the perspective that the human-animal relationship is reciprocal. Maintaining the reciprocal relationship requires respectful human behavior toward animals that is guided by a system

of rules. Three of the primary rules are 1) that humans must harvest animals who give themselves, 2) they must not waste any part of animals they harvest, and 3), in times of low animal populations, people must intentionally limit their harvest (Burch 1984, 1994, 1995; ADF&G 1992).

Failure to follow these rules or treating animals with disrespect will prevent animals from returning. Northwest Arctic Council members have testified about the decline in local availability of caribou, which has meant that many people have gone without caribou in recent years (NWARAC 2023). This proposal reflects the practice of intentional harvest limitation in order to maintain respectful and reciprocal relations between humans and caribou. At the Northwest Arctic Council member 2022, one Council member explained:

Caribou is, I know they're going down. My son got caribou. I have caribou. So, he gave away to elders. And I always tell him don't get any more, I'll stop him when we have enough caribou because a family, my size, there's six of us in the family, and four caribou is enough for the whole year, and I always tell my son that's enough. When you get four caribou, that's good. The caribou herd is going down, we're not going to hunt this spring. And young men now, now days, if you teach them right, they'll listen, and I'm glad my son is doing that. Because I know the caribou is going down and we have to respect that (NWARAC 2022: 20).

## Human population of the region

Decision-making on WACH harvest limits may incorporate demographic data for communities within the core range of the WACH. **Tables 2** highlights total population and the number of households for those regions with the highest documented harvest of caribou within the range of the WACH (U.S. Census 2020). **Table 3** shows the number of households harvesting caribou in the most recent ADF&G, Division of Subsistence surveys (CSIS 2023).

**Table 2.** Population and number of households in the Northwest Arctic Borough, North Slope Borough (excluding Kaktovik), and Nome Census Area (U.S. Census 2020). Kaktovik is excluded from the North Slope data because it is in Unit 26C, beyond the range of the WACH. Note that the Unit 24 community of Anaktuvuk Pass is within the North Slope Borough.

Census Area	Total Population	Number of Households
Northwest Arctic Borough	7,793	1,756
North Slope Borough, excluding	10,748	2,042
Kaktovik		
Nome Census Area	10,046	2,714
Total	28,587	6,512

**Table 3**. The number of households (in areas with a customary and traditional use determination for caribou within the units included in this proposal) harvesting caribou in in the most recent survey years, calculated based on ADF&G, Division of Subsistence data (CSIS 2023). Villages were not all surveyed in the same year. Note that totals for Unit 22 do not include Nome, for which no caribou subsistence survey data are available. Caribou survey data for Nunam Iqua and Kotlik date to 1980 and were deemed too old for inclusion. Some communities in Unit 26A

harvest primarily from the Teshekpuk Herd. These numbers do not reflect recent lack of availability of caribou for many communities, and therefore may over-estimate the number of households currently harvesting caribou.

Unit	Estimated Number of Households Harvesting Caribou in Most Recent Subsistence Survey Years
Unit 18 communities with C&T	12
Tanana (20E) and Stevens Village (25D)	4
Unit 21 (excluding communities in 21A; no C&T)	3
Unit 22 (excluding Nome; no data)	289
Unit 23	784
Unit 24 (excluding Anaktuvuk Pass)	38
Unit 26A and Anaktuvuk Pass	795
Total	1,925

Many gaps in the data remain, including the number of individuals (rather than households) harvesting caribou during past survey years and the number of potential caribou permit holders per household or in total. Of note, Wolfe et al. (2010) demonstrated that households producing more food in rural subsistence communities in Alaska were characterized by their inclusion of "multiple working-age males." Estimates of the number of potential permit holders may take into consideration the number of men of working age as one factor, as hunting has traditionally been dominated by men in Iñupiaq regions, although there are important exceptions to this pattern, as not all men of working age participate in the subsistence economy, and some women are active hunters (Satterthwaite-Phillips et al. 2016).

## Unequal distribution of harvest effort

This proposal seeks a reduced harvest limit for the WACH, and past subsistence harvest estimates can inform consideration of reduced limits. ADF&G, Division of Subsistence has conducted periodic subsistence surveys for communities within the range of the WACH between 1982 and 2018. These data have limitations, such as the fact that communities are often surveyed only once every ten years, not each survey year is representative of typical subsistence use, and even in representative years, harvest numbers are estimates only. Nonetheless, subsistence surveys do provide valuable information on historical baseline harvest levels.

While wildlife regulations allot harvest limits on an individual basis, not all members of a community harvest and distribute wild foods at equal levels. Generally, many more people use caribou than harvest caribou because of the Iñupiaq cultural value of harvesting and sharing subsistence foods to provide for those who do not have a hunter in the household. As first posited by Wolfe (1987) and supported by decades of ADF&G, Division of Subsistence research, it is common for 30% of the households in rural Alaskan communities to harvest 70% of a community's total annual harvest measured in edible pounds of food (Magdanz et al. 2005: 41, Wolfe et al. 2010).

At their March 7-8, 2023 meeting, the Northwest Arctic Council discussed what they called "super hunters," hunters that provide for a large number of families, and who would need designated hunter permits under a reduced harvest limit scenario:

We kind of named them as super hunters because a lot of families will -- five families will pull together gas and grub and whatever necessary for three boats to go out and hunt for six or seven families; that's why we call them super hunters, because they're providing for a lot of people that can't, you know, can't afford the gas, can't afford the boats, or don't have a boat, or an elder, that's one of the reasons why we kind of labeled them as super hunters but we need to ensure that they have this paperwork provided to them if they are going to do that" (NWARAC 2023:110).

**Tables 4-7** compare the estimated number of caribou harvested in each community distributed over all households with harvest *only per households that actually harvested caribou*. Note that while harvest limits are individual, rather than household based, ADF&G, Division of Subsistence data on the percentage of a community harvesting caribou is only available on a household basis. The average number of potential permit-holders per household is unknown.

**Table 4.** For communities in Unit 23, this table shows the estimated number of caribou harvested (1) per household, and (2) per household successfully harvesting caribou for all surveys conducted periodically between 1986 and 2018. Calculated based on data from ADF&G, Division of Subsistence Community Subsistence Information System (CSIS 2023) and ADF&G, Division of Subsistence Technical Papers (Mikow et al. 2014., Mikow and Kostick 2016). Survey years with key data missing were excluded.

Community	Estimated Number of Caribou per Household	Estimated Number of Caribou per Households that Successfully Harvested Caribou
Ambler	5.3	10.5
Buckland	7.4	11.2
Deering	5.6	11.0
Kiana	4.2	6.8
Kivalina	2.9	5.5
Kobuk	4.8	7.2
Kotzebue	2.1	5.7
Noatak	3.8	6.7
Noorvik	4.0	6.8
Point Hope	1.1	3.6
Selawik	5.9	10.0
Shungnak	7.6	12.2
Average	4.6	8.1

**Table 5.** For communities in Unit 26A and Anaktuvuk Pass, this table shows the estimated number of caribou harvested (1) per household, and (2) per household successfully harvesting caribou for all surveys conducted periodically between 1985 and 2014. Calculated based on data from ADF&G, Division of Subsistence Community Subsistence Information System (CSIS 2023). Survey years with key data missing were excluded.

Community	Estimated Number of Caribou per Household	Number of Caribou per Households that Successfully Harvested Caribou
Anaktuvuk Pass	7.6	16.0
Atqasuk	3.7	5.8
Nuiqsut	4.7	7.3
Point Lay	4.7	7.2
Utqiaġvik	2.1	6.6
Wainwright	6.2	10.1
Average	4.8	8.8

Although Anaktuvuk Pass is located on the edge of Unit 24, it is included in the table for Unit 26A communities because of cultural continuity with the North Slope Region. However, as an inland community, Anaktuvuk Pass relies more heavily on caribou than coastal North Slope communities that have access to marine mammals (Brown et al. 2016). Despite important differences between communities, taken as a whole, residents of Unit 23 and residents of Unit 26A and Anaktuvuk Pass together have similar levels of average estimated per household harvest (4.6 and 4.8 caribou, respectively) and similar average estimated harvest per households that successfully hunted caribou (8.1 and 8.8 caribou, respectively) (**Tables 4** and **5**).

In terms of harvest per household successfully harvesting caribou, the highest average in Unit 23 was 12.2 caribou per household in Shungnak (**Table 4**), and the highest average in Unit 26 and Anaktuvuk Pass was 16 caribou, in Anaktuvuk Pass (**Table 5**). The estimated number of households harvesting caribou in the most recent survey years was 784 in Unit 23 and 795 in Unit 26A and Anaktuvuk Pass, for a total of 1,579 households (**Table 3**, CSIS 2023).

Note the significant difference between the two measures of caribou harvest (distributed across all households vs. only those households harvesting caribou) for both Units 23 and 26A. In considering how such numbers compare to the proposed reduction to four caribou per year per permit holder, it is worth noting that some "super households" (Wolfe 1987) that harvest for the wider community are likely to have multiple hunters, each of whom could hold a permit.

**Table 6.** For communities in Unit 22, this table shows the estimated number of caribou harvested (1) per household, and (2) per household successfully harvesting caribou for all surveys conducted periodically between 1989 and 2018. Calculated based on data from ADF&G, Division of Subsistence Community Subsistence Information System (CSIS 2023). Survey years with key data missing were excluded. Note that this table does not include survey data for Nome, which are not available.

Community	Estimated Number of Caribou per Household Successfully Harve Caribou	
Brevig Mission	0.8	5.1
Elim	2.0	4.0
Golovin	<0.1	1.0

Community	Estimated Number of Caribou per Household	Estimated Number of Caribou per Households that Successfully Harvested Caribou
Koyuk	3.6	6.1
Saint Michael	0.3	3.5
Shaktoolik	2.7	5.2
Shishmaref	3.0	6.7
Stebbins	0.1	6.3
Teller	0.2	2.9
Unalakleet	2.3	6.3
Wales	<0.1	3.4
White Mountain	1.2	4.5
Average	1.2	4.6

In Unit 22 communities (excluding Nome, for which no data are available), the average estimated per household harvest was 1.2 caribou, while the estimated harvest per harvesting household was 4.6 caribou, with a high of 6.7 caribou in Shishmaref (**Table 6**). The estimated number of households harvesting caribou in the most recent survey years was 289 for Unit 22 (**Table 3**, CSIS 2023).

**Table 7.** For communities in Unit 24, this table shows the estimated number of caribou harvested (1) per household, and (2) per household successfully harvesting caribou for all surveys conducted periodically between 1982 and 2011. Calculated based on data from ADF&G, Division of Subsistence Community Subsistence Information System (CSIS 2023). Survey years with key data missing were excluded.

Community	Estimated Number of Caribou per Household	Estimated Number of Caribou per Households that Successfully Harvested Caribou
Alatna	1.6	4.1
Bettles	1.2	4.1
Bettles/Evansville	0.2	2.3
Evansville	0.2	1.6
Coldfoot	0.4	1.6
Hughes	0.4	5.3
Huslia	1.4	4.3
Wiseman	0.8	1.3
Average	0.8	3.1

The availability of the WACH within the traditional territories of the interior Athabascans is more variable; harvest of caribou in these communities depends on the proximity of migrations to each village (Brown et al. 2004). In Unit 24 communities (excluding Anaktuvuk Pass), the average harvest per household was 0.8 caribou, and the average harvest per harvesting household was 3.1 caribou (**Table 7**).

No table is included for Unit 21D, remainder communities, where caribou harvest has only been documented for Galena in surveys conducted in the last 15 years. In that community, households harvesting caribou took an average of 2.5 caribou per household (CSIS 2023). Nor is a table included for Unit 18 communities, or Stevens Village and Tanana, which also have a customary and traditional use determination in portions of the WACH range. These communities historically have very low harvest levels (CSIS 2023). However, lower caribou harvest, reflecting intermittent and marginal availability, does not mean that caribou are not important to these communities.

When considering the per household caribou harvest levels shown in **Tables 4-7**, it is not surprising that the most vocal participants in the recent public hearings and tribal consultations are from the high-harvesting regions: residents of northwest Alaska in Unit 23, residents of the North Slope in Unit 26A and Anaktuvuk Pass.

Caribou harvest is affected by multiple factors: harvest limits, availability of animals, shifting migration routes, the need to share with nearby communities, human population size, community location, and the availability of other resources. The numbers in the tables cited in this section are approximations and do not tell the entire story of caribou harvest or need in these communities.

Multiple considerations and pressures determine how many caribou are harvested when a successful hunt is made. For example, in Unit 23, residents of some communities have had to "greatly increase their expenditure of money and effort to maintain...harvest levels" (Dau 2015:14-30). This is due in part to having to travel farther, more frequently, and for longer durations to find caribou (Halas 2015; Gonzalez et al. 2018), which is made even more expensive by rising fuel prices. A reduced harvest limit may make such large investments untenable for some hunters, who would otherwise have provided for the wider community. Although designated hunter permits could ameliorate this outcome, these permits currently present bureaucratic and logistical challenges to rural residents.

Harvest data from comprehensive subsistence household surveys are not sufficiently up to date to provide accurate information on the full impact that the WACH's decline and altered migration pattern may already be having on caribou availability and harvest levels. These surveys are not collected every year in every community. Currently, ADF&G Division of Subsistence is conducting surveys of caribou harvest in Selawik, Shungnak, Noatak, Deering, and Kobuk. This research is scheduled to be completed in 2024 (Cold 2021).

# Cow harvest

In addition to harvest numbers, constraints on whether cows or bulls are harvested must also be taken into consideration. In the fall and prior to freeze-up, bulls have traditionally been preferred because they are fatter than cows (Georgette and Loon 1993; NWARAC 2023). After freeze-up, cows are preferred, because bulls are typically skinnier and in rut by then; the meat smells bad and is of poor quality (Braem et al. 2015; NWARAC 2023).

In some—but not all—survey years, ADF&G, Division of Subsistence data in the CSIS contains a breakdown of caribou harvest by male, female, or sex unknown. In Unit 23, in surveys conducted periodically between 1964 and 2018 for which this information exists, an average of 60% of the harvest was male and 30% was female, with 10% being unknown (**Appendix 2**). In Unit 26A and Anaktuvuk

Pass, in surveys conducted periodically between 1985 and 2014 for which information is available, an average of 70% of caribou harvested were male, 25% were female, and 5% were of unknown sex (**Appendix 2**). However, there was wide variability between years and communities in the breakdown of the harvest by sex.

## Factors contributing towards increased harvest pressure on cows

Harvest of caribou by federally qualified subsistence users may be shifting towards cows due to the delayed migration of caribou into Unit 23 community hunting areas, as recently noted by a Northwest Arctic Council member (NWARAC 2023). However, current harvest report data on cow vs. bull harvest by federally qualified subsistence users are not available. With the delayed migration, caribou have been arriving in some Unit 23 communities after the rutting season has begun, at which point bulls are considered inedible. The local preference is to avoid hunting bulls for many months after the rut. The Western Arctic Caribou Herd Working Group has identified limiting cow harvest as the highest priority for WACH conservation (WACH Working Group 2022). The proposed harvest limit includes a significant limitation on cow harvest; an alternative incremental approach would begin with only limiting cow harvest, an option described in the "Alternatives Considered" section of this analysis.

## Council rationale for proposing a reduced harvest limit

The Northwest Arctic Council has identified multiple factors that may be negatively affecting the WACH population and local people's ability to harvest caribou. Climate change, delayed caribou migration, development, increased predation by bears and wolves and/or a combination of these factors has led to difficulty for caribou-dependent communities in Unit 23 and (Dau 2015, Braem et al. 2015, NWARAC 2020, 2021). Reducing their harvest is one of the few actions Unit 23 communities can take to attempt to slow the WACH population decline. The requests to intentionally reduce caribou harvest reflect Iñupiaq values and the hope of intentionally limiting harvest to contribute to the recovery of the caribou population upon which communities depend.

During discussion of this proposal and an identical Special Action Request at their March 7-8, 2023 meeting, members of the Northwest Arctic Council discussed their rationale for supporting the reduced harvest limit. Council members emphasized the importance of acting pre-emptively and acknowledged that local residents would have to make sacrifices for the preservation of the herd, including taking fewer cows:

We don't want to hit rock bottom with the caribou herd. If we lose that, if we go beyond what we have now we don't even know if we can get our caribou back (NWARAC 2023: 59).

We have to do something to try to preserve this herd even if it means a lot less than what we were getting before. [A] limit to hunting of the cows is the only way because they're the ones who...can bring this herd back. It's one of the things that we have to sacrifice (NWARAC 2023: 54).

One Council member from Kotzebue discussed the need for action parallel to the regulatory process to educate the young people in Northwest Arctic communities about the importance of saving the caribou population. Another Council member from Kotzebue emphasized that restricting harvest by federally

qualified subsistence users would demonstrate local will to self-limit harvest in order to protect the WACH (NWARAC 2023).

The two public hearings and the tribal consultations on WSA22-05/06 showed the conflict faced by participants (see summaries in "Current Events"). The affected communities who rely on the Western Arctic Caribou Herd are aware that conservations measures are needed. However, they are concerned about drastic harvest limit reductions and have asked for a decision-making process that is community-based and allows adequate time for input and consultation with federally qualified subsistence users. At the Federal Subsistence Board meeting on WSA22-05/06, the Chair of the Northwest Arctic Council acknowledged that local reaction to the proposed harvest limit had been strongly negative but emphasized that some conservation action would ultimately need to be taken by federally qualified subsistence users (NWARAC 2023).

## **Harvest History**

## Western Arctic Caribou Herd harvest

The WACH Working Group provides recommendations on herd management, including harvest levels. Currently, the WACH is within the "preservative declining" level, which prescribes a harvest of 6,000-10,000 caribou (**Table 1**). Previous versions of the WACH management plan recommended a harvest rate of 6% of the estimated population when the herd was declining (WACHWG 2011, Parrett 2017b, pers. comm.). The current recommended harvest rate at the preservative declining level is 5% at 200,000 and 4.6% at 130,000. As the 2022 population estimate was 164,000 caribou, the harvestable surplus is currently 7,872 caribou (4.8% of 164,000) (NWARAC 2023; WACHWG 2022). The State manages the WACH on a sustained yield basis (i.e. managing current harvests to ensure future harvests). Of particular concern is the overharvest of cows, which may have occurred since 2010/11 (Dau 2015). Dau (2015:14-29) states, "even modest increases in the cow harvest above sustainable levels could have a significant effect on the population trajectory of the WACH."

Caribou harvest by local hunters is estimated from community harvest surveys (**Appendix 2**), if available, and from models developed by A. Craig with ADF&G's Division of Wildlife Conservation Region V. These models incorporate factors such as community size, availability of caribou, and per capita harvests for each community, which are based on mean values from multiple community harvest surveys (Dau 2015). In 2015, Craig's models replaced models developed by Sutherland (2005), resulting in changes to local caribou harvest estimates from past years. While Craig's models accurately reflect harvest trends, they do not accurately reflect actual harvest numbers (Dau 2015). This analysis only considers the updated harvest estimates using Craig's new model as cited in Dau (2015). Caribou harvest by nonlocal residents and nonresidents are based on harvest reports from harvest tickets and registration permits (Dau 2015). Hunters considered local by ADF&G are functionally identical to federally qualified subsistence users (e.g. residents of St. Lawrence Island are technically federally qualified subsistence users, but do not frequently harvest Western Arctic caribou).

From 1999–2018, the rangewide average estimated total harvest from the WACH was 14,103 caribou/year, ranging from 11,729-16,219 caribou/year (Hansen 2020 and 2021a, pers. comm.), but has

generally been estimated at 12,000 +/- 1,750 caribou per year since 1996 (WACHWG 2021, WACHWG 2019b). Additionally, harvest estimates do not include wounding loss, which may be hundreds of caribou (Dau 2015). Year-specific harvest estimates have not been generated since 2018, in part because they are not very accurate (Hansen 2021a, pers. comm., WACHWG 2021). While all of these harvest estimates are above the preservative harvest level specified in the WACH Management Plan and indicate unsustainable harvest levels, actual harvest is unknown and could be much lower due to caribou being unavailable for harvest near local communities.

Local hunters account for approximately 95% of the total WACH harvest and residents of Unit 23 account for approximately 58% of the total harvest on average (ADF&G 2017c). Comparison of caribou harvest by community from household survey data (**Appendix 2**) with **Figure 1** demonstrates that local community harvests parallel WACH availability rather than population trends. For example, Ambler only harvested 325 caribou when the WACH population peaked in 2003 but harvested 685 caribou in 2012 when most of the WACH migrated through eastern Unit 23. Similarly, Noatak only harvested 66 caribou in 2010 when no GPS-collared caribou migrated through western Unit 23. Harvest increased substantially (360 caribou) the following year when 37% of the GPS-collared caribou (and thus, a greater proportion of the WACH) migrated through western Unit 23. (**Appendix 2**).

Between 1998 and 2020, annual reported caribou harvest in Unit 23 ranged from 168-814 caribou (Hansen 2021a, pers. comm.). Over the same time period, reported harvest by non-federally qualified users ranged from 131-657 caribou. The lowest reported harvest occurred in 2016 when all Federal public lands in Unit 23 were closed to non-federally qualified users, but before harvest reporting was required for federally qualified subsistence users. Regardless, local compliance with reporting mandates is considered low but increasing. In 2017 and 2018, registration permits became required under State and Federal regulations, respectively, which is reflected in the greater number of reported caribou harvest by federally qualified subsistence users. However, compliance with reporting caribou harvest still remains too low to accurately estimate total caribou harvest. On average, 76% of WACH caribou harvested by nonlocals are harvested in Unit 23 (Dau 2015). Between 2016, when Federal lands closures began, and 2020, reported caribou harvest by non-local hunters in Unit 23 averaged 254 caribou (WinfoNet 2018, 2019, Hansen 2021a pers. comm.).

From 1999-2013, 72% of nonlocal hunters on average accessed the WACH by plane. Most nonlocal harvest (85-90%) occurs between August 25 and October 7. Most local subsistence hunters harvest WACH caribou whenever they are available using boats, 4-wheelers, and snowmachines (Dau 2015, Fix and Ackerman 2015). In Unit 23, caribou have historically been available during fall migration, but this has no longer been the case in recent years; caribou migration has occurred later in fall, resulting in subsistence harvest also occurring later, which in turn contributes to food insecurity.

The caribou harvest in Unit 21D averages 0-10 caribou/year (Dau 2009, 2013, 2016, pers. comm.).

## Unit 26A and Teshekpuk Caribou Herd harvest

Reliance on caribou from a particular herd within Unit 26A varies by community. Residents of Atqasuk, Barrow, Nuiqsut, and Wainwright harvest caribou primarily from the TCH while residents from Anaktuvuk Pass, Point Lay, and Point Hope harvest caribou primarily from the WACH (Dau 2011, Parrett 2011, 2013). Weather, distance of caribou from the community, terrain, and high fuel costs are some of the factors that can affect the availability and accessibility of caribou. Residents of Nuiqsut, which is on the northeast corner of Unit 26A, harvest approximately 11% of their caribou from the CACH (**Table 7**, Parrett 2013).

Range overlap between the three caribou herds, frequent changes in the wintering distribution of the TCH and WACH, and annual variation in the community harvest survey effort and location make it difficult to determine the proportion of the TCH, WACH, and CACH in the harvest. Knowledge of caribou distribution at the time of the reported harvest is sometimes used to estimate the proportion of the harvest from each herd. A general overview of the relative utilization based on estimated harvest of each caribou herd by community for regulatory year 2010/11, is presented in **Table 8** (Parrett 2011, Dau 2011, and. Lenart 2011). The percentage of caribou harvested from different herds by community has varied  $\leq 2\%$  for all communities between 2008/09, 2009/10, and 2010/11.

Harvest from the TCH is difficult to estimate because of very poor reporting, variation in community survey effort and location, widely varying wintering distribution of the TCH, and mixing of caribou herds. Most of the harvest occurs from July-October by local hunters in Unit 26A. Very low levels of TCH harvest occur in Units 23, 24, and 26B. Non-locals and non-residents account for less than 3% of the TCH harvest (Parrett 2013). Parrett (2013) estimated 3,387 TCH caribou were harvested in Unit 26A by local communities in each of 2010/11 and 2011/12 regulatory years and that previously reported harvest estimates (Parrett 2009) were biased high due to oversampling (**Table 8**). This estimated harvest is well above State objectives.

**Table 8.** Estimated caribou harvest of the Teshekpuk, Western Arctic and Central Arctic caribou herdsduring the 2010/2011 regulatory years in Unit 26A by federally qualified users (Parrett 2013, Dau 2013).Note: Due to the mixing or the herds, annual variation in the community harvest surveys and missingdata, the percentages for each community do not add up to 100%.

Community	Human population <sup>a</sup>	Per capita caribou harvest <sup>bc</sup>	Approximate total community harvest	Estim annual harves	ated TCH st (%)	Estii an W/ hai	mated nual ACH vest %)	Estimated annual CACH harvest (%)
Anaktuvuk Pass	331	1.8	582	174	(30)	431	(80)	
Atqasuk	234	0.9	215	210	(98)	6	(2)	
Barrow	4,290	0.5	2,145	2,123	(97)	62	(3)	
Nuiqsut	411	1.1	468	403	(86)	3	(1)	36 (11)
Point Lay	191	1.3	247	49	(20)	120	(40)	
Point Hope	704		894	0		894	(100)	
Wainwright	559	1.3	710	426	(60)	48	(15)	
Total Harvest				3,3	87	1	564	36
				~				

<sup>a</sup> Population estimates averaged from the 2010 U.S. Census and 2012 Alaska Department of Commerce, Division of Community and Regional Affairs data

<sup>b</sup> Citations associated with per-capita caribou harvest assessment by community can be found in Table 5 (Parrett 2011).

<sup>c</sup> Sutherland (2005)

### **Alternatives Considered**

### Modify to adjust harvest limits to reflect different harvest levels across the WACH range

Reducing the harvest to four caribou per year per permit holder throughout the range of the herd would impact some communities much more profoundly than others. For example, the Unit 24B community of Anaktuvuk Pass, where the estimated average number of caribou harvested yearly by successfully harvesting households is 16 (**Table 5**) (and where true "super households" may take and share more caribou per year), would face greater impacts than communities in Unit 22, where the baseline average estimated number of caribou taken by households that successfully harvest is 4.6, according to subsistence surveys (**Table 6**).

One alternative considered would reduce harvest limits by a consistent percentage (e.g. approximately 25%) of baseline harvest levels, as documented in past subsistence surveys for each community. Under this scenario, the harvest limit in Unit 22 could be set at three caribou per year, while the harvest limit in Unit 24B, remainder could be set at twelve caribou per year.

This alternative was rejected because it is likely untenable. Communities' search and use areas are not neatly confined to single management units, and disparate harvest limits may motivate hunters to travel to adjacent units, altering patterns of use. Furthermore, subsistence survey data on caribou harvest are estimates only, and caution should be used when employing this information to adjust harvest limits on a fine scale.

If levels of past harvest, as documented in subsistence surveys, were to be used to reduce harvest levels by a consistent percentage for each community, this would be best carried out via community hunt systems or quotas and would entail additional analysis that is well beyond the scope of this proposal. Such an approach would entail working closely with communities to distribute and track permits. After the WACH declined to an estimated low of 75,000 in 1976, ADF&G set the harvest limit at one bull per year by registration permit and distributed a limited quota of permits among communities, an approach that was then incrementally liberalized in subsequent years (Davis et al. 1985).

### Modify to limit cow harvest only

Another alternative considered would maintain the current harvest limits, with the stipulation that only one of the caribou harvested per year per permit holder could be a cow. This alternative would allow "super households" more flexibility to provide for multiple people over the proposed reduction while still conserving cows, although overall harvest of the WACH may not be reduced. This would represent an incremental approach to conservation, with limits to bull harvest being an option for future implementation. However, the degree of WACH decline may warrant limits on harvest of both cows and bulls at this time.

## Modify to reduce the harvest limit, but at a level higher than proposed

Yet another alternative considered would modify this proposal to reduce the current harvest limits, but at a more liberal level than the proposed limit of four caribou per year per permit holder. One option would be to set the individual hunter harvest limit at eight caribou per year, only one of which may be a cow. This alternative would allow some flexibility to super households while conserving cows. For example, a harvest limit of eight caribou per year per permit holder would be largely consistent with the average baseline harvest by households that successfully harvested caribou in communities within Units 23 and 26A and Anaktuvuk Pass combined, as documented in past subsistence surveys (see "Cultural Knowledge and Traditional Practices" section of this analysis). Households that harvest at high levels for the wider community and only have one permitted hunter, including households in Anaktuvuk Pass, would still face harvest reductions (although a designated hunter permit would offer a path for additional harvest). Households with two permit holders could harvest up to 16 caribou per year. This incremental approach would allow communities to adjust to reduced harvest limits in a more gradual manner. However, the degree of WACH decline may warrant greater reduction in harvest limits at this time.

### Modify to exclude Units 21D, remainder and 24B, C, and D

As written, the proposal would include Units 21D, remainder, 24B, remainder, 24C, and 24D. As shown in the Cultural Knowledge and Traditional Practices section of this analysis, average baseline harvest by the communities located in these units occurs at levels below the recommended limit of four caribou per year, with the important exception of the Unit 24B community of Anaktuvuk Pass, which relies heavily on caribou. However, baseline harvest levels and search and use areas for all communities with customary and traditional use determinations for these units would need to be taken into account when considering excluding these units from reduced harvest limits (see the "Customary and Traditional Use Determinations" section of this analysis). Additionally, this alternative was rejected because although harvest levels are lower on the edges of the WACH range overall, caribou migration patterns fluctuate and during years when caribou are available, harvest may be higher.

### Modify to exclude Unit 26A remainder

Another alternative to consider would be to exclude all of Unit 26A remainder from the hunt areas affected by the proposed harvest limit reductions. Adoption of WP24-28, as written, may cause unnecessary hardship and restrictions for subsistence users in the northeastern portions of Unit 26A that are primarily occupied by Teshekpuk (not Western Arctic) caribou. This alternative could reduce hardships and unnecessary restrictions for subsistence users in the portions of Unit 26A where caribou harvest is primarily from the TCH but it would not reduce WACH harvest in those areas.

### Modify to exclude a portion of 26A remainder

Another similar alternative recommended by Selawik NWR and the Western Arctic National Parklands, would be to modify hunt area descriptors and to exclude that portion of Unit 26A north and east of a line running from the east/north bank of Wainwright Inlet to the headwaters of the Ketik River, to the headwaters of the Awuna River to the Colville River at Umiat then east to the Dalton Highway at Sagwon (**Map 4**). This alternative could reduce hardships and unnecessary restrictions for subsistence

users in the portions of Unit 26A where caribou harvest is primarily from the TCH, as well as help conserve the WACH.



**Map 4.** Map of the portion of 26A remainder excluded for alternative recommended by Selawik NWR and the Western Arctic National Parklands.

### **Effects of the Proposal**

If WP24-29 is adopted, the Federal caribou harvest limit in Unit 23 would be reduced from five caribou per day to four caribou per year, only one of which may be a cow. If WP24-28 is adopted, the same harvest limit reduction would occur across the entire range of the WACH, including Units 22, 23, 26A, and portions of Units 21D and 24. The decreased harvest limits and more restrictive cow harvest would reduce subsistence hunting opportunity and harvest under Federal regulations, but could help conserve the WACH and aid in its recovery, which, in turn, could provide more subsistence hunting opportunity in the future. Additionally, intentional harvest reduction to conserve the resource aligns with local cultural practices and values.

However, if the BOG does not adopt similar regulations, all Alaska residents could still harvest 5 caribou/day under State regulations on most Federal public lands, which could greatly limit the impacts of adopting these requests on both the WACH and subsistence users. Federal regulations would also become more restrictive than State regulations. However, as only Federal regulations apply on National Park lands and National Monuments, harvest would likely decrease within Gates of the Arctic NP, Kobuk Valley NP, and Cape Krusenstern NM. Further, if adopted, the proposed closure of federal public lands in Unit 23 to caribou hunting by non-federally qualified users from Aug. 1-Oct. 31 (WP2430/31; see "Current Events") would mean that State regulations would no longer apply on federal public lands in Unit 23 during this time, strengthening the effects of these proposed harvest limits within Unit 23.

In recent years, no collared WACH caribou have migrated into Units 22 or 21D, remainder. Therefore, any regulation changes in these units are unlikely to affect WACH harvest. However, caribou movements and distributions are highly variable, and it is possible portions of the WACH will go there in the future (Joly et al. 2021). A resident caribou herd may be present in Unit 22 (SPRAC 2021, 2022), and harvest limit reductions under Federal regulations would curtail harvest from these caribou (although users would still be able to harvest 5 caribou/day under State regulations) which would be an added benefit of the proposal as the small size (~5000, SPRAC 2021, 2022, NPS unpublished data) of this caribou group cannot support a 5 caribou/day bag limit. Additionally, the TCH and CACH occupies Unit 26A remainder and Unit 24B remainder. These herds have not experienced substantial population declines like the WACH. Therefore, reducing the harvest limits in Unit 26A remainder and Unit 24B remainder may not substantially affect WACH harvest or conservation and could unnecessarily restrict subsistence harvest from the TCH and CACH, although again, users would still be able to harvest 5 caribou/day under State regulations.

The reduced Federal harvest limits could also impact sharing networks, which are an important cultural component for subsistence users in these areas and contribute to food security. While four caribou per year may be enough for individuals and some families (NWARAC 2022), many families and elders depend on the "super households" (Wolfe 1987) to provide caribou meat. However, the use of designated hunter permits could dampen these effects and are intended to accommodate the cultural practice of harvesting for others. Designated hunter permits allow federally qualified subsistence users to hunt for others and allow designated hunters to possess two harvest limits at one time. However, it may take time for hunters to embrace the use of these permits.

## **OSM PRELIMINARY CONCLUSION**

Support Proposal WP24-29.

**Support** Proposal WP24-28 **with modification** to exclude that portion of Unit 26A north and east of a line running from the east/north bank of Wainwright Inlet to the headwaters of the Ketik River, to the headwaters of the Awuna River to the Colville River at Umiat then east to the Dalton Highway at Sagwon.

The modified regulation should read:

### **Proposed Federal Regulation**

Unit 21D—Caribou

*Unit 21D, remainder*— <u>5 caribou per day</u> <u>4 caribou per year, only 1</u> may be a cow, as follows: Calves may not be taken.

Bulls may be harvested.	July 1-Oct. 14. Feb. 1-June 30.
Cows may be harvested.	Sep. 1-Mar. 31.

#### Unit 22—Caribou

Unit 22B that portion west of Golovnin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage - 5 caribou per- day 4 caribou per year, only 1 may be a cow by State registration permit. Calves may not be taken.	Oct. 1-Apr. 30. May 1-Sep. 30, a season may be announced.	
Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the Kuzitrin River drainage (excluding the Pilgrim River drainage), and the Agiapuk River drainages, including the tributaries, and Unit 22E, that portion east of and including the Tin Creek drainage - 5 caribou per day 4 caribou per year, only 1 may be a cow by State registration permit. Calves may not be taken.	July 1–June 30.	
Unit 22A, remainder - <del>5 caribou per day</del> <b>4 caribou per year, only 1</b>	July 1-June 30,	

may be a cow by State registration permit. Calves may not be taken	season may be announced.
Unit 22D, that portion in the Pilgrim River drainage - <del>5 caribou per</del> - <del>day</del> <b>4 caribou per year, only 1 may be a cow</b> by State registration	Oct. 1-Apr. 30. May 1-Sep. 30, season
permit. Calves may not be taken	may be announced

Units 22C, 22D remainder, 22E remainder - 5 caribou per day 4July 1-June 30,caribou per year, only 1 may be a cow by State registration permit.season may beCalves may not be takenannounced

#### Unit 23-Caribou

Unit 23—that portion which includes all drainages north and west of, and including, the Singoalik River drainage— 5 caribou per day 4 caribou per year, only 1 may be a cow by State registration permit as follows:

Bulls may be harvested	July 1–June 30
Cows may be harvested. However, cows accompanied by calves may not be taken July 15–Oct. 14.	July 15–Apr. 30
Unit 23, remainder— <del>5 caribou per day</del> <b>4 caribou per year, only 1 may be a cow</b> by State registration permit as follows:	
Bulls may be harvested	July 1–June 30
<i>Cows may be harvested. However, cows accompanied by calves may not be taken July 31–Oct. 14.</i>	July 31–Mar. 31
Federal public lands within a 10-mile-wide corridor (5 miles either side)	

along the Noatak River from the western boundary of Noatak National Preserve upstream to the confluence with the Cutler River; within the northern and southern boundaries of the Eli and Agashashok River drainages, respectively; and within the Squirrel River drainage are closed to caribou hunting except by federally qualified subsistence users hunting under these regulations.

Bureau of Land Management managed lands between the Noatak and Kobuk Rivers and Noatak National Preserve are closed to caribou hunting from Aug. 1-Sep. 30 for the 2022-24 regulatory cycle, except by federally qualified subsistence users hunting under these regulations.

### Unit 24—Caribou

Unit 24B remainder - 5 caribou per day 4 caribou per year, only 1 may be a cow as follows: Calves may not be taken.

### Unit 23-Caribou

Bulls may be harvested.	July 1-Oct. 14.
	Feb. 1-June 30.
Cows may be harvested.	July 15-Apr. 30.

Units 24C, 24D - 5 caribou per day 4 caribou per year, only 1 may be a cow as follows: Calves may not be taken.

Bulls may be harvested.	July 1-Oct. 14.
	Feb. 1-June 30.
Cows may be harvested	Sep. 1-Mar. 31.

### Unit 26—Caribou

# Unit 26A - north and east of a line running from the east/north bank of Wainwright Inlet to the headwaters of the Ketik River, to the headwaters of the Awuna River to the Colville River at Umiat then east to the Dalton Highway at Sagwon- 5 caribou per day by State registration permit as follows: Calves may not be taken.

Bulls may be harvested	July 1-Oct. 14.
	Dec. 6-June 30.
Cows may be harvested; however, cows accompanied by calves may not be taken July 16-Oct. 15	July 16-Mar. 15.
Noatak National Preserve is closed to caribou hunting from	

*Noatak* National Preserve is closed to caribou nunting from Aug. 1-Sep. 30 for the 2022-24 regulatory cycle, except by federally qualified subsistence users hunting under these regulations. Unit 26A remainder - 5-caribou per day 4 caribou per year, only 1 may be a cow by State registration permit as follows: Calves may not be taken.

Bulls may be harvested

July 1-Oct. 15.

Dec. 6-June 30.

*Up to 3 cows per day* **Only 1 cow** may be harvested; however, July 16-Mar. 15. cows accompanied by calves may not be taken July 16-Oct. 15

#### Justification

OSM supports measures to reduce conservation concerns for the WACH. The lengthy and precipitous decline of the WACH warrants strong measures to aid in the recovery and conservation of this population. Current harvest rates, especially the taking of cows, could prolong or worsen the current decline, and hamper recovery efforts. Additionally, while causes of the decline are multi-faceted and uncertain, reducing human harvest is the most controllable factor.

Excluding the areas that primarily depend on other herds and caribou populations would help reduce the impact on sharing networks, which are an important cultural component for subsistence users in these areas and contribute to food security. The exclusion of that portion of Unit 26A north and east of a line running from the east/north bank of Wainwright Inlet to the headwaters of the Ketik River, to the headwaters of the Awuna River to the Colville River at Umiat then east to the Dalton Highway at Sagwon, would reduce the impact on the harvest on the TCH and CACH in 24B, remainder and a portion of Unit 26A. These herds are above State population objectives and are currently not of conservation concern.

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## Appendix 1

## **Regulatory History**

In 2013, an aerial photo census indicated significant declines in the TCH (Caribou Trails 2014), WACH (Dau 2011), and possibly the Central Arctic Caribou Herd (CACH) populations. In response, the Alaska Board of Game (BOG) adopted modified Proposal 202 (RC76) in March 2015 to reduce harvest opportunities for both residents and nonresidents within the range of the WACH and the TCH. These regulation changes – which included lowering bag limits, changing harvest seasons, modifying the hunt area descriptors, and restricting bull and cow harvest and prohibiting calf harvest – were adopted to slow or reverse the population decline. These regulatory changes took effect on July 1, 2015.

Four Special Actions, WSA15-03/04/05/06, submitted by the North Slope Regional Subsistence Advisory Council (North Slope Council) requested changes to caribou regulations in Units 23, 24, and 26. Temporary Special Action WSA15-03, requested designation of a new hunt area for caribou in Unit 23 where the harvest limit would be reduced from 15 caribou per day to 5 caribou per day, the harvest season be reduced for bulls and cows, and the take of calves would be prohibited. Temporary Special Action WSA15-04 requested designation of a new hunt area for caribou in Unit 24, the harvest seasons be reduced for bulls and cows, and the take of calves be prohibited.

Temporary Special Action WSA15-05 requested that bull caribou harvest limit in Unit 26A be reduced from 10 caribou per day to 5 caribou per day, the cow harvest limit be reduced to 3 per day, the harvest seasons for bulls and cows be reduced, and the take of calves and cows with calves be prohibited. Compared to the new State caribou regulations, it requested 3 additional weeks to the bull harvest season (Dec. 6- Dec. 31). Temporary Special Action WSA15-06 requested designation of a new hunt area for caribou in Unit 26B where the harvest limit would be reduced from 10 caribou per day to 5 caribou per day, the harvest season would be shortened, and the take of calves would be prohibited.

The Federal Subsistence Board (Board) approved Temporary Special Actions WSA15-03/04/05/06 with modification to simplify and clarify the regulatory language; maintain the current hunt areas in Units 23 and 24; decrease the harvest limit from 15 to 5 caribou per day and shorten the cow and bull seasons throughout Unit 23; prohibit the harvest of cows with calves throughout the affected units; and reduce the harvest limit in Unit 26B remainder from 10 to 5 caribou per day and shorten the season. These special actions took effect on July 1, 2015.

In 2015, the Northwest Arctic Council submitted a temporary special action request (WSA16-01) to close caribou hunting on Federal public lands in Unit 23 to non-federally qualified users for the 2016/17 regulatory year. The Northwest Arctic Council stated that their request was necessary for conservation purposes but also needed because nonlocal hunting activities were negatively affecting subsistence harvests. In April 2016, the Board approved WSA16-01, basing its decision on the strong support of the Northwest Arctic and North Slope Councils, public testimony in favor of the request, as well as concerns over conservation and continuation of subsistence uses.

In 2016, six proposals (WP16-37, WP16-48, WP16-49/52, WP16-61, and WP16-63) concerning WACH caribou regulations were submitted to the Board. The Board adopted WP16-48 with modification to allow

the positioning of a caribou, wolf, or wolverine for harvest in Unit 23 on BLM lands only. Proposal WP16-37 requested that Federal caribou regulations mirror the new State regulations across the ranges of the WACH and TCH (Units 21D, 22, 23, 24, 26A, and 26B). The Board adopted Proposal WP16-37 with modification to reduce the harvest limit to five caribou per day, restrict bull harvest during rut and cow harvest around calving, prohibit the harvest of calves and the harvest of cows with calves before weaning (mid-October), and to create a new hunt area in the northwest corner of Unit 23. The Board took no action on the remaining proposals (WP16-49/52, and WP16-61, and WP16-63) due to action taken on WP16-37.

In 2016, the BOG adopted Proposal 140 as amended to make the following changes to Unit 22 caribou regulations: establish a registration permit hunt (RC800), set an annual harvest limit of 20 caribou total, and lengthen cow and bull seasons in several hunt areas.

These State and Federal regulatory changes were the first time that harvest restrictions had been implemented for the WACH and TCH in over 30 years and were the result of extensive discussion and compromise among a variety of stakeholders. The requested restrictions were also supported by management recommendations outlined in the Western Arctic Herd Management Plan (WACH Working Group 2011).

In June 2016, the State submitted a special action request (WSA16-03) to reopen caribou hunting on Federal public lands in Unit 23 to non-federally qualified users, providing new biological information (e.g. calf recruitment, weight, body condition) on the WACH. The State specified that there was no biological reason for the closure and that it could increase user conflicts. In January 2017, the Board rejected WSA16-03 due to the position of all four affected Councils (Northwest Arctic, North Slope, Seward Peninsula, and Western Interior) as well as public testimony and Tribal consultation comments opposing the request. Additionally, the Board found the new information provided by the State to be insufficient to rescind the closure.

In January 2017, the BOG adopted Proposal 2, requiring registration permits for residents hunting caribou within the range of the Western Arctic and Teshekpuk herds in Units 21, 23, 24, and 26 (a similar proposal was passed for Unit 22 in 2016). ADF&G submitted the proposal in order to better monitor harvest and improve management flexibility. The BOG also rejected Proposal 3 (deferred Proposal 85 from 2016), which would have removed the caribou harvest ticket and report exception for residents living north of the Yukon River in Units 23 and 26A). Also in January 2017, the BOG rejected Proposal 45, which proposed requiring big game hunting camps to be spaced at least three miles apart along the Noatak, Agashashok, Eli, and Squirrel Rivers. The proposal failed as it would be difficult to enforce.

In March 2017, the Northwest Arctic and North Slope Councils submitted temporary special action requests (WSA17-03 and -04, respectively) to close caribou hunting on Federal public lands in Unit 23 and in Units 26A and 26B, respectively, to non-federally qualified users for the 2017/18 regulatory year. Both Councils stated that the intent of the proposed closures was to ensure subsistence use in the 2017/18 regulatory year, to protect declining caribou populations, and to reduce user conflicts. The Board voted to approve WSA17-03 with modification to close all Federal public lands within a 10 mile wide corridor (5 miles either side) along the Noatak River from the western boundary of Noatak National Preserve upstream to the confluence with the Cutler River; within the northern and southern boundaries of the Eli and Agashashok River drainages, respectively; and within the Squirrel River drainage, to caribou hunting except by federally qualified subsistence users for the 2017/18 regulatory year. The Board considered the

modification a reasonable compromise for all users, and that closure of the specified area was warranted in order to continue subsistence use. The Board rejected WSA17-04 due to recent changes to State regulations that should reduce caribou harvest.

In April 2018, the Board adopted Proposals WP18-46 with modification and WP18-48 (effective July 1, 2018). Proposal WP18-46 requested closing caribou hunting on Federal public lands in Unit 23 to non-federally qualified users (similar to WSA16-01 and WSA17-03). The Board adopted WP18-46 with the same modification as WSA17-03 (see above) as the Northwest Arctic, Western Interior, and Seward Peninsula Councils as well as the village of Noatak supported this modification and viewed the targeted closure as effectively addressing user conflicts and the continuation of subsistence uses. The Board also adopted WP18-48 to require State registration permits for caribou hunting in Units 22, 23, and 26A to improve harvest reporting and herd management, and to align with State regulations.

Also in 2018, the Board considered proposal WP18-57, which requested that caribou hunting on Federal public lands in Units 26A and 26B be closed to non-federally qualified users. This proposal was submitted by the North Slope Council to ensure continuation of subsistence, protect the caribou herds, and reduce user conflicts. The Board rejected WP18-57, choosing to allow time to evaluate the effects of recently implemented harvest restrictions. In addition, the Board expressed concern that closing Federal lands would shift users to State lands, increasing conflict.

In January 2020, the BOG adopted Proposal 20 to open a year-round resident season for caribou bull harvest in Unit 23 under State regulations. The BOG also adopted Proposal 24 as amended to remove the restriction on caribou calf harvest in Units 22, 23, and 26A. Proposal 28, which would have eliminated the caribou registration permit in Units 23 and 26A for North Slope resident hunters, was not adopted by the BOG, due to an ongoing need for harvest data.

In April 2020, the Board adopted Proposal WP20-46 to open a year-round bull season and permit calf harvest for caribou in Unit 23. Creating a year-round season for bulls was intended to allow for harvest of bulls when caribou migration had been delayed, alleviating harvest pressure on cows. The prohibition on calf harvest was lifted in order to permit taking of calves that had been orphaned or injured.

In 2021, the Northwest Arctic Council submitted Temporary Wildlife Special Action WSA21-01, which requested closing Federal public lands in Units 23 and 26A to caribou and moose hunting by non-federally qualified users from Aug. 1 - Sep. 30, 2021. The Council expressed concern about the late migration of caribou into and through Unit 23 and stated that the lack of fall harvest has resulted in empty freezers and stressed communities. The Council hoped a closure would reduce the impacts from transporters and non-local hunters on migrating caribou. In June 2021, the Board deferred action on this request and asked that Office of Subsistence Management (OSM) staff seek additional input on concerns related to caribou from the WACH Working Group, Federal land-managing agencies, local Fish and Game Advisory Committees, the ADF&G, Federal Subsistence Regional Advisory Councils, commercial guides and transporters, and subsistence users in the area.

In March 2022, the Board approved WSA21-01a (for caribou; WSA21-01b applied to moose) with modification to close Noatak National Preserve (including the Nigu River portion of the Preserve in Unit 26A) and BLM managed lands between the Noatak and Kobuk rivers in Unit 23 to caribou hunting by

non-federally qualified users from August 1 through September 30 during the 2022-2023 and 2023-2024 regulatory years. The Board stated this modification was a reasonable compromise that provides for the continuation of subsistence uses and the conservation of the Western Arctic Caribou Herd, while precluding unnecessary restrictions on non-federally qualified users. The partial closure targets the areas of highest user conflicts and minimizes potential disruptions to caribou migration. The Board also expressed concern over the 24% WACH population decline over the past two years, which prompted the WACH Working Group to change the herd's management level to preservative declining.

In April 2022, the Board rejected Proposal WP22-47, which requested that caribou calf harvest be permitted in Unit 22 because four members of the Board felt this would supply new opportunity for federally qualified subsistence users and would align Federal and State regulations. The remaining four Board members opposed the proposal and felt with the herd in decline that it would be unwise to allow the harvest of caribou calves.

In June 2023, the Board voted to reject Wildlife Special Action requests WSA22-05 and WSA22-06. The Board stated that an immediate reduction to four caribou per year would be detrimental to subsistence needs. The Board acknowledged the need to focus on caribou conservation and that reductions in harvest limits may be needed in the future. Additionally, the Board suggested a more robust discussion of potential alternatives to the harvest reductions is essential. The Board stated that the Federal regulatory proposal process is the more appropriate avenue to allow an analysis to be written and reviewed by the public, all of the affected Councils, and our Federal and State agency partners in the range of the Western Arctic Caribou Herd, resulting in formal recommendations.

## Controlled Use Areas

## Noatak Controlled Use Area

In 1988, the Traditional Council of Noatak submitted a proposal to the BOG to create the Noatak Controlled Use Area (CUA) in order to restrict the use of aircraft in any manner for big game hunting from August 15-September 20 due to user conflicts (Fall 1990). The proposed Controlled Use Area extended five miles on either side of the Noatak River, from the mouth of the Eli River upstream to the mouth of the Nimiuktuk River, including the north side of Kivivik Creek (ADF&G 1988). The BOG adopted the proposal with modification to close a much smaller area extending from the Kugururok River to Sapun Creek from August 20-September 20.

The Controlled Use Area was expanded in 1994 and modified in 2017 (Betchkal 2015; Halas 2015; ADF&G 2017a). From 1994-2016, the Noatak Controlled Use Area consisted of a 10-mile-wide corridor (5 miles either side) along the Noatak River from its mouth to Sapun Creek with approximately 80 miles of the Controlled Use Area within Noatak National Preserve (NP) (**Map 5**, Betchkal 2015). The closure dates from 1994-2009 were August 25-September 15. In 2009 (effective 2010), the BOG adopted Proposal 22 to expand the closure dates to August 15-September 30 in response to the timing of caribou migration becoming less predictable (ADF&G 2009). During the 2016/17 BOG regulatory cycle, the Noatak/Kivalina & Kotzebue AC proposed (Proposal 44) extending the upriver boundary of the Noatak Controlled Use Area to the Cutler River, citing increased user conflicts as their rationale (ADF&G 2017b). In January 2017, the BOG approved amended Proposal 44 to shift the boundaries of the Noatak

Controlled Use Area to start at the mouth of the Agashashok River and end at the mouth of the Nimiuktuk River with approximately 105 miles within Noatak NP (**Map 5**, ADF&G 2017a).

In 1990, the Noatak Controlled Use Area was adopted under Federal regulations. In 1995, the Board adopted Proposal P95-50 to expand the time-period and area of the Controlled Use Area to August 25-September 15 and the mouth of the Noatak River upstream to the mouth of Sapun Creek, respectively, which aligned with State regulations as they existed at that time.

In 2008, Proposals WP08-50 and 51 requested modifications to the Noatak Controlled Use Area dates. These proposals were submitted in response to caribou migration occurring later in the season, to improve caribou harvest for subsistence users, and to decrease conflicts between local and nonlocal hunters. The Board deferred these proposals to the next regulatory cycle. In 2010, Proposals WP10-82, 83, and 85 requested similar date changes. The Board adopted WP10-85 to expand the time period during which aircraft are restricted in the Noatak Controlled Use Area to August 15-September 30, which aligned with the current State regulations.

## Selawik National Wildlife Refuge: Area Not Authorized for Commercial Transporters and Guides

In 2011, Selawik National Wildlife Refuge (NWR) designated refuge lands in the northwest portion of the refuge as closed to big game hunting by commercial guides and transporters through their comprehensive conservation plan (USFWS 2011, 2014). These refuge lands are intermingled with private lands near the villages of Noorvik and Selawik (**Map 3**). The purpose of this closure was to minimize trespass on private lands and to reduce user conflicts (USFWS 2011).

At the winter 2021 meeting of the Northwest Arctic Council, a representative of Selawik National Refuge reported that only two hunters were brought into the refuge by air taxis and transporters in 2020. Because caribou are no longer abundant in Selawik National Wildlife Refuge in September, and because the non-resident moose season is already closed in Unit 23, the refuge no longer receives many fly-in hunters (NWARAC 2021a).

# Noatak National Preserve Delayed Entry Controlled Use Area

In 2012, the NPS established a Special Commercial Use Area or "delayed entry zone" in the western portion of the Noatak NP (Halas 2015, Fix and Ackerman 2015). Within this zone, transporters can only transport nonlocal caribou hunters after a pre-determined date unless otherwise specified by the Western Arctic Parklands (WEAR) Superintendent in consultation with commercial operators, other agencies and local villages (Halas 2015). In 2020, the delayed entry end date was changed from September 15 to September 22 (NPS 2020) in response to requests from the Cape Krusenstern National Monument and Kobuk Valley National Park SRCs and the Native Village of Noatak (Atkinson 2021, pers. comm.). The purpose of this zone is to allow a sufficient number of caribou to cross the Noatak River and establish migration routes, to limit interactions between local and nonlocal hunters, and to allow local hunters the first opportunity to harvest caribou in that area (**Map 5**, USFWS 2014; Halas 2015).

### Aircraft in National Parks and Monuments

National parks and monuments in Unit 23 include Cape Krusenstern National Monument, Kobuk Valley National Park, and Gates of the Arctic National Park. The use of aircraft for access to or from lands and waters within a national park or monument for purposes of taking fish or wildlife within the national park or monument is prohibited, except in the case of exempted communities and individuals for the purpose of subsistence access. However, aircraft are allowed to access lands and waters in national parks and monuments for the purposes of engaging in any activity allowed by law other than the taking of fish and wildlife.

### Anaktuvuk Pass Controlled Use Area

That portion of Unit 26A bounded by a line beginning at 153° 30′ W. long. on the game management boundary between Units 24 and 26A, north along 153° 30′ W. long. to 69° N. lat., east along 69° N. lat. to 152° 10′ W. long., south along 152° 10′ W. long. to 68° 30′ N. lat., east along 68° 30′ N. lat. to 150° 40′ W. long., south along 150° 40′ W. long. to the game management boundary between Units 24 and 26A, and westerly along the game management unit boundary to the point of origin at 153° 30′ W. long. From Aug 15 - Oct 15, the area is closed to the use of aircraft for caribou hunting, including transportation of caribou hunters, their hunting gear, and/or parts of caribou. However, this does not apply to transportation of caribou hunters, their gear, or caribou parts by aircraft between publicly owned airports in the controlled use area

## Dalton Highway Corridor Management Area (DHCMA)

Units 20 and 24-26 extending five miles from each side of the Dalton Highway, including the drivable surface of the Dalton Highway, from the Yukon River to the Arctic Ocean, and including the Prudhoe Bay Closed Area. The area within the Prudhoe Bay Closed Area is closed to the taking of big game; the remainder of the DHCMA is closed to hunting; however, big game, small game, and fur animals may be taken in the area by bow and arrow only, and small game may be taken by falconry. Any hunter traveling on the Dalton Highway must stop at any check station operated by the department within the DHCMA.



Map 5. Federal and State controlled use areas in Unit 23.
# Appendix 2

For survey years in which the sex of harvested caribou was documented, this table shows the percentage of male, female, and sex unknown caribou harvested in Unit 23 (CSIS 2023).

Community	Year	Estimated total number of caribou harvested	% Male	% Female	% Unknown
Ambler	2009	455	76%	24%	0%
	2012	685	69%	28%	2%
Buckland	2009	535	39%	35%	26%
	2016	693	56%	38%	6%
	2018	949	31%	48%	22%
Deering	2007	182	27%	31%	42%
	2013	404	19%	44%	38%
	2017	342	51%	44%	5%
Kiana	1999	487	84%	10%	6%
	2009	414	87%	5%	8%
Kivalina	2007	268	57%	37%	5%
	1964	256	50%	29%	21%
	1965	1010	28%	30%	42%
	1982	346	41%	47%	12%
	1983	564	29%	55%	15%
Kobuk	2004	134	76%	24%	0%
	2009	210	78%	17%	5%
	2012	119	73%	19%	8%
Kotzebue	2012	1804	61%	20%	20%
	2013	1680	76%	20%	4%
	2014	1286	75%	17%	8%
Noatak	1999	683	66%	30%	4%
	2002	410	88%	12%	0%
	2007	442	73%	23%	4%
	2016	337	64%	34%	2%
Noorvik	2002	987	71%	23%	6%
	2008	767	73%	15%	12%
	2012	851	64%	24%	12%
	2017	250	41%	56%	3%
Point Hope	2014	185	62%	24%	14%
Selawik	1999	1289	62%	37%	1%
	2006	933	73%	26%	1%
	2011	683	60%	39%	1%
Shungnak	1998	561	50%	49%	1%

Community	Year	Estimated total number of caribou harvested	% Male	% Female	% Unknown
	2008	407	43%	50%	7%
	2012	395	71%	27%	2%
Average		611	60%	30%	10%

For survey years in which the sex of harvested caribou was documented, this table shows the percentage of male, female, and sex unknown caribou harvested in Unit 26A and Anaktuvuk Pass (CSIS 2023). No data on the sex of harvested caribou is available for Wainwright.

Community	Year	Estimated total number of caribou harvested	% Male	% Female	% Unknown
Anaktuvuk Pass	2014	770	51%	39%	10%
1 435	2014	616	57%	43%	0%
	2011	605	68%	4370	0%
	1003	574	55%	JZ /8	0%
	1993	574	33%	45%	0%
	1991	545	<i>11%</i>	23%	0%
A 4	1990	591	55%	43%	2%
Atqasuk	2006	170	96%	4%	0%
	2005	202	84%	15%	1%
	2004	313	/9%	17%	4%
	2003	189	79%	17%	4%
Kaktovik	1994	79	77%	23%	0%
	1992	159	69%	29%	3%
	1991	181	73%	24%	2%
	1990	114	52%	37%	11%
	1987	186	64%	33%	3%
	1986	178	59%	35%	6%
	1985	235	53%	33%	14%
Nuiqsut	2014	774	73%	21%	6%
	2006	363	93%	5%	3%
	2005	436	96%	4%	0%
	2004	429	83%	11%	6%
	2003	293	87%	7%	5%
	1994	258	73%	13%	14%
	1993	672	71%	22%	7%
Point Lay	2012	356	57%	42%	1%
Utqiaġvik	2014	4323	46%	29%	25%

Community	Year	Estimated total number of caribou harvested	% Male	% Female	% Unknown
Average		527	70%	25%	5%

WP24-30/31 Executive Summary					
General Description	Proposal WP24-30 requests closing Federal public lands in Units				
	23 to caribou hunting by non-federally qualified users from				
	August 1 to October 31.				
	Submitted by: The Northwest Arctic Subsistence Regional				
	Advisory Council				
	Proposal WP24-31 requests closing Federal public lands in Units				
	23 to caribou hunting by non-federally qualified users from				
	August 1 to October 31.				
	Submitted by: The North Slope Subsistence Regional Advisory				
	Council				
Proposed Regulation	Unit 23 – Caribou				
	Federal public lands are closed to caribou hunting from Aug.				
	1-Oct. 31, except by federally qualified subsistence users				
	hunting under these regulations.				
OSM Preliminary Conclusion	Support Proposal WP24-30/31 with modification to include a				
	threshold that would remove the closure once the WACH				
	Working Group manages the herd at a conservative management				
	and harvest level (population $\geq$ 200,000) with a stable or				
	increasing population trend (Adult cow survival $\ge 80\%$ and calf				
	recruitment $\geq$ 15:100).				
Northwest Arctic Subsistence					
Regional Advisory Council					
North Slope Subsistence					
Regional Advisory Council					
Recommendation					
Interagency Staff Committee					
Comments					
ADF&G Comments					
Written Public Comments					

# DRAFT STAFF ANALYSIS WP24-30/31

## **ISSUES**

Wildlife Proposal WP24-30, submitted by the Northwest Arctic Subsistence Regional Advisory Council (Northwest Arctic Council), requests closing Federal public lands in Units 23 to caribou hunting by non-federally qualified users from August 1 to October 31.

Wildlife Proposal WP24-31, submitted by the North Slope Subsistence Regional Advisory Council (North Slope Council), requests closing Federal public lands in Units 23 to caribou hunting by non-federally qualified users from August 1 to October 31.

### DISCUSSION

The Northwest Arctic Council and the North Slope Council stated that the Western Arctic Caribou Herd (WACH) population has been in decline for years and the low population level in 2022 is cause for concern. Both Councils are asking to close hunting of the WACH on Federal public lands in Units 23 to non-federally qualified users to help with conservation, while providing a meaningful subsistence priority for federally qualified subsistence users.

### **Existing Federal Regulation**

### Unit 23–Caribou

Unit 23—that portion which includes all drainages north and west of, and including, the Singoalik River drainage—5 caribou per day by State registration permit as follows:

Bulls may be harvested	July 1–June 30
<i>Cows may be harvested. However, cows accompanied by calves may not be taken July 15–Oct. 14.</i>	July 15–Apr. 30
<i>Unit 23, remainder—5 caribou per day by State registration permit as follows:</i>	
Bulls may be harvested	July 1–June 30
<i>Cows may be harvested. However, cows accompanied by calves may not be taken July 31–Oct. 14.</i>	July 31–Mar. 31

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### Unit 23-Caribou

Federal public lands within a 10-mile-wide corridor (5 miles either side) along the Noatak River from the western boundary of Noatak National Preserve upstream to the confluence with the Cutler River; within the northern and southern boundaries of the Eli and Agashashok River drainages, respectively; and within the Squirrel River drainage are closed to caribou hunting except by federally qualified subsistence users hunting under these regulations.

#### **Proposed Federal Regulation**

#### Unit 23-Caribou

Unit 23—that portion which includes all drainages north and west of, and including, the Singoalik River drainage— 5 caribou per day by State registration permit as follows:

Bulls may be harvested	July 1–June 30
Cows may be harvested. However, cows accompanied by calves may not be taken July 15–Oct. 14.	July 15–Apr. 30
Federal public lands are closed to caribou hunting from Aug. 1–Oct. 31, except by federally qualified subsistence users hunting under these regulations	
Unit 23, remainder— 5 caribou per day by State registration permit as follows:	
Bulls may be harvested	July 1–June 30
<i>Cows may be harvested. However, cows accompanied by calves may not be taken July 31–Oct. 14.</i>	July 31–Mar. 31
Federal public lands are closed to caribou hunting from Aug. 1–Oct. 31, except by federally qualified subsistence users hunting under these regulations	

Federal public lands within a 10-mile-wide corridor (5 miles either side) along the Noatak River from the western boundary of Noatak National

### Unit 23-Caribou

Preserve upstream to the confluence with the Cutler River; within the northern and southern boundaries of the Eli and Agashashok River drainages, respectively; and within the Squirrel River drainage are closed to caribou hunting except by federally qualified subsistence users hunting under these regulations.

## **Existing State Regulation**

#### Unit 23—Caribou

23, north of and including the Singoalik	<i>Residents—5 caribou per day by permit.</i>	
River drainage	Bulls RC907	No closed season
	Cows RC907	Jul. 15-Apr. 30
	Nonresidents—1 bull	Aug. 1-Sep. 30
23 remainder	<i>Residents—5 caribou per day by permit.</i>	
	Bulls RC907	No closed season
	Cows RC907	Sep. 1-Mar. 31.
	Nonresidents—1 bull	Aug. 1-Sep. 30

### **Extent of Federal Public Lands**

Federal public lands comprise approximately 70.5% of Unit 23 and consist of 39.6% NPS managed lands, 21.8% BLM managed lands, and 9.1% FWS managed lands.

### **Customary and Traditional Use Determinations**

Residents of Units 21D west of the Koyukuk and Yukon Rivers, Galena, 22, 23, 24 including residents of Wiseman but not other residents of the Dalton Highway Corridor Management Area, and 26A, have a customary and traditional use determination for caribou in Unit 23.

Only resident zone communities can hunt in National Parks and Monuments. The resident zone communities for Kobuk Valley National Park and Cape Krusenstern National Monument include all NANA Regional Corporation communities (all Unit 23 communities except Point Hope). Resident zone

communities for Gates of the Arctic National Park include Alatna, Allakaket, Ambler, Anaktuvuk Pass, Bettles/Evansville, Hughes, Kobuk, Nuiqsut, Shungnak, and Wiseman.

## **Regulatory History**

In 2013, an aerial photo census indicated significant declines in the Teshekpuk caribou herd (TCH) (Caribou Trails 2014), WACH (Dau 2011), and possibly the Central Arctic Caribou Herd (CACH) populations. In response, the Alaska Board of Game adopted modified Proposal 202 (RC76) in March 2015 to reduce harvest opportunities for both residents and nonresidents within the range of the WACH and the TCH. These regulation changes, which included lowering bag limits, changing harvest seasons, modifying the hunt area descriptors, restricting bull and cow harvest, and prohibiting calf harvest were adopted to slow or reverse the population decline. These regulatory changes took effect on July 1, 2015.

Four Special Actions, WSA15-03/04/05/06, submitted by the North Slope Regional Advisory Council requested changes to caribou regulations in Units 23, 24, and 26. Temporary Special Action WSA15-03, requested designation of a new hunt area for caribou in Unit 23 where the harvest limit would be reduced from 15 caribou per day to five caribou per day, the harvest season be reduced for bulls and cows, and the take of calves would be prohibited. Temporary Special Action WSA15-04, requested designation of a new hunt area for caribou in Unit 24, the harvest seasons be reduced for bulls and cows, and the take of calves be prohibited.

Temporary Special Action WSA15-05, requested that bull caribou harvest limit in Unit 26A be reduced from 10 caribou per day to 5 caribou per day, the cow harvest limit be reduced to three per day, the harvest seasons for bulls and cows be reduced, and the take of calves and cows with calves be prohibited. Compared to the new State caribou regulations, it requested three additional weeks to the bull harvest season (Dec. 6- Dec. 31). Temporary Special Action WSA15-06, requested designation of a new hunt area for caribou in Unit 26B where the harvest limit would be reduced from 10 caribou per day to 5 caribou per day, the harvest season would be shortened, and the take of calves would be prohibited.

The Federal Subsistence Board (Board) approved Temporary Special Actions WSA15-03/04/05/06 with modification to simplify and clarify the regulatory language; maintain the current hunt areas in Units 23 and 24; decrease the harvest limit from 15 to five caribou per day and shorten the cow and bull seasons throughout Unit 23; prohibit the harvest of cows with calves throughout the affected units; and reduce the harvest limit in Unit 26B remainder from 10 to five caribou per day and shorten the season. These special actions took effect on July 1, 2015.

These State and Federal regulatory changes were the first time that harvest restrictions had been implemented for the WACH and TCH in over 30 years and were the result of extensive discussion and compromise among a variety of stakeholders. The requested restrictions were also supported by management recommendations outlined in the Western Arctic Herd Management Plan (WACH Working Group 2011).

In 2015, the Northwest Arctic Council submitted a temporary special action request (WSA16-01) to close caribou hunting on Federal public lands in Unit 23 to non-federally qualified users for the 2016/17 regulatory year. The Council stated that their request was necessary for conservation purposes but also

needed because nonlocal hunting activities were negatively affecting subsistence harvests. In April 2016, the Board approved WSA16-01, basing its decision on the strong support of the Northwest Arctic and North Slope Councils, public testimony in favor of the request, as well as concerns over conservation and continuation of subsistence uses.

In 2016, six proposals (WP16-37, WP16-48, WP16-49/52, WP16-61, and WP16-63) concerning WACH caribou regulations were submitted to the Board. The Board adopted WP16-48 with modification to allow the positioning of a caribou, wolf, or wolverine for harvest in Unit 23 on BLM lands only. Proposal WP16-37 requested that Federal caribou regulations mirror the new State regulations across the ranges of the WACH and TCH (Units 21D, 22, 23, 24, 26A, and 26B). The Board adopted Proposal WP16-37 with modification to reduce the harvest limit to five caribou per day, restrict bull harvest during rut and cow harvest around calving, prohibit the harvest of calves and the harvest of cows with calves before weaning (mid-October), and to create a new hunt area in the northwest corner of Unit 23. The Board took no action on the remaining proposals (WP16-49/52, and WP16-61, and WP16-63) due to action taken on WP16-37.

In June 2016, the State submitted a special action request (WSA16-03) to reopen caribou hunting on Federal public lands in Unit 23 to non-federally qualified users, providing new biological information (e.g. calf recruitment, weight, body condition) on the WACH. The State specified that there was no biological reason for the closure and that it could increase user conflicts. In January 2017, the Board rejected WSA16-03 due to the position of all four affected Councils (Northwest Arctic, North Slope, Seward Peninsula, and Western Interior) as well as public testimony and Tribal consultation comments opposing the request. Additionally, the Board found the new information provided by the State to be insufficient to rescind the closure.

In January 2017, the Alaska Board of Game (BOG) adopted Proposal 2, requiring registration permits for residents hunting caribou within the range of the Western Arctic and Teshekpuk herds in Units 21, 23, 24, and 26 (a similar proposal was passed for Unit 22 in 2016). The Alaska Department of Fish and Game (ADF&G) submitted the proposal in order to better monitor harvest and improve management flexibility. The BOG also rejected Proposal 3 (deferred Proposal 85 from 2016), which would have removed the caribou harvest ticket and report exception for residents living north of the Yukon River in Units 23 and 26A). Also in January 2017, the BOG rejected Proposal 45, which proposed requiring big game hunting camps to be spaced at least three miles apart along the Noatak, Agashashok, Eli, and Squirrel Rivers. The proposal failed as it would be difficult to enforce.

In March 2017, the Northwest Arctic and North Slope Councils submitted temporary special action requests (WSA17-03 and -04, respectively) to close caribou hunting on Federal public lands in Unit 23 and in Units 26A and 26B, respectively, to non-federally qualified users for the 2017/18 regulatory year. Both Councils stated that the intent of the proposed closures was to ensure subsistence use in the 2017/18 regulatory year, to protect declining caribou populations, and to reduce user conflicts. The Board voted to approve WSA17-03 with modification to close all Federal public lands within a 10 mile wide corridor (five miles either side) along the Noatak River from the western boundary of Noatak National Preserve upstream to the confluence with the Cutler River; within the northern and southern boundaries of the Eli and Agashashok River drainages, respectively; and within the Squirrel River drainage, to caribou hunting

except by federally qualified subsistence users for the 2017/18 regulatory year. The Board considered the modification a reasonable compromise for all users, and that closure of the specified area was warranted in order to continue subsistence use. The Board rejected WSA17-04 due to recent changes to State regulations that should reduce caribou harvest.

In April 2018, the Board adopted Proposals WP18-46 with modification and WP18-48 (effective July 1, 2018). Proposal WP18-46 requested closing caribou hunting on Federal public lands in Unit 23 to non-federally qualified users (similar to WSA16-01 and WSA17-03). The Board adopted WP18-46 with the same modification as WSA17-03 (see above) as the Northwest Arctic, Western Interior, and Seward Peninsula Councils as well as the village of Noatak supported this modification and viewed the targeted closure as effectively addressing user conflicts and the continuation of subsistence uses. The Board also adopted WP18-48 to require State registration permits for caribou hunting in Units 22, 23, and 26A to improve harvest reporting and herd management, and to align with State regulations.

In January 2020, the BOG adopted Proposal 20 to open a year-round resident season for caribou bull harvest in Unit 23 under State regulations. The BOG also adopted Proposal 24 as amended to remove the restriction on caribou calf harvest in Units 22, 23, and 26A. Proposal 28, which would have eliminated the caribou registration permit in Units 23 and 26A for North Slope resident hunters, was not adopted by the BOG, due to an ongoing need for harvest data.

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In June 2023, the Board voted to reject Wildlife Special Action requests WSA22-05 and WSA22-06. The Board stated that an immediate reduction to four caribou per year would be detrimental to subsistence needs. The Board acknowledged the need to focus on caribou conservation and that reductions in harvest limits may be needed in the future. Additionally, the Board suggested a more robust discussion of potential alternatives to the harvest reductions is essential. The Board stated that the Federal regulatory proposal process is the more appropriate avenue to allow an analysis to be written and reviewed by the public, all the affected Councils, and our Federal and State agency partners in the range of the WACH resulting in formal recommendations.

### Controlled Use Areas

#### Noatak Controlled Use Area

In 1988, the Traditional Council of Noatak submitted a proposal to the BOG to create the Noatak Controlled Use Area (CUA) in order to restrict the use of aircraft in any manner for big game hunting from August 15-September 20 due to user conflicts (Fall 1990). The proposed CUA extended five miles on either side of the Noatak River, from the mouth of the Eli River upstream to the mouth of the Nimiuktuk River, including the north side of Kivivik Creek (ADF&G 1988). The BOG adopted the proposal with modification to close a much smaller area extending from the Kugururok River to Sapun Creek from August 20-September 20.

The CUA was expanded in 1994 and modified in 2017 (Betchkal 2015, Halas 2015, ADF&G 2017a). From 1994-2016, the Noatak Controlled Use Area consisted of a 10-mile-wide corridor (five miles either side) along the Noatak River from its mouth to Sapun Creek with approximately 80 miles of the CUA within Noatak National Preserve (NP) (**Map 3**, Betchkal 2015). The closure dates from 1994-2009 were August 25-September 15. In 2009 (effective 2010), the BOG adopted Proposal 22 to expand the closure dates to August 15-September 30 in response to the timing of caribou migration becoming less predictable (ADF&G 2009). During the 2016/17 BOG regulatory cycle, the Noatak/Kivalina & Kotzebue Advisory Committees (AC) proposed (Proposal 44) extending the upriver boundary of the Noatak CUA to the Cutler River, citing increased user conflicts as their rationale (ADF&G 2017b). In January 2017, the BOG approved amended Proposal 44 to shift the boundaries of the Noatak CUA to start at the mouth of the Agashashok River and end at the mouth of the Nimiuktuk River with approximately 105 miles within Noatak NP (**Map 3**, ADF&G 2017a).

In 1990, the Noatak CUA was adopted under Federal regulations. In 1995, the Board adopted Proposal P95-50 to expand the time-period and area of the CUA to August 25-September 15 and the mouth of the Noatak River upstream to the mouth of Sapun Creek, respectively, which aligned with State regulations as they existed at that time.

In 2008, Proposals WP08-50 and 51 requested modifications to the Noatak CUA dates. These proposals were submitted in response to caribou migration occurring later in the season, to improve caribou harvest for subsistence users, and to decrease conflicts between local and nonlocal hunters. The Board deferred

these proposals to the next regulatory cycle. In 2010, Proposals WP10-82, 83, and 85 requested similar date changes. The Board adopted WP10-85 to expand the time period during which aircraft are restricted in the Noatak Controlled Use Area to August 15-September 30, which aligned with the current State regulations.

## Selawik National Wildlife Refuge: Area Not Authorized for Commercial Transporters and Guides

In 2011, Selawik National Wildlife Refuge (NWR) designated refuge lands in the northwest portion of the refuge as closed to big game hunting by commercial guides and transporters through their comprehensive conservation plan (USFWS 2011, 2014). These refuge lands are intermingled with private lands near the villages of Noorvik and Selawik (**Map 3**). The purpose of this closure was to minimize trespass on private lands and to reduce user conflicts (USFWS 2011).

At the winter 2021 meeting of the Northwest Arctic Council, a representative of Selawik National Refuge reported that only two hunters were brought into the refuge by air taxis and transporters in 2020. Because caribou are no longer abundant in Selawik National Wildlife Refuge in September, and because the non-resident moose season is already closed in Unit 23, the refuge no longer receives many fly-in hunters (NWARAC 2021a).

# Noatak National Preserve Delayed Entry Controlled Use Area

In 2012, the NPS established a Special Commercial Use Area or "delayed entry zone" in the western portion of the Noatak NP (Halas 2015, Fix and Ackerman 2015). Within this zone, transporters can only transport nonlocal caribou hunters after a pre-determined date unless otherwise specified by the Western Arctic Parklands (WEAR) Superintendent in consultation with commercial operators, other agencies and local villages (Halas 2015). In 2020, the delayed entry end date was changed from September 15 to September 22 (NPS 2020) in response to requests from the Cape Krusenstern National Monument and Kobuk Valley National Park Subsistence Resource Commissions and the Native Village of Noatak (Atkinson 2021, pers. comm.). The purpose of this zone is to allow a sufficient number of caribou to cross the Noatak River and establish migration routes, to limit interactions between local and nonlocal hunters, and to allow local hunters the first opportunity to harvest caribou in that area (**Map 3**, USFWS 2014, Halas 2015).

### Aircraft in National Parks and Monuments

National parks and monuments in Unit 23 include Cape Krusenstern National Monument, Kobuk Valley National Park, and Gates of the Arctic National Park. The use of aircraft for access to or from lands and waters within a national park or monument for purposes of taking fish or wildlife within the national park or monument is prohibited, except in the case of exempted communities and individuals for the purpose of subsistence access. However, aircraft are allowed to access lands and waters in national parks and monuments for the purposes of engaging in any activity allowed by law other than the taking of fish and wildlife.



## **Current Events**

The WACH Working Group has submitted Wildlife Proposal WP24-28 requesting to change the Federal regulations for caribou in Units 21D, remainder; 24B, remainder; 24C; 24D; and all caribou hunt areas within Units 22, 23, and 26A to reduce the caribou harvest limit from five caribou per day to four caribou per year, however, no more than one cow may be taken. A companion proposal was also submitted to the State for consideration at their January 2024 BOG meeting.

The Northwest Arctic Council has submitted Wildlife Proposal WP24-29 requesting to change the Federal regulations for caribou in Unit 23 to reduce the caribou harvest limit five caribou per day to four caribou per year, only one of which may be a cow per year. A companion proposal was also submitted to the State for consideration at their January 2024 BOG meeting.

## **Biological Background**

The TCH, WACH, and CACH have ranges that overlap in Units 26A and 24B (Map 1), and there can be considerable mixing of herds during the fall and winter (Prichard et al. 2020). As the wildlife proposals focus on conservation concerns for the WACH, this analysis will focus on the WACH. The TCH and CACH, primarily occupies Unit 26 (Dau 2011, 2015; Lenart 2011; Parrett 2011, 2015c, 2015d), and will not be considered further in this analysis.

Caribou abundance naturally fluctuates over decades (Gunn 2003; WACH Working Group 2011). Gunn (2003) reports the mean doubling rate for Alaskan caribou as  $10 \pm 2.3$  years. Although the underlying mechanisms causing these fluctuations are uncertain, climatic oscillations (i.e., Arctic and Pacific Decadal Oscillations) may play an important role (Gunn 2003; Joly et al. 2011). Climatic oscillations can influence factors such as snow depth, icing, forage quality and growth, wildfire occurrence, insect levels, and predation, which all contribute to caribou population dynamics (Joly et al. 2011). Density-dependent reduction in forage availability, resulting in poorer body condition may exacerbate caribou population fluctuations (Gunn 2003).

Caribou calving generally occurs from late May to mid-June (Dau 2013; Cameron et al. 2018). Weaning generally occurs in late October and early November before the breeding season (Taillon et al. 2011). Calves may stay with their mothers through their first winter, which improves calves' access to food and body condition (Holand et al. 2012). Calves orphaned after weaning (October) have greater chances of survival than calves orphaned before weaning (Russell et al. 1991; Joly 2000; Holand et al. 2012; Rughetti and Festa-Bianchet 2014).

Caribou feed on a wide variety of plants including lichens, fungi, sedges, grasses, forbs, and twigs of woody plants. Arctic caribou depend primarily on lichens during the fall and winter, but during summer they feed on leaves, grasses and sedges (Joly and Cameron 2018; Miller 2003).



Map 1. Herd overlap and ranges of the WACH, TCH, CACH, and Porcupine Caribou Herd.

The WACH has historically been the largest caribou herd in Alaska and has a home range of approximately 157,000 square miles in northwestern Alaska. In the spring, most mature cows move north to calving grounds in the Utukok Hills, while bulls and immature cows lag behind and move toward summer range in the Wulik Peaks and Lisburne Hills (**Map 2**; Dau 2011; WACH Working Group 2011, 2019). After calving, cows and calves move west toward the Lisburne Hills where they mix with the bulls and non-maternal cows. During the summer, the herd moves rapidly to the Brooks Range. Calving locations of individuals average 35 miles apart from one year to the next, and 90% of females calved within one week from the previous year (Joly et al. 2021). The WACH has used the same general calving grounds for more than 100 years (Cameron et al. 2020).

Except for summer periods, little individual site-specific fidelity is observed from year to year, especially during the winter (Joly et al. 2021). The winter range fluctuates year to year as the WACH demonstrate low fidelity to wintering grounds (Joly et al. 2021). Rut occurs during fall migration (Dau 2011, WACH Working Group 2011). The fall migration is more variable and shows less fidelity to specific migration routes than the spring migration. While caribou still showed a fidelity to certain regions within the herd's range (Joly et al. 2021).

In recent years, the timing of fall migration has been less predictable (Joly et al. 2021). Reasons for changes in migration phenology are unknown. However, Cameron et al. (2021) found that WACH migrated in response to snow events and cold temperatures but would pause migration when they encountered snow free areas or warmer temperatures. This corresponds with Traditional Ecological Knowledge, which has observed caribou migrating in response to weather (NWARAC 2021b). Caribou migrations are also closely related to the population size and density of the herd (Burch 1972, Joly et al. 2021b).

The proportion of caribou using certain migration paths also varies each year (**Figure 1**; Baltensperger and Joly 2019; Joly and Cameron 2020). Changes in migration paths are likely influenced by multiple factors including food availability, snow depth, rugged terrain, and dense vegetation (Nicholson et al. 2016; Fullman et al. 2017). If caribou travelled the same migration routes every year, their food resources would likely be depleted (NWARAC 2016a). Anthropogenic factors can also influence migration paths. Radio collared caribou data has shown that the Red Dog Mine Road, near Kivalina has delayed the fall migration along the coast with some caribou turning around rather than crossing the road (Wilson et al. 2016; WACH Working Group 2021).

The WACH Working Group consists of a broad spectrum of stakeholders, including subsistence users, sport hunters, conservationists, hunting guides, reindeer herders and transporters. The Group is also technically supported by NPS, FWS, BLM, and ADF&G personnel. The WACH Working Group developed a WACH Cooperative Management Plan in 2003 and revised it in 2011 and 2019 (WACH Working Group 2011, 2019). The WACH Management Plan identifies nine plan elements: cooperation, population management, habitat, regulations, reindeer, knowledge, education, human activities, and changing climate, as well as associated goals, strategies, and management actions. As part of the population management element, the WACH Working Group developed a guide to herd management determined by population size, population trend, and harvest rate. Population sizes guiding management level determinations were based on recent (since 1970) historical data for the WACH (WACH Working Group 2011, 2019). Revisions to recommended harvest levels under liberal and conservative management were made in 2015 (WACH Working Group 2015) and 2019 (WACH Working Group 2019a; **Table 1**).

The WACH population declined rapidly in the early 1970s, bottoming out at about 75,000 animals in 1976. Aerial photocensuses have been used since 1986 to estimate population size. The WACH population increased throughout the 1980s and 1990s, peaking at 490,000 animals in 2003 (**Figure 2**). From 2003-2016, the herd declined at an average annual rate of 7.1% from approximately 490,000 caribou to 200,928 caribou (Dau 2011, 2014; Caribou Trails 2014; Parrett 2016). In 2017, the herd increased to an estimated 259,000 caribou (Parrett 2017a). However, part of this increase may have been due to improved photographic technology as ADF&G switched from film to higher resolution digital cameras. The 2019 population estimate was 244,000 caribou (Hansen 2019a). No photocensus was completed in 2020, but ADF&G completed a census in 2021 (WACH Working Group 2020). The 2021 population estimate was 188,000 caribou with a 95% confidence interval of +/- 11,855 and a minimum count of 180,374. This is approximately a 24% decline from the 2019 population estimate (WACH Working Group 2021). The 2022 population estimate was 164,000 caribou with a 95% confidence

interval of +/- 7,271 and a minimum count of 161,034, representing an additional 12% decline (**Figure 2**; WACH Working Group 2022).

Between 1982 and 2011, the WACH population was within the liberal management level prescribed by the WACH Working Group (**Figure 2, Table 1**). In 2013, the herd population estimate fell below the population threshold for liberal management of a decreasing population (265,000), slipping into the conservative management level. In 2020, as no photocensus was completed, the WACH Working Group voted to maintain the herd's status at the conservative declining level (WACH Working Group 2020). The 2021 population estimate fell below the population threshold for conservative management of a decreasing population (200,000). The WACH Working Group voted to place the herd in the preservative declining level in 2021 and 2022 (WACH Working Group 2021, 2022).

Between 1970 and 2021, the bull:cow ratio exceeded Critical Management level of 30 bulls:100 cows identified in the 2019 WACH Management Plan (**Figure 3**). (Note: Previous management plans identified 40 bulls:100 cows as the critical management level). However, the average annual number of bulls:100 cows was greater during the period of population growth (54:100 between 1976–2001) than during the recent period of decline (44:100 between 2004-2016). However, in 2017 the bull:100 cow ratio was the highest since 1998 at 54 bulls:100 cows. In 2021, that ratio fell slightly to 47 bulls:100 cows (**Figure 3**; WACH Working Group 2021). Additionally, Dau (2015) states that while trends in bull:cow ratios are accurate, actual values should be interpreted with caution due to sexual segregation during sampling and the inability to sample the entire population, which likely account for more annual variability than actual changes in composition.

Although factors contributing to the 2003-present decline are not known with certainty, increased adult cow mortality, and decreased calf recruitment and survival played a role (Dau 2011; WACH Working Group 2022). Since the mid-1980s, adult mortality has slowly increased while recruitment has slowly decreased (**Figure 4**; Dau 2013). Prichard (2009) developed a population model specifically for the WACH using various demographic parameters and found adult cow survival to have the largest impact on population size, followed by calf survival and then parturition rates.

Calf production has likely had little influence on the population trajectory (Dau 2013, 2015). Between 1990 and 2003, the June calf:cow ratio averaged 66 calves:100 cows/year. Between 2004 and 2017, the June calf:cow ratio averaged 72 calves:100 cows/year. In June 2018, 86 calves:100 cows were observed, which approximates the highest parturition level ever recorded for the herd (86 calves:100 cows in 1992) (Dau 2016a, WACH Working Group 2021). The 5-year period from 2015-2019 had the highest (83%) parturition rate of any period since monitoring began. Since 2018, the parturition rates have decreased. In 2022, the calf:cow ratio was 64 calves:100 cows. The long-term average (1992-2022) is 70 calves:100 cows/year (**Figure 5**, WACH Working Group 2022; NWARAC 2023).

Decreased calf survival through summer and fall and recruitment into the herd may have contributed to the recent population decline (Dau 2013, 2015). Fall calf:cow ratios indicate calf survival over summer. Between 1976 and 2017, the fall calf:cow ratio ranged from 35 to 59 calves:100 cows/year, averaging 47 calves:100 cows/year (**Figure 5**).

Similarly, the ratio of short yearlings (SY, 10-11 months old caribou) to adults provides a measure of overwintering calf survival and recruitment. Between 1998 and 2022, SY:adult ratios ranged from 9-26 and averaged 17 SY:100 adults/year (**Figure 5**). SY:100 adult ratios were high from 2016-2018, ranging from 21-23 SY:100 adults (Dau 2016b, NWARAC 2019a, NWARAC 2023). The 2022 SY:100 adult ratio was on par with the long-term average at 17 SY:100 adults (WACH Working Group 2022). Over the past seven years the short yearling ratio has been at or above the long-term average. Thus, recruitment does not appear to be a major driver of herd decline.

Cow mortality affects the trajectory of the herd (Dau 2011, 2013; Prichard 2009; NWARAC 2019a). The long-term mortality rate of radio-collared adult cows averaged 19% from 1987-2020 (WACH Working Group 2022). The annual mortality rate increased from an average of 15% between 1987 and 2003 to 23% from 2004-2014 (Figure 4; Dau 2011, 2013, 2014, 2015). Mortality rates declined in 2015 and 2016, but then increased sharply in 2017. However, the increased mortality rate in 2017 may have been due to a low and aging sample size as few caribou were collared in the previous two years (Prichard et al. 2012; NWARAC 2019a) and/or difficult weather conditions (Gurarie et al. 2020). Prior to 2019, ADF&G and NPS deployed collars on caribou at Onion Portage via boat in September. Only seven collars total were deployed in both 2017 and 2018 due to fewer caribou migrating through Onion Portage at predictable times. ADF&G and NPS begun deploying collars using net gun techniques via helicopter in April 2019 (Joly and Cameron 2021). Since 2018, estimated mortality rates have remained above the long-term average, ranging from 23-36%. Estimated mortality includes all causes of death including hunting (Dau 2011). Dau (2015) states that cow mortality estimates are conservative due to exclusion of unhealthy (i.e. diseased) and yearling cows from collaring. These mortality estimates are influenced by the age at which individuals were collared (which is unknown), sample size and how long the collars have been on individuals (Dau 2015, Prichard et al. 2012).

Cow mortality is low over winter and then increases in the spring/early summer, likely due to the convergence of declining body condition, demands of migration, and lactation prior to the availability of higher quality forage. Conversely, bull mortality spikes during the fall, both naturally from the demands of rut and from targeted human harvest (Dau 2013, 2014). Additionally, Prichard (2009) and Dau (2015) suggest that harvest levels and rates of cows can greatly impact population trajectory.

Increased predation, hunting pressure, deteriorating range condition (including habitat loss and fragmentation), climate change, fall and winter icing events, and disease may be contributing factors to the population decline (Joly et al. 2011; Dau 2014, 2015). Joly et al. (2007) documented a decline in lichen cover in portions of the wintering areas of the WACH, which continued through at least 2015 (BLM, unpublished data).



Map 2. WACH seasonal range map, 2002-2017 (image from WACH Working Group 2019a).





**Figure 1.** 2010-2020 distribution of caribou crossing the Noatak River during fall. Histograms depict where collared female caribou crossed the Noatak River, generally from north to south, on their fall migration. Relative percentages (top number) and the absolute number (middle number) of caribou are provided. The river is divided into seven (lowest number) color-coded segments which are displayed in the background. The middle five segments are 100 river kilometers long, while the westernmost segment (red) is 200 km (before extending into the Chukchi Sea) and the easternmost (yellow) runs as far east as WACH caribou are known to migrate (Joly and Cameron 2021).

**Table 1.** WACH management levels using herd size, population trend, and harvest rate (WACH Working Group 2019b).

	Po	pulation Trend				
	Declining	Stable	Increasing			
Management	Adult Cow	Adult Cow	Adult Cow			
and	Survival	Survival	Survival	Harvest Recommendations May Include:		
Harvest	<80%	80%-88%	>88%			
Level	Calf	Calf	Calf			
	Recruitment	Recruitment	Recruitment			
	<15:100	15-22:100	>22:100			
ral	Pop: 265,000+	Pop: 230,000+	Pop: 200,000+	Reduce harvest of bulls by nonresidents to maintain at least 30 bulls:100 cows		
Libe	Harvest: 14,000+	Harvest: 14,000+	Harvest: 14,000+	No restriction of bull harvest by resident hunters unless bull:cow ratios fall below 30 bulls:100 cows		
ervative	Pop: 200,000- 265,000	Pop: 170,000- 230,000	Pop: 150,000- 200,000	<ul> <li>Encourage voluntary reduction in calf harvest, especially when the population is declining</li> <li>No cow harvest by nonresidents</li> <li>Restriction of bull harvest by nonresidents</li> </ul>		
Conse	Harvest: 10,000-14,000	Harvest: 10,000-14,000	Harvest: 10,000-14,000	• Limit the subsistence harvest of bulls only when necessary to maintain a minimum 30:100 bull:cow ratio		
ervative	Pop: 130,000- 200,000	Pop: 115,000- 170,000	Pop: 100,000- 150,000	<ul> <li>No harvest of calves</li> <li>Limit harvest of cows by resident hunters through permit hunts and/or village quotas</li> <li>Limit the subsistence harvest of bulls to maintain at least 30 bulls:100 cows</li> </ul>		
Pres	Harvest: 6,000-10,000	Harvest: 6,000-10,000	Harvest: 6,000-10,000	Harvest restricted to residents only, according to state and federal law. Closure of some federal public lands to non-qualified users may be necessary		
tical	Pop: <130,000	Pop: <115,000	Pop: <100,000	<ul> <li>No harvest of calves</li> <li>Highly restrict the harvest of cows through permit hunts and/or village quotas</li> <li>Limit the subsistence harvest of bulls to maintain at least 30 bulls:100 cows</li> </ul>		
C	Harvest: <6,000	Harvest: <6,000	Harvest: <6,000	• Harvest restricted to residents only, according to state and federal law. Closure of some federal public lands to non-qualified users may be necessary		



**Figure 2**. The WACH population estimates from 1970–2022. Population estimates from 1986–2022 are based on aerial photographs of groups of caribou that contained radio-collared animals (Dau 2011, 2013, 2014; Parrett 2016, 2017a; Hansen 2019a; WACH Working Group 2021, 2022).



Figure 3. Bull:cow ratios for the WACH (Dau 2015; ADF&G 2017c; Parrett 2017a; WACH Working Group 2021).



**Figure 4.** Mortality rate of radio-collared cow caribou in the WACH (Dau 2013, 2015, 2016b; NWARAC 2019a; WACH Working Group 2020, 2021). Collar Year = 1 Oct-Sep 30. Note: Prior to 2019, collars were deployed via boat in Onion Portage from September to October. Starting in 2019 collars were deployed via net gun techniques in spring (Joly and Cameron 2021).



**Figure 5.** Calf:cow and short yearling (SY):adult ratios for the WACH (Dau 2013, 2015, 2016a; ADF&G 2017c; Parrett 2017a; NWARAC 2019a, 2023; WACH Working Group 2021, 2022). Short yearlings are 10-11 months old caribou.

### **Cultural Knowledge and Traditional Practices**

The present-day human population in Unit 23 includes 11 regional Iñupiaq nations that were intact in the mid-19<sup>th</sup> century (Burch 1998). The estimated population of the Northwest Arctic Borough was 7,346 in 2022 (ADLWD 2022). Caribou have been a significant resource for the Iñupiat for thousands of years. Archaeological deposits at the Onion Portage site on the Kobuk River document 10,000 years of caribou hunting at this location, which is still used today (Anderson 1968, 1988), and even older archaeological deposits dated to circa 11,000 years ago occur in the Kivalina River drainage (Buvit et al. 2019).

The objective of the fall hunt has historically been to acquire large quantities of high-quality meat to freeze for winter (Burch 1994). Ideally, caribou harvesting occurs when the weather is cool enough to prevent spoilage of meat, but before freeze-up. Hunters search for caribou and attempt to intercept them at known river crossings, making the Kobuk and Noatak Rivers central to traditional hunt areas. Prior to freeze-up, bulls have traditionally been preferred because they are fatter than cows (Georgette and Loon 1993). After freeze-up, cows are preferred, because bulls are typically skinnier and in rut by then; the meat smells bad and is of poor quality (Braem et al. 2015). Small groups of caribou that have over-wintered may be harvested by hunters in areas that are accessible by snowmachine.

During their March 7-8, 2023 meeting, Northwest Arctic Council members discussed the difficulties that communities have had in recent years in their efforts to harvest caribou. A Council member from Kotzebue said, "I had a lot of concerns regarding caribou. We know that they don't come through here anymore. I haven't gotten any fresh caribou meat within well over a year. It is a big concern." He added, "This is beginning to get depressing because people aren't filling their freezers" (NWRAC 2023). Another Council member from Kotzebue said that caribou "didn't migrate down the last three years like they normally would…so that was another concern is that most of the villages where the caribou normally migrate didn't get caribou the last couple years or three years" (NWARAC 2023). These recent accounts build on several years of testimony showing that communities—especially those in the communities in the Kobuk River region—have been unable to harvest caribou at levels needed for subsistence (OSM 2022).

Variability in resource availability is a feature of subsistence economies. Prior to settlement in permanent communities, residents of Northwest Alaska were seasonally nomadic, and were able to adapt to lack of local caribou availability by being mobile, as well as through extensive trading networks (Burch 1984). Communities depended on their Traditional Ecological Knowledge to remember how to draw on alternative resources and survive in difficult times (Minc 1986). Periodic severe shortages in subsistence resources caused larger and more permanent population shifts, such as outmigration from the Northwest Arctic region to the North Slope region in the 1880s (Burch 1984).

Caribou dominate subsistence harvest in most communities in the Northwest Arctic (Braem et al. 2015, 2017). In household harvest surveys conducted between 1964 and 2017, caribou were often the most harvested species, more than any other wild resource, in pounds of edible weight. Based on these surveys, the per person harvest of caribou has been as high as 430 pounds per year in communities in Unit 23 (ADF&G 2021; **Table 7**).

**Table 7** highlights variability in the estimated number of caribou harvested annually by Unit 23 communities, based on periodic subsistence surveys conducted by ADF&G, Division of Subsistence. Over time, estimated annual harvest tends to correspond with local availability of caribou. The average estimated annual pounds per person of caribou harvested across survey years ranges from a high of 255.3 pounds in Ambler to a low of 50.5 pounds in Point Hope (**Table 7**).

**Table 7.** Two measures of caribou harvest between 1982 and 2018 in Unit 23 communities. Data is from the ADF&G, Division of Subsistence Community Subsistence Information System (CSIS 2021) with the following exceptions. Kotzebue data for 2002-2004 is from Whiting 2006; Noatak and Deering data for 2011 is from Mikow et al. 2014; 2018 data for Buckland is from Mikow and Cunningham 2020; Point Hope data for 2000-2001 is from Bacon et al. 2009, rev. 2011. Dashes indicate that no data is available.

Community	Year	Estimated Number of Caribou Harvested	Estimated Pounds of Caribou per Person
Kotzebue	2014	1,286	59
	2013	1,680	75
	2012	1,803	78
	2004	1,915	
	2003	1,719	
	2002	2,376	
	1986	1,917	97
	Avg	1,814	77
Selawik	2011	683	109
	2006	934	165
	1999	1,289	249
	Avg	987	174.3
Kivalina	2010	86	32
	2007	268	85
	1992	351	138
	1983	564	283.9
	1982	346	179
	Avg	323	144
Noatak	2016	337	80
	2011	360	89.8
	2007	441	114
	2002	410	120
	1999	683	224
	1994	615	220
	Avg	474	141.3
Point Hope	2014	185	34
	2000-2001	219	
	1994	355	67

Community	Year	Estimated Number of Caribou Harvested	Estimated Pounds of Caribou per Person					
	Avg	253	50.5					
	Lower Kobuk River							
Noorvik	2017	250	65					
	2012	851	198					
	2008	767	173					
	2002	988	181					
	Avg	714	154.3					
Kiana	2009	440	149					
	2006	306	108.5					
	1999	488	174					
	Avg	411	143.8					
	Upper Kot	ouk River						
Ambler	2012	685	330					
	2009	456	260					
	2003	325	176					
	Avg	489	255.3					
Shungnak	2012	396	196					
	2008	416	218					
	2002	403	220					
	1998	561	312					
	Avg	444	236.5					
Kobuk	2012	119	98					
	2009	210	194					
	2004	134	148					
	Avg	154	146.7					
	Northern Sewa	ard Peninsula						
Buckland	2018	950	220					
	2016	637	179					
	2009	561	176					
	2003	637	212					
	Avg	696	196.8					
Deering	2017	342	342					
-	2013	294	430					
	2011-2012	237	206					
	2007	182	161					
	1994	142	131					
	Avg	240	254					

**Table 8** compares percentages of surveyed Unit 23 households attempting to harvest caribou versus those succeeding in harvesting caribou, according to subsistence surveys. In practice, attempted harvest depends on the presence of caribou in traditional harvest areas. It is worth noting that the percentage of households attempting to harvest caribou in any year may adjust to perceived abundance or availability, so the percentage of households attempting to harvest caribou be taken as a simple proxy of interest or need. However, the disparity between the percentage attempting to harvest and those harvesting can give us some limited information about whether caribou are available. The percent harvesting includes those who harvested even one caribou, so this measure cannot show whether people are getting as many caribou as they need.

**Table 8**. Percent of surveyed Unit 23 households attempting to harvest and successfully harvesting caribou between 1986 and 2018. Data is from the ADF&G Division of Subsistence Community Subsistence Information System (ADF&G 2021) with the following exceptions. Noatak and Deering data for 2011 is from Mikow et al. 2014; 2018 data for Buckland is from Mikow and Cunningham 2020. Dashes indicate that no data is available.

Community	Year	Percent of Surveyed	Percent of Surveyed	Percent of Surveyed
-		Households	Households	Households
		Attempting to	Attempting to	Harvesting Caribou
		Harvest Caribou	Harvest Caribou but	-
			Unsuccessful	
Kotzebue	2014	39%	10%	29%
	2013	43%	9%	34%
	2012	44%	5%	39%
	1986	50%	5%	45%
Selawik	2011	70%	16%	54%
	2006	65%	2%	63%
	1999	61%	0%	61%
Kivalina	2010	66%	37%	29%
	2007	64%	0%	64%
	1992	77%	3%	74%
Noatak	2016	70%	19%	51%
	2011	62%	12%	50%
	2007	73%	7%	66%
	2002	76%	5%	71%
	1999	74%	2%	72%
	1994	84%	0%	84%
Point Hope	2014	53%	23%	30%
		Lower Kobuk River Co	ommunities	
Noorvik	2017	59%	19%	40%
	2012	60%	0%	60%
	2008	70%	0%	70%
	2002	72%	1%	71%
Kiana	2009	83%	3%	80%
	2006	62%	5%	57%
	1999	68%	3%	65%
		Upper Kobuk River Co	ommunities	
Ambler	2012	70%	8%	62%
	2009	76%	2%	74%
	2003	74%	4%	70%

Community	Year	Percent of Surveyed Households Attempting to Harvest Caribou	Percent of Surveyed Households Attempting to Harvest Caribou but Unsuccessful	Percent of Surveyed Households Harvesting Caribou
Shungnak	2012	52%	4%	48%
	2008	73%	5%	68%
	1998	74%	2%	72%
Kobuk	2012	66%	9%	57%
	2009	86%	4%	82%
	2004	82%	21%	61%
Northern Seward Peninsula				
Buckland	2018	68%	3%	65%
	2016	86%	3%	83%
	2003	61%	3%	58%
Deering	2017	63%	6%	57%
	2013	44%	6%	38%
	2011	63%	0%	63%
	2007	55%	10%	45%
	1994	57%	3%	54%

Harvest data from comprehensive household surveys are not sufficiently up to date to provide accurate information on the full impact of reduced caribou numbers and delayed or truncated migration on subsistence harvest; new comprehensive subsistence surveys and key informant interviews are needed. Currently, ADF&G Division of Subsistence is conducting surveys of caribou harvest in Selawik, Shungnak, Noatak, Deering, and Kobuk. This research is scheduled to be completed in 2024 (Cold 2021).

In the current temporary closure to fall caribou hunting by non-federally qualified users in portions of Unit 23 and a small area in Unit 26A, approved by the Board in 2022 (WSA21-01a), the primary concern driving the Northwest Arctic Council's proposal was potential disruption of caribou migration pathways by transporters and non-local hunters. The rationale for the current proposal is based in the declining WACH population. Therefore, concerns about user conflict are not detailed here, but they continue to be a central concern for local residents, and the reader may refer to analysis of WSA21-01a (OSM 2022) for a full account of local concerns about the impacts of non-local hunters and transporters on caribou availability for federally qualified subsistence hunters.

## **Harvest History**

The WACH Working Group provides recommendations on herd management, including harvest levels. Currently, the WACH is within the "preservative declining" level, which prescribes a harvest of 6,000-10,000 caribou (**Table 1**). Previous versions of the WACH management plan recommended a harvest rate of 6% of the estimated population when the herd was declining (WACH Working Group 2011; Parrett 2017b, pers. comm.). The current recommended harvest rate at the preservative declining level is 5% at 200,000 and 4.6% at 130,000. As the 2022 population estimate was 164,000 caribou, the harvestable surplus is currently 7,872 caribou (4.8% of 164,000) (NWARAC 2023; WACH Working Group 2022). The State manages the WACH on a sustained yield basis (i.e. managing current harvests to ensure future

harvests). Of particular concern is the overharvest of cows, which may have occurred since 2010/11 (Dau 2015). Dau (2015:14-29) states, "even modest increases in the cow harvest above sustainable levels could have a significant effect on the population trajectory of the WACH."

Caribou harvest by local hunters is estimated from community harvest surveys (**Table 7**), if available, and from models developed by A. Craig with ADF&G's Division of Wildlife Conservation Region V. These models incorporate factors such as community size, availability of caribou, and per capita harvests for each community, which are based on mean values from multiple community harvest surveys (Dau 2015). In 2015, Craig's models replaced models developed by Sutherland (2005), resulting in changes to local caribou harvest estimates from past years. While Craig's models accurately reflect harvest trends, they do not accurately reflect actual harvest numbers (Dau 2015). This analysis only considers the updated harvest estimates using Craig's new model as cited in Dau (2015). Caribou harvest by nonlocal residents and nonresidents are based on harvest reports from harvest tickets and registration permits (Dau 2015). Hunters considered local by ADF&G are functionally identical to federally qualified subsistence users (e.g. residents of St. Lawrence Island are technically federally qualified subsistence users, but do not frequently harvest Western Arctic caribou).

From 1999–2018, the range wide average estimated total harvest from the WACH was 14,103 caribou/year, ranging from 11,729-16,219 caribou/year (Hansen 2020 and 2021a, pers. comm.), but has generally been estimated at 12,000 +/- 1,750 caribou per year since 1996 (WACH Working Group 2019b, 2021). Additionally, harvest estimates do not include wounding loss, which may be hundreds of caribou (Dau 2015). Year-specific harvest estimates have not been generated since 2018, in part because they are not very accurate (Hansen 2021a, pers. comm.; WACH Working Group 2021). While all these harvest estimates are above the preservative harvest level specified in the WACH Management Plan and indicate unsustainable harvest levels, actual harvest is unknown and could be much lower due to caribou being unavailable for harvest near local communities.

Local hunters account for approximately 95% of the total WACH harvest and residents of Unit 23 account for approximately 58% of the total harvest on average (ADF&G 2017c). Comparison of caribou harvest by community from household survey data (**Table 7**) with **Figure 1** demonstrates that local community harvests parallel WACH availability rather than population trends. For example, Ambler only harvested 325 caribou when the WACH population peaked in 2003 but harvested 685 caribou in 2012 when most of the WACH migrated through eastern Unit 23. Similarly, Noatak only harvested 66 caribou in 2010 when no GPS-collared caribou migrated through western Unit 23. Harvest increased substantially (360 caribou) the following year when 37% of the GPS-collared caribou (and thus, a greater proportion of the WACH) migrated through western Unit 23 (**Table 7**).

Between 1998 and 2020, annual reported caribou harvest in Unit 23 ranged from 168-814 caribou (Hansen 2021a, pers. comm.). Over the same time period, reported harvest by non-federally qualified users ranged from 131-657 caribou. The lowest reported harvest occurred in 2016 when all Federal public lands in Unit 23 were closed to non-federally qualified users, but before harvest reporting was required for federally qualified subsistence users. Regardless, local compliance with reporting mandates is considered low but increasing. In 2017 and 2018, registration permits became required under State and

Federal regulations, respectively, which is reflected in the greater number of reported caribou harvest by federally qualified subsistence users. However, compliance with reporting caribou harvest still remains too low to accurately estimate total caribou harvest. On average, 76% of WACH caribou harvested by nonlocals are harvested in Unit 23 (Dau 2015). Between 2016, when Federal lands closures began, and 2020, reported caribou harvest by non-local hunters in Unit 23 averaged 254 caribou (WinfoNet 2018, 2019; Hansen 2021a pers. comm.).

From 1999-2013, 72% of nonlocal hunters on average accessed the WACH by plane. Most nonlocal harvest (85-90%) occurs between August 25 and October 7. Most local subsistence hunters harvest WACH caribou whenever they are available using boats, 4-wheelers, and snowmachines (Dau 2015; Fix and Ackerman 2015). In Unit 23, caribou have historically been available during fall migration, but this has no longer been the case in recent years; caribou migration has occurred later in fall, resulting in subsistence harvest also occurring later, which in turn contributes to food insecurity.

## **Alternatives Considered**

One alternative would close Federal public lands in Unit 23 to non-federally qualified users utilizing a population threshold. Federal public lands in Unit 23 would be open to all users when the WACH Working Group adopts a conservative management and harvest level (population  $\geq 200,000$ ) with a stable or increasing population trend (Adult cow survival  $\geq 80\%$  and calf recruitment  $\geq 15:100$ ). Federal public lands in Unit 23 would be closed to non-federally qualified users when the herd status is at a preservative management level to provide subsistence priority for federally qualified subsistence users and help with the conservation and recovery of the WACH.

## **Effects of the Proposal**

If Wildlife Proposals WP24-30/31 are approved, Federal public lands in Unit 23 will be closed to the harvest of caribou by non-federally qualified users from Aug. 1-Oct. 31. Only federally qualified subsistence users, those with a customary and traditional use determination for caribou in Units 23, would be able to harvest caribou on Federal public lands in Unit 23 during this time.

This may increase hunting pressure on State or privately owned lands. State managed lands comprise 19% of Unit 23 and also encompass many of the villages in the unit. If this proposal is adopted, user conflicts and concern about the effects of non-local hunters on caribou migration may increase on State managed lands, particularly along the upper Kobuk River. If Unit 23 is closed to non-Federally qualified users, these users may be displaced onto Federal public lands in adjacent units (i.e. Unit 26A), which could impact hunting and harvest in those units.

If this proposal is approved, those with a history of residency and family connection in Unit 23 who are now residing in nonrural areas would not be able to harvest caribou on Federal public lands in Units 23 Aug. 1-Oct. 31, as they are not federally qualified subsistence users. Non-federally qualified users who are Native corporation shareholders would still be able to hunt on Native corporation lands under State regulations if permission is granted by the landowners.

While harvest by non-federally qualified users on Federal public lands may decrease substantially, between 1998 and 2020, annual reported caribou harvest in Unit 23 by non-federally qualified users was small, ranging from 131-657 caribou (Hansen 2021a, pers. comm.). Any reduction in harvest may be negated by the fact that non-federally qualified users would still be able to access and harvest caribou on gravel bars below the mean high-water mark within Federal public lands, which are considered State land. Reports from law enforcement and nonlocal hunters indicate caribou are commonly harvested on such gravel bars, which may suggest limited impacts of the closure.

This closure is focused on current herd numbers and classification under WACH Working Group management levels; the herd is currently being managed at the "preservative declining" level (**Table 1**), and under this framework it is recommended to restrict harvest to residents only, and closure of some Federal public lands to non-federally qualified subsistence users may be necessary. Approving this proposal may result in increased subsistence opportunity for federally qualified subsistence users and a limited reduction of harvest on the declining WACH. However, Wildlife Proposal WP24-28/29 has been submitted to reduce the harvest on the WACH.

## **OSM PRELIMINARY CONCLUSION**

**Support** Proposals WP24-30/31 with modification to include a threshold that would remove the closure once the WACH Working Group manages the herd at a conservative management and harvest level (population  $\ge 200,000$ ) with a stable or increasing population trend (Adult cow survival  $\ge 80\%$  and calf recruitment  $\ge 15:100$ ).

### Justification

OSM supports measures to reduce conservation concerns for the WACH. The length and precipitous decline of the WACH warrants strong measures to aid in the recovery and conservation of this population. Current harvest rates could prolong or worsen the current decline and hamper recovery efforts. Additionally, while causes of the decline are multi-faceted and uncertain, reducing human harvest is the most controllable factor. The WACH is currently being managed at the "preservative declining" level, and under this framework it is recommended to restrict harvest to residents only, and closure of some Federal public lands to non-federally qualified users may be necessary as a tool to help in the recovery.

ANILCA Title VIII requires that Federal land managers give subsistence uses of fish and wildlife priority over other uses. With the continued decline of the WACH, and the concurrent proposals to reduce WACH harvest limits for federally qualified subsistence users, it is appropriate to limit non-subsistence hunting activities in Unit 23.

The current temporary closure applies to portions of Unit 23 and 26A, which were identified as potentially important to protecting migration routes. However, the current proposal is based on concern with the declining WACH population, and therefore, it is reasonable to close all of Unit 23.

Adding a population threshold would ensure that the closure does not result in unnecessary restrictions to non-federally qualified users and this restriction will not remain in effect longer than necessary when the population recovers.

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	WP24-27 Executive Summary			
General Description	Wildlife Proposal WP24-27 requests changing the Federal muskox permit system in Units 22 and 23 from a Federal registration permit to a Federal drawing permit. Additionally, BLM and NPS request standardizing language in the eight delegation of authority letters and changing the in-season manager for the muskox hunt in Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage from the Western Arctic National Parklands superintendent to the BLM Anchorage Field Office manager. <i>Submitted by the Bureau of Land Management and the</i> <i>National Park Service</i> .			
Proposed Regulation	Unit 22–Muskox			
	Unit 22B — 1 bull by Federal <b>drawing</b> permit or State permit. Federal public lands are closed to the taking of musk ox except by federally qualified subsistence users hunting under these regulations	Aug. 1-Mar. 15.		
	Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek — 1 bull by Federal <b>drawing</b> permit or State permit. Federal public lands are closed to the harvest of musk ox except by residents of Nome and Teller hunting under these regulations	Sep. 1-Mar. 15.		
	Unit 22D, that portion within the Kuzitrin River drainages — I bull by Federal <b>drawing</b> permit or State permit. Federal public lands are closed to the taking of musk ox except for residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission hunting under these regulations	Aug. 1-Mar. 15.		
	Unit 22D, remainder — 1 bull by Federal <b>drawing</b> permit or State permit. Federal public lands are closed to the taking of musk ox except by residents of Elim, White Mountain, Nome, Teller, and Brevig Mission hunting under these regulations	Aug. 1-Mar. 15.		
	Unit 22E — 1 bull by Federal <b>drawing</b> permit or State permit. Federal public lands are closed to the harvest of musk ox except by federally qualified subsistence users hunting under these regulations	Aug. 1-Mar. 15.		

	WP24-27 Executive Summary	
	Unit 22, remainder	No open season.
	Unit 23–Muskox	
	Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage — 1 bull by Federal <b>drawing</b> permit or State permit. Federal public lands are closed to the taking of musk oxen except by federally qualified subsistence users hunting under these regulations	Aug. 1-Mar. 15.
	Unit 23, Cape Krusenstern National Monument — 1 bull by Federal <b>drawing</b> permit.	Aug. 1-Mar. 15.
	Unit 23, that portion north and west of the Kobuk River drainage — 1 bull by State <b>permit</b> or Federal <b>drawing</b> <del>registration</del> permit.	Aug. 1-Mar. 15.
	Unit 23, remainder	No open season.
OSM Preliminary Conclusion	Support Proposal WP24-27.	
Seward Peninsula Subsistence Regional Advisory Council Recommendation		
Northwest Arctic Subsistence Regional Advisory Council Recommendation		
Interagency Staff Committee Comments		

WP24-27 Executive Summary				
ADF&G Comments				
Written Public Comments	None			

# DRAFT STAFF ANALYSIS WP24-27

## ISSUES

Wildlife Proposal WP24-27, submitted by the Bureau of Land Management (BLM) and the National Park Service (NPS), requests changing the Federal muskox permit system in Units 22 and 23 from a Federal registration permit to a Federal drawing permit. Additionally, BLM and NPS request standardizing language in the eight delegation of authority letters (**Appendix 1**) and changing the inseason manager for the muskox hunt in Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage (Unit 23 SW) from the Western Arctic National Parklands (WEAR) superintendent to the BLM Anchorage Field Office manager. This proposal will codify into regulation the changes approved in 2022 from Wildlife Temporary Special Action WSA22-01.

#### DISCUSSION

The proponents state changes to permit distribution language are necessary to reflect how permits have been issued in recent history: via a drawing system which was out of compliance with registration permit language. This change will allow the continuation of subsistence use and further conservation of healthy muskoxen populations on the Seward Peninsula. This housekeeping change will affect five muskox hunts in Unit 22 and three muskox hunts in Unit 23 for a total of eight hunts. Updating the Delegation of Authority letters will standardize and clarify language between all eight of these hunts. Specifically, the scope of delegation language for all eight muskox hunts should read: Close the season, set any needed permit conditions, determine annual quotas, the number of permits to be issued, and the method of permit allocation between State and Federal permits (**Appendix 1**). Changing the inseason manager from the WEAR Superintendent to the BLM Anchorage Field Office manager will better reflect land status in the hunt areas.

## **Existing Federal Regulation**

#### Unit 22–Muskox

*Unit 22B*—1 bull by Federal permit or State permit. Federal public lands Aug. 1-Mar. 15. are closed to the taking of musk ox except by federally qualified subsistence users hunting under these regulations

Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek — Sep. 1-Mar. 15. 1 bull by Federal permit or State permit. Federal public lands are closed to the harvest of musk ox except by residents of Nome and Teller hunting under these regulations

Unit 22D, that portion within the Kuzitrin River drainages — 1 bull by Federal permit or State permit. Federal public lands are closed to the taking of musk ox except for residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission hunting under these regulations	Aug. 1-Mar. 15.
Unit 22D, remainder — 1 bull by Federal permit or State permit. Federal public lands are closed to the taking of musk ox except by residents of Elim, White Mountain, Nome, Teller, and Brevig Mission hunting under these regulations	Aug. 1-Mar. 15.
Unit $22E - 1$ bull by Federal permit or State permit. Federal public lands are closed to the harvest of musk ox except by federally qualified subsistence users hunting under these regulations	Aug. 1-Mar. 15.
Unit 22, remainder	No open season.
Unit 23–Muskox	
Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage — 1 bull by Federal permit or State permit. Federal public lands are closed to the taking of musk oxen except by federally qualified subsistence users hunting under these regulations	Aug. 1-Mar. 15.
Unit 23, Cape Krusenstern National Monument — 1 bull by Federal permit.	Aug. 1-Mar. 15.
Unit 23, that portion north and west of the Kobuk River drainage — 1 bull by State or Federal registration permit.	Aug. 1-Mar. 15.
Unit 23, remainder	No open season.

## **Proposed Federal Regulation**

#### Unit 22–Muskox

Unit 22B — 1 bull by Federal **drawing** permit or State permit. Federal public Aug. 1-Mar. 15. lands are closed to the taking of musk ox except by federally qualified subsistence users hunting under these regulations

Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek — Sep. 1-Mar. 15. 1 bull by Federal **drawing** permit or State permit. Federal public lands are closed to the harvest of musk ox except by residents of Nome and Teller hunting under these regulations

Unit 22D, that portion within the Kuzitrin River drainages — 1 bull byAug. 1-Mar. 15.Federal drawing permit or State permit. Federal public lands are closed tothe taking of musk ox except for residents of Council, Golovin, WhiteMountain, Nome, Teller, and Brevig Mission hunting under these regulationsThe taking of musk ox except for residents of Council for the taking of musk ox except for residents of Council for the taken of taken of the taken of taken of

Unit 22D, remainder — 1 bull by Federal **drawing** permit or State permit. Aug. 1-Mar. 15. Federal public lands are closed to the taking of musk ox except by residents of Elim, White Mountain, Nome, Teller, and Brevig Mission hunting under these regulations

Unit 22E — 1 bull by Federal **drawing** permit or State permit. Federal public Aug. 1-Mar. 15. lands are closed to the harvest of musk ox except by federally qualified subsistence users hunting under these regulations

Unit 22, remainder

No open season.

#### Unit 23-Muskox

Unit 23, south of Kotzebue Sound and west of and including the BucklandAug. 1-Mar. 15.River drainage — 1 bull by Federal drawing permit or State permit. Federalpublic lands are closed to the taking of musk oxen except by federallyqualified subsistence users hunting under these regulationsProvide the taking of musk oxen except by federally

*Unit 23, Cape Krusenstern National Monument* — 1 *bull by Federal drawing Aug. 1-Mar. 15. permit.* 

*Unit 23, that portion north and west of the Kobuk River drainage* — 1 *bull by Aug. 1-Mar. 15. State permit or Federal drawing registration permit.* 

Unit 23, remainder

No open season.

# **Existing State Regulation**

#### Unit 22–Muskox

22A- One bull by permit.	TX090	Aug 1- Mar 15
22B east of the Darby Mtns including drainages of Kwiniuk, Tubutulik, Koyuk and Inglutalik rivers. One bull by permit.	TX105	Aug 1- Mar 15
22B remainder- One bull by permit.	TX105	Jan 1- Mar 15
22C that portion of the Snake River drainage downstream of the Glacier Creek confluence and including the Glacier Creek	TX095	Aug 1- Mar 15
drainage, that portion of the Nome River drainage downstream of and including the Basin Creek and Shepard Creek drainages, and all drainages flowing directly to Norton Sound between the mouths of the Nome River and the Snake River- One bull, by bow and arrow, muzzleloader, or shotgun only, by permit	<i>TX096</i>	
22C that portion of drainages flowing to Norton Sound 1) between the east bank of the Penny River and the Snake River drainage, 2) the Snake River drainage upstream of the Glacier Creek confluence and excluding the Glacier Creek drainage, 3) the Nome River drainage upstream of and excluding the Basin Creek and Shepard Creek drainages, and 4) between the Nome River drainage and the west bank of the Flambeau River extended along Safety Sound to the Safety Bridge- One bull by permit		Aug 1- Mar 15
22C Remainder		No open season
22D that portion west of the Tisuk River drainage, west of the west bank of the unnamed creek originating at the unit boundary opposite the headwaters of McAdam's Creek and west of the west bank of Canyon Creek to its confluence with Tuksuk Channel- One bull by permit	TX103	Jan 1- Mar 15
22D Kuzitrin River drainage (Includes Kougarok and Pilgrim rivers)- One bull by permit	TX102	Jan 1- Mar 15

22D Remainder- One bull by permit	TX102	Aug 1- Mar 15
22E- One bull by permit	TX104	Aug 1- Mar 15
Unit 23–Muskox		
23 Seward Peninsula west of and including the Buckland River drainage- One bull by permit	TX106	Aug 1- Mar 15
23 that portion north and west of the Kobuk River drainage—One bull by permit	TX107	Aug 1- Mar 15
23 remainder		No open season

#### **Extent of Federal Public Lands/Waters**

Unit 22 is comprised of 43% Federal public lands and consists of 28% BLM, 12% NPS, and 3% U.S. Fish and Wildlife Service (USFWS) managed lands.

Unit 23 is comprised of 71% Federal public lands and consist of 40% NPS, 22% BLM, and 9% USFWS managed lands.

#### **Customary and Traditional Use Determinations**

Residents of Unit 22B have a customary and traditional use determination (C&T) for muskoxen in Units 22B and 22D.

Residents of Unit 22C have a C&T for muskoxen in Units 22B, west of the Darby Mountains, 22C, and 22D.

Residents of Units 22D have a C&T for muskoxen in Unit 22D.

Residents of Unit 22E (excluding Little Diomede Island) have a C&T for muskoxen in Units 22D and 22E.

Residents of Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage have a C&T for muskoxen in Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage.

Residents of Unit 23 east and north of the Buckland River drainage have C&T for muskox in Unit 23, remainder.

Residents of the NANA region are considered resident zone communities of Cape Krusenstern National Monument (CAKR). These communities include Kotzebue, Selawik, Noorvik, Kiana, Shungnak, Ambler, Kobuk, Noatak, Kivalina, Buckland, and Deering.

## **Regulatory History**

## Seward Peninsula Muskox

In 1995, Proposal P95-44 requested to establish the first Federal muskox hunts and closed all Federal public lands to non-federally qualified users in Units 22D and 22E. This proposal was submitted because the muskox population was robust enough to withstand a harvest of 15 bulls as recommended by the Seward Peninsula Cooperative Muskox Management Plan (OSM 1995). The Federal Subsistence Board (Board) adopted Proposal P95-44 with modification to also establish a Federal muskox season in Unit 23 SW to provide additional subsistence opportunity. The Board added Unit 23 SW because muskox from the Seward Peninsula population occurred in the area. The harvest limit was one bull by Federal registration permit. The season was Sept. 1-Jan. 31 or until 7 muskoxen were harvested.

In 1997, Wildlife Special Action 97-14 established a shared Federal and State permit system for muskox on the Seward Peninsula that was supported by both the Seward Peninsula and Northwest Arctic Subsistence Regional Advisory Councils (Seward Peninsula and Northwest Arctic Councils) and adopted by the Board (FSB 1998). Village recommendations were summarized in a resolution written and passed by the Seward Peninsula Council in 1998 and subsequently presented to the Alaska Board of Game (BOG), which approved a Tier II subsistence muskox hunt for the Seward Peninsula with the assumption that this would be part of a combined Federal/State harvest program.

In 1998, the Seward Peninsula Council also submitted Proposal P98-89 to extend the muskox season by three months to close on March 31 (rather than January 31) for Units 22D, 22E, and 23 SW. However, as part of the consensus agenda, the Board adopted Proposal P98-89 with modification to change the season to Aug. 1 - Mar. 15. This modification was made due to biological concerns that hunting in late March could stress cows shortly before the calving season.

In 2000, the Board adopted Proposal WP00-56 to combine two Federal permit areas in Unit 22D, one on NPS land and the other on BLM land, as designated in 1997. Six of the Federal permits were then transferred into the State Tier II system.

In 2001, the Board adopted Proposal WP01-35, which established a muskox season in Unit 22B and changed the harvest limit from one bull to one muskox in Units 22B, 22D, 22E and 23 SW, however, cows could only be taken from Jan. 1-Mar. 15 and no more than eight cows could be harvested. Total harvest could not exceed 13 muskoxen. The Seward Peninsula Muskox Cooperators Group (Cooperators) unanimously supported submitting the proposal to provide more subsistence opportunity, to better coordinate between State and Federal hunts and because there were no conservation concerns (OSM 2001). The BOG adopted similar regulations.

In 2002, the Board adopted Proposal WP02-37, delegating authority to the Superintendent of the WEAR to set annual harvest quotas and close the season for muskox in Unit 23 SW.

In 2005, the BOG established a Tier I subsistence registration hunt, previously a Tier II hunt, in Unit 22E as proposed by the Cooperators. This was expected to help users reach the harvest quota in an area where the harvestable surplus was greater than the number of permit applicants.

In 2006, the Board adopted Proposals WP06-41 and WP06-55, establishing a designated hunter permit for muskox in Units 22 and 23 SW, respectively. Special provisions allowed a federally qualified subsistence user to designate another federally qualified subsistence user to take muskoxen on their behalf, unless the recipient is a member of a community operating under a community harvest system.

In 2008, the BOG adopted Proposal 77 with modification. This changed the framework of the Seward Peninsula muskoxen hunts in all Seward Peninsula hunt areas by adopting a combination of Tier I subsistence registration hunts and drawing permit hunts. This ended the original Tier II permit hunts that had been in place since 1998 (Gorn 2011, Hughes 2018, pers. comm.)

In 2010, several proposals regarding muskoxen were submitted to the Board. The Board adopted Proposal WP10-74, which requested rescinding the closure of Federal public lands to the harvest of muskoxen in Unit 22E, except by federally qualified subsistence users. Harvest quotas were rarely met in Unit 22E, indicating harvest should be allowed on Federal public lands under both Federal and State regulations, and because conservation concerns were minimal due to the harvest quotas. The Board also adopted WP10-75, which requested the harvest of cow muskoxen be allowed for the entire season in Unit 22E, rather than restricting it to the Jan. 1–Mar. 15 portion. Proposal WP10-77 requested the Federal hunt areas for muskoxen within Unit 22D remainder be aligned with State regulations by establishing hunts in the Kougarok, Kuzitrin, and Pilgrim river drainages. The Board adopted WP10-77 with modification to establish the current Unit 22D Kuzitrin hunt area, which encompasses the Kougarok and Pilgrim river drainages. They also adopted Proposal WP10-84 with modification, clarifying the regulatory language and requiring a Federal permit or State Tier I registration permit (instead of Tier II) to harvest muskox in Unit 23 SW. The Board revised permit requirements to maintain consistency with recent changes under State regulations.

In 2011, the BOG adopted regulations to allow flexibility in managing muskox hunts outside of the normal regulatory cycle. This enabled Alaska Department of Fish and Game (ADF&G) to manage their permits as either Tier I or Tier II and to set harvest thresholds from year to year based on current biological data and the relationship between the harvestable surplus and amount necessary for subsistence (Gorn and Dunker 2015).

In 2014, Proposals WP14-33, -35, -36, -38 and -41 were adopted with modification by the Board in response to a decline in the muskox population and resulting conservation concern. These commonly eliminated the cow hunt, delegated authority to the Superintendent of the Bering Land Bridge National Preserve and the BLM Anchorage Field Office manager to restrict the number of Federal registration permits to be issued in the different hunt areas and further closed Federal public lands in Units 22D, 22E and 23SW to the harvest of muskox except by federally qualified subsistence users.

In 2018, using the flexibility that was adopted into regulations in 2011, the BOG began administering the Unit 22E muskox harvest as a Tier II hunt (TX104). This modification resulted from population surveys suggesting that the current harvest strategy yielded a harvestable portion below the lower end of the ADF&G's goals for the amount necessary for subsistence (Dunker 2018, pers. comm.).

In 2020, the Board reviewed Wildlife closure reviews WCR20-10, -19, -28, -29, -30 and -44 for these six muskox hunts in Units 22 and 23SW and voted to maintain status quo for all of them. Muskox populations had been at low levels since the 2015 decline, and mature bull:cow ratios and rate of recruitment were lower than historical averages. Given the State still managed under a Tier II permit and the current conservative harvest strategy, these closures were deemed necessary to protect the muskox population.

In April 2022, the Board adopted special action WSA22-01, which requested the same changes as this proposal. They recognized drawing permits would maintain the effective administration of these muskox hunts that provide for subsistence hunting opportunity while sustainably managing and conserving the muskox populations. The Seward Peninsula and Northwest Arctic Councils supported the request, considering it to be a housekeeping request and felt administering the permit by random drawing to be the most equitable manner for permit distribution (FSB 2022).

## Cape Thompson Muskox

In regulatory year (RY) 2000-2001, the ADF&G started the muskox Tier II permit in Unit 23, that portion north and west of the Noatak River. In RY 2014/15, the boundary was changed to be Unit 23, that portion north and west of the Kobuk River (Unit 23 NW).

In 2003, the NPS prepared an Environmental Assessment under the National Environmental Policy Act, and its Regional Director signed a Finding of No Significant Impact, designating all lands within the NANA Regional Corporation as the resident zone for Cape Krusenstern National Monument (CAKR). With this 2003 decision, the current resident zone communities are Kotzebue, Selawik, Noorvik, Kiana, Shungnak, Ambler, Kobuk, Noatak, Kivalina, Buckland, and Deering.

In 2005, Proposal WP05-19 requested the establishment of a season and allocation of muskoxen within CAKR to provide opportunity for families with "permanent subsistence camps" within CAKR. The Board adopted Proposal WP05-19 with modification, limiting the hunt to resident zone community members with permanent residence within CAKR or the immediately adjacent Napaktuktuk Mountain area, south of latitude 67°05' N and west of longitude 162°30' W and delegating authority to the WEAR Superintendent to set the season closing date and annual harvest quotas. This action included a Section 804 prioritization, resulting in closure of the muskox hunt to some federally qualified subsistence users.

In 2011, the Northwest Arctic Council supported maintaining the CAKR muskox closure to nonfederally qualified users based on population concerns at its March 2011 meeting. The Northwest Arctic Council agreed to revisit the closure when further data regarding the population became available. In 2016, the Board adopted Proposal WP16-50 as modified by OSM as part of the consensus agenda. Proposal WP16-50 removed the 804 restriction for the CAKR hunt area, expanding the pool of users eligible to hunt muskox within CAKR to all resident zone community members who are also federally qualified subsistence users. This regulatory change provided more opportunity for federally qualified subsistence users, while maintaining the permit and harvest quota, resulting in no biological effects to the muskox population.

Additionally in 2016, the Board adopted Proposal WP16-51 as modified by OSM to establish a muskox hunt in the portion of Unit 23 north and west of the Kobuk River drainage with a harvest limit of 1 bull muskox and season of Aug. 1-Mar. 15. The modification specified that harvest would be by State or Federal registration permit and to delegate authority the WEAR Superintendent to close the season, determine annual harvest quotas, and determine the number of Federal permits to be issued, by delegation of authority letter only.

In April 2022, the Board adopted Proposal WP22-55 as modified by OSM which established a hunt for Cape Thompson muskox in Unit 26A from Aug. 1-Mar. 15. The OSM modification was to revise the hunt area descriptor, require a Federal drawing permit (instead of a Federal registration permit), and to delegate authority to the BLM Arctic District Office to manage the hunt. Wildlife closure review WCR22-27, regarding muskox in CAKR, was reviewed at the same time by the Board. They adopted the OSM recommendation to modify or eliminate this closure by removing unnecessary language as a housekeeping change. Both items were included on the Board's consensus agenda (FSB 2022).

In April 2022, the Board adopted special action WSA22-01, which requested the same changes as this proposal. They recognized drawing permits would maintain the effective administration of these muskox hunts that provide for subsistence hunting opportunity while sustainably managing and conserving the muskox populations. The Northwest Arctic and North Slope Councils supported the request, considering it to be a housekeeping request and felt administering the permit by random drawing to be the most equitable manner for permit distribution (FSB 2022).

## **Biological Background**

Muskoxen are adapted for survival in arctic habitats. Their large body size, thick undercoat and long guard hairs allow muskoxen to stay warm in arctic climates and conserve energy (Klein 1992). However, their thick fur does not allow them to regulate their body temperature, especially following high exertion activities, such as running. Their lower chest height and smaller hooves make travelling through deep snow difficult (Klein 1992; Ihl and Klein 2001). They tend towards wind swept areas with reduced snow depth (Dau 2005) as they cannot forage in deep, hard-packed snow, using body-fat reserves and conservative behavior to survive winters. These adaptations limit suitable habitat and lead muskox groups to remain localized during winter months to conserve energy (Klein 1992). Therefore, disturbance to muskox groups during the winter by hunters or predators could decrease survival through increased energetic requirements and movement to unsuitable habitat (Nelson 1994; Hughes 2018).

#### Seward Peninsula Muskox

Muskoxen had disappeared from Alaska by the late 1800s and maybe earlier from the Seward Peninsula (Lent 1999; Dunker and Germain 2022)). Muskoxen were reintroduced to Units 22C and 22D in 1970 and have since expanded their range to the north and east (Gorn and Dunker 2015). Currently, muskoxen from the Seward Peninsula population occupy suitable habitat in Units 22, 21D, and the southern portion of Unit 23.

Muskox management on the Seward Peninsula was historically guided by recommendations developed by the Cooperators. The group was composed of staff from NPS, BLM, USFWS, ADF&G, Bering Straits Native Corporation, Kawerak Inc., Reindeer Herders Association, Northwest Alaska Native Association, residents of Seward Peninsula communities, and representatives from other interested groups or organizations. The Cooperators Group has not met since January of 2008 (Braem 2022, pers. comm.). The following management goals formed the basis of the cooperative interagency management plan for Seward Peninsula muskoxen developed from 1992 through 1994 (Nelson 1994): 1) manage populations to allow for growth while providing for harvest; 2) protect habitats; and 3) encourage cooperation and information sharing among agencies.

Aerial survey methods used to monitor the Seward Peninsula muskox population include minimum counts, distance sampling, and sex-age composition surveys. Survey areas include the core count area of Units 22B, 22C, 22D, 22E, and 23 SW, and the expanded count area, which include the core count area as well as northern Unit 22A, southeastern Unit 23, western Unit 21D, and western Unit 24. Beginning in 2010, distance sampling techniques, conducted during the winter, were implemented to estimate abundance of Seward Peninsula muskox. This methodology replaced the minimum count surveys used since 1980. The minimum count surveys assumed 100% coverage but had varying effort from year to year. The distance sampling protocol was developed because it was believed that these estimates would provide more useful data and improve long-term monitoring efforts (Gorn and Dunker 2015). Surveys of the expanded count area were also implemented in 2010 to better understand the eastward migration of muskoxen from the Seward Peninsula, their current distribution and total population. Sex-age composition surveys, completed in the spring after distance sampling, document large scale patterns in structure of the population.

After reintroduction, the Seward Peninsula muskox population experienced periods of growth between 1970 and 2000 (14% annual rate of increase) and 2000 and 2010 (3.8% annual rate of increase), peaking at 2,903 muskoxen in 2010 (Gorn 2011). However, a 23.4% decrease in abundance occurred between 2010 and 2012 and since 2015, the muskox population has experienced an annual rate of decline of 2%, to an estimated 2,071 muskoxen in 2021 (**Figure 1**). It was hypothesized the decline was related to the high mortality rates of adult cows and declines in the number of short yearlings (10–12-month-old muskoxen) (Gorn 2012); however, caution should be used when interpreting these mortality rates as they are based on a small sample size (Gorn 2011).

Composition surveys indicated declines in mature bulls between 2002 and 2011 (**Figure 2**), which prompted changes to the method of determining sustainable harvest rates (Gorn 2011). Selective harvest of mature bulls on the Seward Peninsula was thought to be a driver of reduced population

growth. The hypothesis was young male muskoxen may be less effective than mature bulls at maintaining a harem, leading to extended calving seasons, which in turn may decrease calf survival and reduce recruitment. Younger males may also be less effective than mature bulls at defending their harem from predatory attacks, leading to more predation mortality. Therefore, annual harvest was restricted to less than 10% of the estimated number of mature bulls in the interest of conservation (Schmidt and Gorn 2013). Following this change in harvest management, the mature bull:100 cow ratio of Seward Peninsula muskoxen has increased over the 2011 low of 29:100 and remained stable through 2021 at an average of 38:100 (Dunker 2017a, 2022 pers. comm.).

Short yearlings (SY) are muskox between 10 and 12 months old and provide a measure of recruitment and population growth. Composition surveys indicate a decrease in short yearlings between 2002 and 2015, from 44:100 to 23:100, with low recruitment rates of particular concern (Gorn and Dunker 2015; Dunker 2022, pers. comm.). Between 2002 and 2021, SY:cow ratios for the entire Seward Peninsula muskox population ranged from 17-44 SY:100 cows (**Figure 2**). Ratios have been increasing since 2015 to almost as high as 2002 levels, peaking in 2021 at 42:100.



**Figure 1**. Population estimates for Seward Peninsula muskox. The core count area includes Units 22B, 22C, 22D, 22E, and 23SW. The expanded count area includes the core count area, northern Unit 22A, southeastern Unit 23, and Unit 21D (Gorn and Dunker 2015, Dunker 2017a, 2022 pers. comm.).





#### Cape Thompson Muskox

ADF&G translocated 36 muskoxen near Cape Thompson in 1970, with an additional 34 animals released in the same area in 1977 (Westing 2011). Muskox have occupied CAKR since at least 1979 and occupy habitat from the mouth of the Noatak River, north to Cape Lisburne (NPS 2014). Muskoxen in the Cape Thompson area appear to occupy relatively discrete "core areas," separate from the muskox population on the Seward Peninsula, although muskoxen are also widely scattered throughout the remainder of Unit 23 in groups (Westing 2011).

Agencies responsible for management of the muskox population in Unit 23 have several objectives. The NPS manages muskoxen within their lands to maintain a viable population in perpetuity, provide subsistence opportunity when sustainable, and defer to State regulations when not in conflict with NPS regulations (NPS 2014). The Arctic Network Inventory and Monitoring Program objectives include determining late winter sex and age composition, distribution and estimating abundance (Schmidt, Robinson, and Miller 2018). Additionally, ADF&G management objectives include surveying the population at least once every 3 years, assessing range expansion, monitoring sex and age composition, and minimizing the effects of development, hunting, and tourism on muskoxen and their habitat (Hughes 2016).

Since 1987, aerial population surveys of the Cape Thompson herd have occurred in the "core count area," which extends from the mouth of the Noatak River to Cape Lisburne within about 20 miles of the Chukchi Sea coast. Muskox have since expanded their range. In 2011, 2016, and 2020, ADF&G and NPS completed a population-wide survey that included the core count areas as well as expanded

areas in Unit 26A and Unit 23 north of the Kobuk River (Hughes 2016, 2020 pers. comm.; NPS 2017) (Figure 3).

From 1970-1998, the Cape Thompson muskox population grew 8% annually, while between 1998 and 2005, the population grew 2% annually. Since 2005, the data suggests a slight decline in population within the core count area, likely due to range expansion into other areas (Hughes 2016, NPS 2017). Between 2011 and 2020, the population within the core count area stabilized, averaging 234 muskoxen. In 2020, the population estimate was 226 muskoxen (**Figure 3**).

The recruitment rate (measured as the proportion of short yearlings in the population) and proportion of mature bulls in the core count area has been stable since 2015 further indicating no population growth. In spring 2019, short yearlings and mature bulls comprised 13% and 16% of the population, respectively. No spring composition survey occurred in 2020 due to constraints from weather, time, and the COVID-19 pandemic (Hughes 2020, pers. comm.).



**Figure 3.** Number of Cape Thompson muskoxen counted in the core count area and expanded survey area (Hughes 2016, 2020 pers. comm., NPS 2017). Prior to 2011, minimum count methods were used. In 2011 minimum counts were replaced with distance sampling methods and error bars represent the 95% credible intervals surrounding those estimates.

## **Cultural Knowledge and Traditional Practices**

In Iñupiaq, muskoxen are called *umingmak*, "the one with hair like a beard" (Lent 1999). The earliest archaeological evidence for use of muskoxen in arctic Alaska dates to Birnirk culture, beginning in approximately 600 A.D. (Lent 1999). In comparison to caribou, the availability of muskoxen was more predictable in time and space (Klein 1989). Muskoxen were likely always present at relatively low numbers, and their use was limited but continuous over approximately 1500 years.

Historically, muskoxen provided fat when caribou were lean in late winter and early spring and provided an alternative food source in years when caribou were scarce. Muskoxen were more heavily hunted following the introduction of firearms, and were also intensively harvested by whalers, trappers, and traders in the 1800s. In Alaska, muskoxen persisted the longest in the eastern Brooks Range, where they were extirpated by the 1890s (Lent 1998). According to ethnohistoric research, the last muskoxen in Northwestern Alaska were hunted in the late 1850s around Wainwright, but the exact timing of their local extirpation further south in the Northwest Arctic and Seward Peninsula regions is difficult to determine (Lent 1999).

Muskoxen were reintroduced to the region in 1970 (Lent 1999). While muskoxen are not a major source of food in relation to other subsistence resources, they have become more important within some families. A harvested muskox yields a large amount of meat and is shared with the community. Muskoxen represent both a valuable subsistence harvest and a potential nuisance or threat to communities and hunters (Lent 1999, Mason 2015, SPRAC 2019 and 2022). Across their range in northern Alaska, the presence of muskoxen is also reported to deter caribou and prevent successful caribou harvests (Kutz et al. 2017).

## **Harvest History**

## Seward Peninsula Muskox

Prior to 2012, muskox harvest rates on the Seward Peninsula were calculated as 3% of the total population size. The harvest quota for each hunt area was determined based on the percentage of the range-wide muskox population occurring within that hunt area, with the harvest rate reaching up to 8% of a population in some subunits. However, following declines in recruitment, bull:cow ratios, and overall population size, managers reassessed this strategy. Consequently, a new harvest management strategy was implemented in 2012. Since 2012, Unit 22 muskox harvest rates have been based primarily on the number of mature bulls in the population. Specifically, harvest quotas are calculated as 10% of the estimated number of mature bulls within the hunt area, and range-wide harvest targets are set at 2% of the estimated population size (Gorn and Dunker 2013; Gorn and Dunker 2015).

This shift in harvest management was accompanied by a significant reduction in harvest. Range-wide, harvest declined from 111 muskox in 2011 (5.5% of the total population) to 26 muskoxen in 2012 (1.2% of the total population). Total reported harvest has remained below 2% of the total population, which has likely influenced the subsequent increase in mature bulls (Gorn and Dunker 2015). Between 1995 and 2011, the post-harvest rate for Seward Peninsula muskox ranged from 0.7%-5.8%, peaking in

2009 (**Figure 3**) (Gorn and Dunker 2015; Dunker 2022, pers. comm.). After the population decline in 2012, the post-harvest rate has remained below 2% of the range-wide population estimate, ranging from 1%–1.7% with an average of 1.3% between 2012 and 2021 (Dunker 2022, pers. comm.).

Harvest of muskoxen on the Seward Peninsula by Federal permit has remained low with most muskox harvest occurring by State permit (**Table 2**). From 2001–2012 reported Federal harvest averaged 5.3 muskoxen per year, then from 2013- 2021, after the change in harvest management, reported harvest averaged 3.4 muskoxen per year. From 2001- 2020, Federal permit harvest of muskox ranged from 0-15 muskoxen harvested per year, with an average success rate of 27%. Since 2012, harvest by Federal permit has accounted for 3.4%- 25% of overall muskox harvest on the Seward Peninsula, averaging 10% (**Table 3**) (OSM 2022).



**Figure 3.** Reported harvest and realized harvest rate as percentage of herd population for Seward Peninsula muskox by subunit (Gorn and Dunker 2015; Dunker 2022, pers. comm.; Germain 2022, pers. comm.).

	U	J <b>nit 22</b>	Unit 23		Total	
Regulatory Year	Issued	Harvested	Issued	Harvested	Issued	Harvested
2001	25	10	6	3	31	13
2002	37	7	3	0	40	7
2003	32	13	6	2	38	15
2004	19	3	5	1	24	4
2005	22	8	2	1	24	9
2006	21	9	3	1	24	10
2007	16	2	6	1	22	3
2008	23	1	5	0	28	1
2009	13	0	4	0	17	0
2010	2	0			2	0
2011	1	0			1	0
2012	9	2	0	0	9	2
2013	12	10	0	0	12	10
2014	9	4	4	0	13	4
2015	6	3	2	0	8	3
2016	9	2	3	0	12	2
2017	6	3	1	0	7	3
2018	8	2	2	2	10	4
2019	12	3	5	1	17	4
2020	11	2	5	2	16	4
2021	11	7	6	1	17	8
2022	11	7	6	2	17	9
Total	315	98	74	17	389	115
Success		31%		23%		30%

**Table 2.** Federal permits issued, reported Federal muskox harvest for Seward Peninsula 2001- 2022 and percent of successful harvest of issued permits (OSM 2022; Hughes 2023). Blanks indicate no data present.

Year	State Harvest	Federal Harvest	Total	% Federal Harvest
2012	24	2	26	8%
2013	30	10	40	25%
2014	31	4	35	11%
2015	25	3	28	11%
2016	28	2	30	7%
2017	32	3	35	9%
2018	24	4	26	15%
2019	28	4	29	14%
2020	27	4	24	17%
2021	32	8	32	25%
2022	25	9	34	26%

**Table 3**. Percentage of total reported Seward Peninsula muskox harvest byFederal permit (OSM 2022; Germain 2023, pers. comm.; Osburn 2023, pers. comm.).

## Cape Thompson Muskox

Harvest within CAKR occurs only by Federal registration permit (FX2303). No more than two permits have been issued per year since the hunt was established in 2005. Harvest has ranged from 0-2 muskox per year between 2005 and 2022 (**Table 4**).

Harvest from the Cape Thompson muskox population within the Unit 23 NW hunt area occurs under Federal (FX2303 and FX2312) and State (TX107) regulations. Between 2005 and 2019, the State Tier II (TX107) muskox harvest averaged 3.7 muskoxen with an annual harvest quota of six bull muskoxen (ADF&G 2020, Hughes 2016). In 2016, one muskox was harvested by Federal permit FX2312 (OSM 2020). ADF&G considers a 2-3% harvest rate to be sustainable for the Cape Thompson muskox population (Hughes 2016).

Illegal harvest likely occurs, although the magnitude is not known. Between 2003 and 2014, ADF&G received reports of at least 16 muskoxen that were illegally killed in the northern portion of Unit 23. In 2013, five cow muskoxen from the Cape Thompson population were illegally shot and not salvaged. As a result, ADF&G issued an emergency order in June of 2013, closing the State Tier II hunt prior to the regulatory year 2013/14 season opening date (Hughes 2016).

**Table 4.** Federal permits issued and muskox harvested for the CAKR muskox hunt (FX2303) and Unit 23 NW hunt (FX2312). Annual reported harvest of muskoxen in Unit 23 north and west of the Kobuk, under State (Tier II, TX207). Only years with data are shown. Harvest in other years is presumed to be zero. The FX2312 hunt began in 2016 (Westing 2013; ADF&G 2015 and 2022; Adkisson 2015, pers. comm.; OSM 2022; Osburn 2023, pers. comm.).

Year	FX2303 Permits	FX2303 Harvest	FX2312 Permits	FX2312 Harvest	TX107 Permits	TX107 Harvest
	155060		Issueu		155060	
2000						1
2002						5
2004						5
2005	1	1				
2006	1	0				4
2007	2	1				6
2008						5
2009						4
2010	2	1			6	4
2011					7	5
2012					6	5
2013					7	
2014					6	4
2015					6	5
2016	1	1	3	1	6	5
2017	1	1	3	0	3	3
2018	2	2	0	0	3	3
2019	2	1	0	0	3	3
2020					3	3
2021			1	0	3	3
2022	2	1	1	1		

Effects of the Proposal

If this proposal is adopted there will be no change to how Federal muskox permits are distributed in Units 22 and 23. The Federal in-season managers have distributed permits utilizing a draw system since about 1998, and these changes have already been temporarily implemented through WSA22-01. Delegation of Authority letters will be modified to standardize language among the Federal muskox hunts in Units 22 and 23 to clarify the scope of in-season managers' authority, which currently is unclear and has been misinterpreted. Specifically, for all eight hunts, Federal in-season managers will have the authority to close the season, set any needed permit conditions, determine annual harvest quotas, the number of permits issued, and the method of allocation between Federal and State permits (**Appendix 1**). Transferring authority from the WEAR superintendent to the BLM Anchorage Field

Office manager for in-season management of the Federal muskox hunt in Unit 23 SW better reflects land status within that hunt area. Adoption of this proposal will allow for effective and flexible hunt management and administration, which will ensure the sustainable harvest of muskoxen and equitable distribution of Federal permits amongst federally qualified subsistence users.

## **OSM PRELIMINARY CONCLUSION**

Support Proposal WP24-27.

#### Justification

Adopting WP24-27 will not change subsistence use of muskoxen by federally qualified subsistence users or affect the Seward Peninsula or Cape Thompson muskox populations, as it is an administrative change only. However, allowing a Federal drawing permit hunt (rather than registration permit hunt) for muskoxen in Units 22 and 23 ensures harvest remains within sustainable levels and responds to both changing hunt conditions and population. A drawing permit also randomizes the selection of who receives a permit, making permit distribution more equitable among federally qualified subsistence users. This proposal provides flexibility in administering the hunt and allows for a limited harvest. Standardizing the language in the delegation of authority letters to close the season, set any needed permit conditions, determine the annual harvest quota, the number of permits issued, and the method of permit allocation between State and Federal permits provides clarity to the in-season managers on what authority they have and allows for effective and flexible hunt administration, while the change in the in-season manager better reflects land status in the Unit 23 SW hunt area (Appendix 1).

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## Appendix 1

Superintendent Bering Land Bridge National Preserve P.O. Box 220 Nome, Alaska 99762

Dear Superintendent:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the Superintendent of the Bering Land Bridge National Preserve to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Unit 22D, that portion within the Kuzitrin River drainage, for the management of muskox on these lands.

It is the intent of the Board that actions related to management of muskox by Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), the Bureau of Land Management (Field Manager of the Anchorage Field Office), and the Chair of the affected Council(s) to the extent possible. The Office of Subsistence Management will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair or alternate, local tribes, and Alaska Native Corporations to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

## **DELEGATION OF AUTHORITY**

**1.** <u>Delegation</u>: The Superintendent of the Bering Land Bridge National Preserve is hereby delegated authority to issue emergency or temporary special actions affecting muskox on Federal

lands as outlined under the **Scope of Delegation**. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by regulation at 36 CFR 242.19 and 50 CFR 100.19.

**2.** <u>Authority:</u> This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

**3.** <u>Scope of Delegation</u>: The regulatory authority hereby delegated is limited to the following authorities within the limits set by regulation at 36 CFR 242.26 and 50 CFR 100.26:

- Close the season, set any needed permit conditions, determine annual harvest quotas, the number of permits to be issued, and the method of permit allocation between State and Federal permits.
- To set closing dates for the muskox season on Federal public lands in Unit 22D within the Kuzitrin River drainage.
- As needed, determine harvest quotas and the number of Federal registration permits to be issued annually and determine the method of permit allocation for muskox on Federal public lands in Unit 22D within the Kuzitrin River drainage.

This delegation also permits you to close and reopen Federal public lands to nonsubsistence hunting but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed hunts.

This delegation may be exercised only when it is necessary to conserve muskox populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the populations. All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to methods and means of take, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those within the Kuzitrin River drainage of Unit 22D.

4. <u>Effective Period</u>: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

**5.** <u>**Guidelines for Delegation:**</u> You will become familiar with the management history of the wildlife species relevant to this delegation in the region, with current State and Federal regulations and management plans, and be up to date on population and harvest status information. You will provide subsistence users in the region a local point of contact about Federal subsistence issues and regulations and facilitate a local liaison with State managers and other user groups.

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19, (2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected Federally qualified subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Board for consideration. You will maintain a record of all special action requests and rationale for your decision. A copy of this record will be provided to the

Administrative Records Specialist OSM no later than sixty days after development of the document.

For management decisions on special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government consultation related to pre-season and post-season management actions as established in the Board's Government-to-Government Tribal Consultation Policy (Federal Subsistence Board Government-to-Government Tribal Consultation Policy 2012 and Federal Subsistence Board Policy on Consultation with Alaska Native Claim Settlement Act Corporations 2015).

You will immediately notify the Board through the Assistant Regional Director for OSM and coordinate with the Chair(s) or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning emergency and temporary special actions being considered. You will ensure that you have communicated with OSM to ensure the special action is aligned with ANILCA Title VIII, Federal Subsistence regulations and policy, and that the perspectives of the Chair(s) or alternate of the affected Council(s), OSM, and affected State and Federal managers have been fully considered in the review of the proposed special action.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you will seek Council recommendations on the proposed temporary special action(s). If the affected Council(s) provided a recommendation, and your action differs from that recommendation, you will provide an explanation in writing in accordance with 50 CFR 100.10(e)(1) and 36 CFR 242.10(e)(1).

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify the public, OSM, affected State and Federal managers, law enforcement personnel, and Council members. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal managers, and the local Council members at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponent of the request immediately. A summary of special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of each calendar year for presentation to the Council(s).

You may defer a special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of Federal subsistence users or is particularly controversial. This option should be exercised judiciously and may be initiated only when sufficient time allows for it. Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that a special action request may best be handled by the Board, subsequently rescinding the delegated regulatory authority for the specific action only.

**6.** <u>**Support Services:**</u> Administrative support for regulatory actions will be provided by the Office of Subsistence Management.

WP24-27: Change Federal muskox permit system in Units 22 and 23 from a Federal registration permit to a Federal drawing permit

Sincerely,

Anthony Christianson Chair

Enclosures

cc: Federal Subsistence Board

Assistant Regional Director, Office of Subsistence Management Deputy Assistant Regional Director, Office of Subsistence Management Subsistence Policy Coordinator, Office of Subsistence Management Wildlife Division Supervisor, Office of Subsistence Management Subsistence Council Coordinator, Office of Subsistence Management Chair, Seward Peninsula Subsistence Regional Advisory Council Special Projects Coordinator, Alaska Department of Fish and Game **Deputy** Commissioner, Alaska Department of Fish and Game Interagency Staff Committee Administrative Record Superintendent Bering Land Bridge National Preserve P.O. Box 220 Nome, Alaska 99762

Dear Superintendent:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the Superintendent of the Bering Land Bridge National Preserve to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Unit 22E for the management of muskox on these lands.

It is the intent of the Board that actions related to management of muskox by Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), the Bureau of Land Management (Field Manager of the Anchorage Field Office), and the Chair of affected Council(s) to the extent possible. The Office of Subsistence Management will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair or alternate, local tribes, and Alaska Native Corporations to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

## **DELEGATION OF AUTHORITY**

**1.** <u>Delegation</u>: The Superintendent of the Bering Land Bridge National Preserve is hereby delegated authority to issue emergency or temporary special actions affecting muskox on Federal lands as outlined under the **Scope of Delegation**. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by regulation at 36 CFR 242.19 and 50 CFR 100.19.

**2.** <u>Authority:</u> This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

**3.** <u>Scope of Delegation</u>: The regulatory authority hereby delegated is limited to the following authorities within the limits set by regulation at 36 CFR 242.26 and 50 CFR 100.26:

• Close the season, set any needed permit conditions, determine annual harvest quotas, the number of permits to be issued, and the method of permit allocation between State and Federal permits.

• To set closing dates for the muskox season on Federal public lands in Unit 22E.

# • As needed, set or adjust annual harvest quotas and the number of Federal registration permits to be issued annually and determine the method of permit allocation for muskox on Federal public lands in Unit 22E.

This delegation also permits you to close and reopen Federal public lands to nonsubsistence hunting but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed hunts.

This delegation may be exercised only when it is necessary to conserve muskox populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the populations. All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to methods and means of take, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those within Unit 22E.

4. <u>Effective Period</u>: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

**5.** <u>**Guidelines for Delegation:**</u> You will become familiar with the management history of the wildlife species relevant to this delegation in the region, with current State and Federal regulations and management plans, and be up to date on population and harvest status information. You will provide subsistence users in the region a local point of contact about Federal subsistence issues and regulations and facilitate a local liaison with State managers and other user groups.

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19, (2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected Federally qualified subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Board for consideration. You will maintain a record of all special action requests and rationale for your decision. A copy of this record will be provided to the Administrative Records Specialist in OSM no later than sixty days after development of the document.

For management decisions on special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government consultation related to pre-season and post-season management actions as established in the Board's Government-to-Government Tribal Consultation Policy (Federal Subsistence Board Government-to-Government Tribal Consultation Policy 2012 and Federal Subsistence Board Policy on Consultation with Alaska Native Claim Settlement Act Corporations 2015).

You will immediately notify the Board through the Assistant Regional Director for OSM and coordinate with the Chair(s) or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning emergency and temporary special actions being considered. You will ensure that you have communicated with OSM to ensure the special action is aligned with ANILCA Title VIII, Federal Subsistence regulations and policy, and that the perspectives of the Chair(s) or alternate of the affected Council(s), OSM, and affected State and Federal managers have been fully considered in the review of the proposed special action.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you will seek Council recommendations on the proposed temporary special action(s). If the affected Council(s) provided a recommendation, and your action differs from that recommendation, you will provide an explanation in writing in accordance with 50 CFR 100.10(e)(1) and 36 CFR 242.10(e)(1).

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify the public, OSM, affected State and Federal managers, law enforcement personnel, and Council members. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal managers, and the local Council representatives at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponent of the request immediately. A summary of special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of each calendar year for presentation to the Council(s).

You may defer a special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of Federal subsistence users or is particularly controversial. This option should be exercised judiciously and may be initiated only when sufficient time allows for it. Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that a special action request may best be handled by the Board, subsequently rescinding the delegated regulatory authority for the specific action only.

**6.** <u>Support Services:</u> Administrative support for regulatory actions will be provided by the Office of Subsistence Management.

Sincerely,

Anthony Christianson Chair

Enclosures

### cc: Federal Subsistence Board

Assistant Regional Director, Office of Subsistence Management Deputy Assistant Regional Director, Office of Subsistence Management Subsistence Policy Coordinator, Office of Subsistence Management Wildlife Division Supervisor, Office of Subsistence Management Subsistence Council Coordinator, Office of Subsistence Management Chair, Seward Peninsula Subsistence Regional Advisory Council **Deputy** Commissioner, Alaska Department of Fish and Game Special Projects Coordinator, Alaska Department of Fish and Game Interagency Staff Committee Administrative Record Anchorage Field Office Manager Bureau of Land Management 4700 BLM Road Anchorage, Alaska 99507

Dear Field Office Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the manager of the Bureau of Land Management (BLM) Anchorage Field Office to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Unit 22B for the management of muskox on these lands.

It is the intent of the Board that actions related to management of muskox by Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), the National Park Service (Superintendent of the Bering Land Bridge National Preserve), and the Chair of the affected Council(s) to the extent possible. The Office of Subsistence Management will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair or alternate, local tribes, and Alaska Native Corporations to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

## **DELEGATION OF AUTHORITY**

**1.** <u>Delegation</u>: The BLM Anchorage Field Office manager is hereby delegated authority to issue emergency or temporary special actions affecting muskox on Federal lands as outlined under the **Scope of Delegation**. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulation at 36 CFR 242.19 and 50 CFR 100.19.

**2.** <u>Authority:</u> This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

**3.** <u>Scope of Delegation</u>: The regulatory authority hereby delegated is limited to the following authorities within the limits set by regulation at 36 CFR 242.26 and 50 CFR 100.26:

• Close the season, set any needed permit conditions, determine annual harvest quotas, the number of permits to be issued, and the method of permit allocation

between State and Federal permits.

• To set closing dates for the muskox season on Federal public lands in Unit 22B.

• As needed, set or adjust the annual harvest quotas and the number of Federalregistration permits to be issued annually and determine the method of permitallocation for muskox on Federal public lands in Unit 22B.

This delegation also permits you to close and reopen Federal public lands to nonsubsistence hunting but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed hunts.

This delegation may be exercised only when it is necessary to conserve the muskox population, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the populations. All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to methods and means of take, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those within Unit 22B.

4. <u>Effective Period</u>: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

**5.** <u>**Guidelines for Delegation:**</u> You will become familiar with the management history of the wildlife species relevant to this delegation in the region, with current State and Federal regulations and management plans, and be up to date on population and harvest status information. You will provide subsistence users in the region a local point of contact about Federal subsistence issues and regulations and facilitate a local liaison with State managers and other user groups.

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19, (2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected Federally qualified subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Board for consideration. You will maintain a record of all special action requests and rationale for your decision. A copy of this record will be provided to the Administrative Records Specialist in OSM no later than sixty days after development of the document.

For management decisions on special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government consultation related to pre-season and post-season management actions as established in the Board's Government-to-Government Tribal Consultation Policy (Federal Subsistence Board Government-to-Government Tribal Consultation Policy 2012 and Federal Subsistence Board

Policy on Consultation with Alaska Native Claim Settlement Act Corporations 2015).

You will immediately notify the Board through the Assistant Regional Director for OSM and coordinate with the Chair(s) or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning emergency and temporary special actions being considered. You will ensure that you have communicated with OSM to ensure the special action is aligned with ANILCA Title VIII, Federal Subsistence regulations and policy, and that the perspectives of the Chair(s) or alternate of the affected Council(s), OSM, and affected State and Federal managers have been fully considered in the review of the proposed special action.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you will seek Council recommendations on the proposed temporary special action(s). If the affected Council(s) provided a recommendation, and your action differs from that recommendation, you will provide an explanation in writing in accordance with 50 CFR 100.10(e)(1) and 36 CFR 242.10(e)(1).

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify the public, OSM, affected State and Federal managers, law enforcement personnel, and Council members. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal managers, and the local Council members at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponent of the request immediately. A summary of special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of each calendar year for presentation to the Council(s).

You may defer a special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of Federal subsistence users or is particularly controversial. This option should be exercised judiciously and may be initiated only when sufficient time allows for it. Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that a special action request may best be handled by the Board, subsequently rescinding the delegated regulatory authority for the specific action only.

**6.** <u>Support Services</u>: Administrative support for regulatory actions will be provided by the Office of Subsistence Management.

Sincerely,

Anthony Christianson Chair
## Enclosures

cc: Federal Subsistence Board

Assistant Regional Director, Office of Subsistence Management Deputy Assistant Regional Director, Office of Subsistence Management Subsistence Policy Coordinator, Office of Subsistence Management Wildlife Division Supervisor, Office of Subsistence Management Subsistence Council Coordinator, Office of Subsistence Management Chair, Seward Peninsula Subsistence Regional Advisory Council Superintendent, Bering Land Bridge National Preserve **Deputy** Commissioner, Alaska Department of Fish and Game Special Projects Coordinator, Alaska Department of Fish and Game Interagency Staff Committee Administrative Record Anchorage Field Office Manager Bureau of Land Management 4700 BLM Road Anchorage, Alaska 99507

Dear Field Office Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the manager of the Bureau of Land Management (BLM) Anchorage Field Office to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within that portion of Unit 22D west of the Tisuk River drainage and Canyon Creek, for the management of muskox on these lands.

It is the intent of the Board that actions related to management of muskox by Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), the National Park

Service (Superintendent of the Bering Land Bridge National Preserve), and the Chair of the affected Council(s) to the extent possible. The Office of Subsistence Management will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair or alternate, local tribes, and Alaska Native Corporations to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

# **DELEGATION OF AUTHORITY**

**1.** <u>**Delegation:**</u> The BLM Anchorage Field Office manager is hereby delegated authority to issue emergency or temporary special actions affecting muskox on Federal lands as outlined under

the **Scope of Delegation**. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulation at 36 CFR 242.19 and 50 CFR 100.19.

**2.** <u>Authority:</u> This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

**3.** <u>Scope of Delegation</u>: The regulatory authority hereby delegated is limited to the following authorities within the limits set by regulation at 36 CFR 242.26 and 50 CFR 100.26:

- Close the season, set any needed permit conditions, determine annual harvest quotas, the number of permits to be issued, and the method of permit allocation between State and Federal permits.
- To set closing dates for the muskox season on Federal public lands in Unit 22D west of the Tisuk River drainage and Canyon Creek.
- As needed, set or adjust the annual harvest quotas and the number of Federalregistration permits to be issued annually and determine the method of permitallocation for muskox on Federal public lands in Unit 22D west of the Tisuk Riverdrainage and Canyon Creek.

This delegation also permits you to close and reopen Federal public lands to nonsubsistence hunting but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed hunts.

This delegation may be exercised only when it is necessary to conserve muskox populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the populations. All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to methods and means of take, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those in Unit 22D west of the Tisuk River drainage and Canyon Creek.

**4.** <u>Effective Period</u>: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

**5.** <u>**Guidelines for Delegation:**</u> You will become familiar with the management history of the wildlife species relevant to this delegation in the region, with current State and Federal regulations and management plans, and be up to date on population and harvest status information. You will provide subsistence users in the region a local point of contact about Federal subsistence issues and regulations and facilitate a local liaison with State managers and other user groups.

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19, (2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected Federally qualified subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Board for consideration. You will maintain a record of all special action requests and rationale for your decision. A copy of this record will be provided to the Administrative Records Specialist in OSM no later than sixty days after development of the document.

For management decisions on special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government consultation related to pre-season and post-season management actions as established in the Board's Government-to-Government Tribal Consultation Policy (Federal Subsistence Board Government-to-Government Tribal Consultation Policy 2012 and Federal Subsistence Board Policy on Consultation with Alaska Native Claim Settlement Act Corporations 2015).

You will immediately notify the Board through the Assistant Regional Director for OSM, and coordinate with the Chair(s) or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning emergency and temporary special actions being considered. You will ensure that you have communicated with OSM to ensure the special action is aligned with ANILCA Title VIII, Federal Subsistence regulations and policy, and that the perspectives of the Chair(s) or alternate of the affected Council(s), OSM, and affected State and Federal managers have been fully considered in the review of the proposed special action.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you will seek Council recommendations on the proposed temporary special action(s). If the affected Council(s) provided a recommendation, and your action differs from that recommendation, you will provide an explanation in writing in accordance with 50 CFR 100.10(e)(1) and 36 CFR 242.10(e)(1).

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**6.** <u>Support Services</u>: Administrative support for regulatory actions will be provided by the Office of Subsistence Management.

Sincerely,

WP24-27: Change Federal muskox permit system in Units 22 and 23 from a Federal registration permit to a Federal drawing permit

Anthony Christianson Chair

Enclosures

cc: Federal Subsistence Board

Assistant Regional Director, Office of Subsistence Management Deputy Assistant Regional Director, Office of Subsistence Management Subsistence Policy Coordinator, Office of Subsistence Management Wildlife Division Supervisor, Office of Subsistence Management Subsistence Council Coordinator, Office of Subsistence Management Chair, Seward Peninsula Subsistence Regional Advisory Council Superintendent of the Bering Land Bridge National Preserve **Deputy** Commissioner, Alaska Department of Fish and Game Special Projects Coordinator, Alaska Department of Fish and Game Interagency Staff Committee Administrative Record Anchorage Field Office Manager Bureau of Land Management 4700 BLM Road Anchorage, Alaska 99507

Dear Field Office Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the manager of the Bureau of Land Management (BLM) Anchorage Field Office to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Unit 22D remainder for the management of muskox on these lands.

It is the intent of the Board that actions related to management of muskox by Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), the National Park

Service (Superintendent, Bering Land Bridge National Preserve), and the Chair of the affected Council(s) to the extent possible. The Office of Subsistence Management will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair or alternate, local tribes, and Alaska Native Corporations to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

# **DELEGATION OF AUTHORITY**

**1.** <u>Delegation</u>: The BLM Anchorage Field Office manager is hereby delegated authority to issue emergency or temporary special actions affecting muskox on Federal lands as outlined under the **Scope of Delegation**. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulation at 36 CFR 242.19 and 50 CFR 100.19.

**2.** <u>Authority:</u> This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

**3.** <u>Scope of Delegation</u>: The regulatory authority hereby delegated is limited to the following authorities within the limits set by regulation at 36 CFR 242.26 and 50 CFR 100.26:

• To set closing dates for the muskox season on Federal public lands Unit 22D

remainder.

• As needed, set or adjust the annual harvest quotas and the number of Federal registration permits to be issued annually and determine the method of permit allocation for muskox on Federal public lands in Unit 22D remainder.

This delegation also permits you to close and reopen Federal public lands to nonsubsistence hunting but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed hunts.

This delegation may be exercised only when it is necessary to conserve muskox populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the populations. All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to methods and means of take, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those within Unit 22D remainder.

4. <u>Effective Period</u>: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

**5.** <u>**Guidelines for Delegation:**</u> You will become familiar with the management history of the wildlife species relevant to this delegation in the region, with current State and Federal regulations and management plans, and be up to date on population and harvest status information. You will provide subsistence users in the region a local point of contact about Federal subsistence issues and regulations and facilitate a local liaison with State managers and other user groups.

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Government-to-Government Tribal Consultation Policy 2012 and Federal Subsistence Board Policy on Consultation with Alaska Native Claim Settlement Act Corporations 2015).

You will immediately notify the Board through the Assistant Regional Director for OSM, and coordinate with the Chair(s) or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning emergency and temporary special actions being considered. You will ensure that you have communicated with OSM to ensure the special action is aligned with ANILCA Title VIII, Federal Subsistence regulations and policy, and that the perspectives of the Chair(s) or alternate of the affected Council(s), OSM, and affected State and Federal managers have been fully considered in the review of the proposed special action.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you will seek Council recommendations on the proposed temporary special action(s). If the affected Council(s) provided a recommendation, and your action differs from that recommendation, you will provide an explanation in writing in accordance with 50 CFR 100.10(e)(1) and 36 CFR 242.10(e)(1).

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify the public, OSM, affected State and Federal managers, law enforcement personnel, and Council members. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal managers, and the local Council members at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponent of the request immediately. A summary of special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of each calendar year for presentation to the Council(s).

You may defer a special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of Federal subsistence users or is particularly controversial. This option should be exercised judiciously and may be initiated only when sufficient time allows for it. Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that a special action request may best be handled by the Board, subsequently rescinding the delegated regulatory authority for the specific action only.

**6.** <u>Support Services:</u> Administrative support for regulatory actions will be provided by the Office of Subsistence Management.

Sincerely,

Anthony Christianson Chair

## Enclosures

cc: Federal Subsistence Board

Assistant Regional Director, Office of Subsistence Management Deputy Assistant Regional Director, Office of Subsistence Management Subsistence Policy Coordinator, Office of Subsistence Management Wildlife Division Supervisor, Office of Subsistence Management Subsistence Council Coordinator, Office of Subsistence Management Chair, Seward Peninsula Subsistence Regional Advisory Council Superintendent, Bering Land Bridge National Preserve **Deputy** Commissioner, Alaska Department of Fish and Game Special Projects Coordinator, Alaska Department of Fish and Game Interagency Staff Committee Administrative Record Anchorage Field Office Manager Bureau of Land Management 4700 BLM Road Anchorage, Alaska 99507 Superintendent-Western Arctic National Parklands P.O. Box 1029 Kotzebue, Alaska 99752

# Dear Superintendent Field Office Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the **Bureau of Land Management (BLM) Anchorage Field Office** Superintendent of the Western Arctic National Parklands to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Unit 23 south of Kotzebue Sound and west of and including the Buckland River drainage for the management of muskox on these lands.

It is the intent of the Board that actions related to management of muskox by Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), **the National Park Service (Superintendent, Bering Land Bridge National Preserve)**, and the Chair of the affected Council(s) to the extent possible. The Office of Subsistence Management will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair or alternate, local tribes, and Alaska Native Corporations to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

# **DELEGATION OF AUTHORITY**

1. <u>Delegation:</u> The BLM Anchorage Field Office manager Superintendent of the Western-Arctic National Parklands is hereby delegated authority to issue emergency or temporary special actions affecting muskox on Federal lands as outlined under the Scope of Delegation. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulation at 36 CFR 242.19 and 50 CFR 100.19.

**2.** <u>Authority:</u> This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest

seasons within frameworks established by the Board."

**3.** <u>Scope of Delegation</u>: The regulatory authority hereby delegated is limited to the following authorities within the limits set by regulation at 36 CFR 242.26 and 50 CFR 100.26:

- Close the season, set any needed permit conditions, determine annual harvest quotas, the number of permits to be issued, and the method of permit allocation between State and Federal permits.
- To set closing dates for the muskox season on Federal public lands in Unit 23 south of Kotzebue Sound and west of and including the Buckland River drainage as it applies to muskox on these lands.
- As needed, set or adjust annual harvest quotas and the number of Federal registration permits to be issued annually for muskox on Federal public lands in Unit 23 south of Koztebue Sound and west of and including the Buckland River drainage.

This delegation also permits you to close and reopen Federal public lands to nonsubsistence hunting but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed hunts.

This delegation may be exercised only when it is necessary to conserve muskox populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the populations. All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to methods and means of take, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those within Unit 23 south of Kotzebue Sound and west of and including the Buckland River drainage.

4. <u>Effective Period</u>: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

**5.** <u>**Guidelines for Delegation:**</u> You will become familiar with the management history of the wildlife species relevant to this delegation in the region, with current State and Federal regulations and management plans, and be up to date on population and harvest status information. You will provide subsistence users in the region a local point of contact about Federal subsistence issues and regulations and facilitate a local liaison with State managers and other user groups.

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19, (2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected Federally qualified subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Board for consideration. You will maintain a record of all special action

requests and rationale for your decision. A copy of this record will be provided to the Administrative Records Specialist in OSM no later than sixty days after development of the document.

For management decisions on special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government consultation related to pre-season and post-season management actions as established in the Board's Government-to-Government Tribal Consultation Policy (Federal Subsistence Board Government-to-Government Tribal Consultation Policy 2012 and Federal Subsistence Board Policy on Consultation with Alaska Native Claim Settlement Act Corporations 2015).

You will immediately notify the Board through the Assistant Regional Director for OSM and coordinate with the Chair(s) or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning emergency and temporary special actions being considered. You will ensure that you have communicated with OSM to ensure the special action is aligned with ANILCA Title VIII, Federal Subsistence regulations and policy, and that the perspectives of the Chair(s) or alternate of the affected Council(s), OSM, and affected State and Federal managers have been fully considered in the review of the proposed special action.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you will seek Council recommendations on the proposed temporary special action(s). If the affected Council(s) provided a recommendation, and your action differs from that recommendation, you will provide an explanation in writing in accordance with

50 CFR 100.10(e)(1) and 36 CFR 242.10(e)(1).

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify the public, OSM, affected State and Federal managers, law enforcement personnel, and Council members. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal managers, and the local Council members at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponent of the request immediately. A summary of special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of each calendar year for presentation to the Council(s).

You may defer a special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of Federal subsistence users or is particularly controversial. This option should be exercised judiciously and may be initiated only when sufficient time allows for it. Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that a special action request may best be handled by the Board, subsequently rescinding the delegated regulatory authority for the specific action only.

**6.** <u>Support Services</u>: Administrative support for regulatory actions will be provided by the Office of Subsistence Management.

Sincerely,

Anthony Christianson Chair

## Enclosures

cc: Federal Subsistence Board

Assistant Regional Director, Office of Subsistence Management Deputy Assistant Regional Director, Office of Subsistence Management Subsistence Policy Coordinator, Office of Subsistence Management Wildlife Division Supervisor, Office of Subsistence Management Subsistence Council Coordinator, Office of Subsistence Management Chair, Northwest Arctic Subsistence Regional Advisory Council **Superintendent, Bering Land Bridge National Preserve Deputy** Commissioner, Alaska Department of Fish and Game Special Projects Coordinator, Alaska Department of Fish and Game Interagency Staff Committee Administrative Record Superintendent Western Arctic National Parklands National Park Service PO Box 1029 Kotzebue, Alaska 99752

Dear Superintendent:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the Superintendent of the Western Arctic National Parklands to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to

Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Cape Krusenstern National Monument (CAKR) for the management of muskox on these lands.

It is the intent of the Board that actions related to management of muskox by designated Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), the National Park Service (NPS) Regional Office, and the Chair of affected Council(s) to the extent possible. The Office of Subsistence Management will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair or alternate, local tribes, and Alaska Native Corporations to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

# **DELEGATION OF AUTHORITY**

**1.** <u>Delegation</u>: The Superintendent of the Western Arctic National Parklands in Kotzebue is hereby delegated authority to issue emergency or temporary special actions affecting muskox in CAKR as outlined under the **Scope of Delegation**. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulations at 36 CFR 242.19 and 50 CFR 100.19.

**2.** <u>Authority:</u> This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

**3.** <u>Scope of Delegation</u>: The regulatory authority hereby delegated is limited to the following authorities within the limits set by regulations at 36 CFR 242.26 and 50 CFR 100.26:

- Close the season, set any needed permit conditions, determine annual harvest quotas, the number of permits to be issued, and the method of permit allocation between State and Federal permits.
- To set closing dates for the muskox season in CAKR.
- As needed, set or adjust the annual harvest quotas for muskox for the Federal hunt in CAKR.-

This delegation also permits you to close and reopen Federal public lands to nonsubsistence hunting, but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed hunts.

This delegation may be exercised only when it is necessary to conserve muskox populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the populations. All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to methods and means of take, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those in Cape Krusenstern National Monument.

4. <u>Effective Period</u>: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

**5.** <u>**Guidelines for Delegation:**</u> You will become familiar with the management history of the wildlife species relevant to this delegation in the region, with current State and Federal regulations and management plans, and be up-to-date on population and harvest status information. You will provide subsistence users in the region a local point of contact about Federal subsistence issues and regulations and facilitate a local liaison with State managers and other user groups.

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19, (2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected Federally qualified subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Board for consideration. You will maintain a record of all special action requests and rationale for your decision. A copy of this record will be provided to the Administrative Records Specialist in OSM no later than sixty days after development of the document.

For management decisions on special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government

consultation related to pre-season and post-season management actions as established in the Board's Government-to-Government Tribal Consultation Policy (Federal Subsistence Board Government-to-Government Tribal Consultation Policy 2012 and Federal Subsistence Board Policy on Consultation with Alaska Native Claim Settlement Act Corporations 2015).

You will immediately notify the Board through the Assistant Regional Director for OSM, and coordinate with the Chair(s) or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning emergency and temporary special actions being considered. You will ensure that you have communicated with OSM to ensure the special action is aligned with ANILCA Title VIII, Federal Subsistence regulations and policy, and that the perspectives of the Chair(s) or alternate of the affected Council(s), OSM, and affected State and Federal managers have been fully considered in the review of the proposed special action.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you will seek Council recommendations on the proposed temporary special action(s). If the affected Council(s) provided a recommendation, and your action differs from that recommendation, you will provide an explanation in writing in accordance with 50 CFR 100.10(e)(1) and 36 CFR 242.10(e)(1).

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify the public, OSM, affected State and Federal managers, law enforcement personnel, and Council members. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal managers, and the local Council members at least 24 hours before the State action would be effective. If a decision to take no action is made, you will immediately notify the proponent of the request. A summary of special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of each calendar year for presentation to the Council(s).

You may defer a special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of Federal subsistence users or is particularly controversial. This option should be exercised judiciously and may be initiated only when sufficient time allows. Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that a special action request may best be handled by the Board, subsequently rescinding the delegated regulatory authority for the specific action.

**6.** <u>Support Services</u>: Administrative support for regulatory actions will be provided by the Office of Subsistence Management.

Sincerely,

WP24-27: Change Federal muskox permit system in Units 22 and 23 from a Federal registration permit to a Federal drawing permit

Anthony Christianson Chair

## Enclosures

cc: Federal Subsistence Board

Assistant Regional Director, Office of Subsistence Management Deputy Assistant Regional Director, Office of Subsistence Management Subsistence Policy Coordinator, Office of Subsistence Management Wildlife Division Supervisor, Office of Subsistence Management Subsistence Council Coordinator, Office of Subsistence Management Chair, Northwest Arctic Regional Advisory Council Chair, Cape Krusenstern National Monument Subsistence Resource Commission Subsistence Manager, Cape Krusenstern National Monument **Deputy** Commissioner, Alaska Department of Fish and Game Special Projects Coordinator, Alaska Department of Fish and Game Interagency Staff Committee Administrative Record Superintendent Western Arctic National Parklands P.O. Box 1029 Kotzebue, Alaska 99752

Dear Superintendent:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the Superintendent of the Western Arctic National Parklands to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Unit 23 north and west of the Kobuk River drainage for the management of muskox on these lands.

It is the intent of the Board that actions related to management of muskox by Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), the Bureau of Land Management, and the Chair of the affected Council(s) to the extent possible. The Office of Subsistence Management will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair or alternate, local tribes, and Alaska Native Corporations to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

# **DELEGATION OF AUTHORITY**

**1.** <u>Delegation</u>: The Superintendent of the Western Arctic National Parklands is hereby delegated authority to issue emergency or temporary special actions affecting muskox on Federal lands as outlined under **Scope of Delegation**. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulation at 36 CFR 242.19 and 50 CFR 100.19.

**2.** <u>Authority:</u> This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

**3.** <u>Scope of Delegation</u>: The regulatory authority hereby delegated is limited to the following authorities within the limits set by regulation at 36 CFR 242.26 and 50 CFR 100.26:

• Close the season, set any needed permit conditions, determine annual harvest quotas, the number of permits to be issued, and the method of permit allocation

between State and Federal permits.

- To set closing dates for the muskox season on Federal public lands in Unit 23 northand west of the Kobuk River drainage as it applies to muskox on these lands.
- As needed, set or adjust annual harvest quotas and the number of Federal registration permits to be issued annually for muskox on Federal public lands in Unit 23 north and west of the Kobuk River drainage.

This delegation also permits you to close and reopen Federal public lands to nonsubsistence hunting, but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed hunts.

This delegation may be exercised only when it is necessary to conserve muskox populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the populations. All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to methods and means of take, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those within Unit 23 north and west of the Kobuk River drainage.

4. <u>Effective Period</u>: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

**5.** <u>**Guidelines for Delegation:**</u> You will become familiar with the management history of the wildlife species relevant to this delegation in the region, with current State and Federal regulations and management plans, and be up-to-date on population and harvest status information. You will provide subsistence users in the region a local point of contact about Federal subsistence issues and regulations and facilitate a local liaison with State managers and other user groups.

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19, (2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected Federally qualified subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Board for consideration. You will maintain a record of all special action requests and rationale for your decision. A copy of this record will be provided to the Administrative Records Specialist in OSM no later than sixty days after development of the document.

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Board's Government-to-Government Tribal Consultation Policy (Federal Subsistence Board Government-to-Government Tribal Consultation Policy 2012 and Federal Subsistence Board Policy on Consultation with Alaska Native Claim Settlement Act Corporations 2015).

You will immediately notify the Board through the Assistant Regional Director for OSM, and coordinate with the Chair(s) or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning emergency and temporary special actions being considered. You will ensure that you have communicated with OSM to ensure the special action is aligned with ANILCA Title VIII, Federal Subsistence regulations and policy, and that the perspectives of the Chair(s) or alternate of the affected Council(s), OSM, and affected State and Federal managers have been fully considered in the review of the proposed special action.

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50 CFR 100.10(e)(1) and 36 CFR 242.10(e)(1).

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify the public, OSM, affected State and Federal managers, law enforcement personnel, and Council members. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal managers, and the local Council members at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponent of the request immediately. A summary of special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of each calendar year for presentation to the Council(s).

You may defer a special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of Federal subsistence users or is particularly controversial. This option should be exercised judiciously and may be initiated only when sufficient time allows for it. Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that a special action request may best be handled by the Board, subsequently rescinding the delegated regulatory authority for the specific action only.

**6.** <u>Support Services</u>: Administrative support for regulatory actions will be provided by the Office of Subsistence Management.

Sincerely,

Anthony Christianson Chair

## Enclosures

cc: Federal Subsistence Board

Assistant Regional Director, Office of Subsistence Management Deputy Assistant Regional Director, Office of Subsistence Management Subsistence Policy Coordinator, Office of Subsistence Management Wildlife Division Supervisor, Office of Subsistence Management Subsistence Council Coordinator, Office of Subsistence Management Chair, Northwest Arctic Subsistence Regional Advisory Council Field Manager, Bureau of Land Management Anchorage Field Office **Deputy** Commissioner, Alaska Department of Fish and Game Special Projects Coordinator, Alaska Department of Fish and Game Interagency Staff Committee Administrative Record

WP24-01 Executive Summary	
General Description	Proposal WP24-01 is a request to allow the sale of brown bear hides. Submitted by: Kaleb Rowland
Proposed Regulation	<ul> <li>§25 Subsistence taking of fish, wildlife, and shellfish: general regulations</li> <li>(j) Utilization of fish, wildlife, or shellfish</li> <li></li> <li>(13) You may sell the raw/untanned and tanned hide or cape from a legally harvested brown bear, caribou, deer, elk, goat, moose, musk ox, and sheep.</li> </ul>
OSM Preliminary Conclusion	<ul> <li>Support Proposal WP24-01 with modification to allow the sale of brown bear hides with claws attached in areas where the Federal harvest limit is two bears every regulatory year and after first obtaining a permit available at the time of sealing from an ADF&amp;G sealing officer.</li> <li>The modified regulation should read:</li> <li>§25 Subsistence taking of fish, wildlife, and shellfish: general regulations</li> <li>(j) Utilization of fish, wildlife, or shellfish</li> <li></li> <li>(13) You may sell the raw/untanned and tanned hide or cape from a legally harvested caribou, deer, elk, goat, moose, musk ox, sheep, and brown bear with claws attached harvested in an area with a two brown bear limit per regulatory year in Federal regulations only after first obtaining a permit at the time of sealing from the Alaska Department of Fish and Game.</li> </ul>
Southeast Alaska Subsistence Regional Advisory Council Recommendation	
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	

WP24-01 Executive Summary		
Kodiak/Aleutians Subsistence Regional Advisory Council Recommendation		
Bristol Bay Subsistence Regional Advisory Council Recommendation		
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation		
Western Interior Alaska Subsistence Regional Advisory Council Recommendation		
Seward Peninsula Subsistence Regional Advisory Council Recommendation		
Northwest Arctic Subsistence Regional Advisory Council Recommendation		
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation		
North Slope Subsistence Regional Advisory Council Recommendation		
Interagency Staff Committee Comments		
ADF&G Comments		

	WP24-01 Executive Summary
Written Public Comments	None

# DRAFT STAFF ANALYSIS WP24-01

## ISSUE

Proposal WP24-01, submitted by Kaleb Rowland of McCarthy, Alaska, is a request to allow the sale of brown bear hides.

## DISCUSSION

The proponent states federally qualified subsistence users in many areas of Alaska must salvage the hides of brown bears, however, the hides must not be sold. The proponent continues that the hides of many other legally harvested big game species may be sold, and brown bears should be added to this regulation.

## **Existing Federal Regulation**

## §\_\_\_\_.25 Subsistence taking of fish, wildlife, and shellfish: general regulations<sup>1</sup>

(j) Utilization of fish, wildlife, or shellfish

. . .

(13) You may sell the raw/untanned and tanned hide or cape from a legally harvested caribou, deer, elk, goat, moose, musk ox, and sheep.

## **Proposed Federal Regulation**

## §\_\_\_\_.25 Subsistence taking of fish, wildlife, and shellfish: general regulations

(j) Utilization of fish, wildlife, or shellfish

•••

(13) You may sell the raw/untanned and tanned hide or cape from a legally harvested **brown bear**, caribou, deer, elk, goat, moose, musk ox, and sheep.

#### **Existing State Regulation**

#### 5 AAC 92.200—Purchase and sale of game

<sup>&</sup>lt;sup>1</sup> Sections of the regulatory booklet produced for the public that describe legal utilization of brown bears are incorrect. The Code of Federal Regulations regarding the utilization of brown bears are correctly reflected in the **Appendix**.

. . .

(b) Except as provided in 5 AAC 92.031, a person may not purchase, sell, advertise, or otherwise offer for sale:

(1) any part of a brown bear, except an article of handicraft made from the fur of a brown bear, and except skulls and hides with claws attached of brown bears harvested in areas where the bag limit is two bears per regulatory year\* by permit issued under 5 AAC 92.031;

\*Note: The harvest limit for a resident hunting in Units 16B, 17, 19A, 19D, 20E, 21, 22A, 22B, 22D, 22E, 23, 24B, 25D, and 26A is two brown bears per regulatory year. A person may not take more than one brown bear, statewide, in any regulatory year, except that in these units, a person may take two brown bears per regulatory year (*5 AAC 92.132 Bag limit for brown bears*).

#### 5 AAC 92.031 - Permit for selling skins, skulls, and trophies

. . .

(g) A person may sell, advertise, or otherwise offer for sale a skull or hide with claws attached of a brown bear harvested in an area where the bag limit is two brown bears per regulatory year only after first obtaining a permit\* from the department. Any advertisement must include the permit number assigned by the department, and the department will permanently mark all hides and skulls intended for sale. All bears sold under this permit must be reported to the department within the time frame specified on the permit.

\*Note: A "Permit to Sell a Brown/Grizzly Bear Hide and/or Skull" is available at the time of sealing from the sealing officer.

#### **Extent of Federal Public Lands**

Federal public lands comprise approximately 54% of Alaska and consist of 20% U.S. Fish and Wildlife Service managed lands, 15% Bureau of Land Management managed lands, 14% National Park Service managed lands, and 6% U.S. Forest Service managed lands.

#### **Customary and Traditional Use Determinations**

This is a statewide proposal. For more information refer to the customary and traditional use determinations at  $\S$  .24 Customary and traditional use determinations.

## Background

#### Convention on International Trade in Endangered Species of Wild Fauna and Flora

All Alaskan brown/grizzly bears are classified as the same species, *Ursus arctos*, but are referred to differently depending on where they are found and their diet. In general, the common name "brown bear" refers to those Ursus arctos found in the coastal regions, and the common name "grizzly bear" refers to those found in the interior. The brown bear conservation environment in the lower 48 is related but very different than in Alaska, which is the only remaining state with an abundant brown bear population. Brown bears once ranged from northern Alaska and western Canada south to Mexico, and from the west coast east across the great plains of the United States. Over the last 200 years, the number and range of brown bears south of Canada has declined by more than 95% largely as a result of excessive human caused mortality and habitat loss (ADF&G 2000). In 1990, fewer than 1,000 brown bears remained in the states south of the Canadian border (Schoen 1990). Today, Alaska is home to more than 98% of the brown bear population in the United States and 70% of the brown bears in North America (ADF&G 2000). With the demise of brown bears in other areas, Alaska has become a premier locale for trophy bear hunting.

In 1975 the North American brown bear was listed by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) as an Appendix II species, which means it may become threatened by extinction if trade is not strictly regulated and monitored. This listing is designed to protect threatened populations elsewhere in North America, outside of Alaska. Commercial trade in Appendix II species is allowed only if the state of export issues permits reporting that the trade will not be detrimental to the survival of the species in the wild. The transport of brown bear parts between states or countries is subject to both State and Federal consideration and permitting (USFWS 2023).

Licensed hunting of brown bears occurs in four provinces and territories in Canada (Yukon, Northwest Territories, Nunavut, and British Columbia). In Canada, almost all trade in brown bear parts, including gall bladders and paws, is prohibited (some exceptions apply to Aboriginal groups for personal or ceremonial use). Some manufactured, non-food items, such as tanned hides, may be sold, but such trade in brown bear parts is low. In Canada, brown bears are mainly traded as hunting trophies (skins, rugs, or taxidermy mounts). A provincial or territorial permit is needed to legally possess, sell, and export brown bear parts, including those killed by accident or for defense of life and property. A CITES export permit is required for international export (Government of Canada 2012, 2014).

#### Sale of Hides

People have sold and exported brown bear pelts from Alaska for centuries. During the Russian Period in Alaska, the Russian American Company exported large numbers of brown bear skins to St. Petersburg and Asia (Bockstoce 2009).

Conservation efforts, led by Eastern conservationists, began with the passage of the Game Law of 1908 that implemented hunting seasons and a licensing system for brown bear parts that were being shipped out of Alaska, and limited exports to three brown bear hides annually per person and a \$5 dollar fee on

each hide. The primary deterrent to the sale and export of brown bear hides was the export limit and fee (Holzworth 1930).

In 1925 a new game law was passed that eliminated market hunting of big game, including brown bears, and established the Alaska Game Commission, the predecessor to the Alaska Department of Fish and Game (ADF&G), that was responsible for imposing and revising seasons and harvest limits in Alaska. However, lack of enforcement and increases in sport and trophy hunting, especially for big coastal bears, continued to threaten brown bear populations in some areas of Alaska. Alaska Natives were exempted under the new law and were still permitted to hunt game at any time of year for food and to sell game hides within the state unless otherwise restricted (Dufresne 1965).

Beginning in 1961 after Alaska statehood, the purchase, sale, or barter of brown bears or brown bear parts was prohibited by the State of Alaska (State of Alaska 1961). Salvage and sealing requirements, introduced in 1961, mandated that a hunter retrieve the hide with claws attached and skull so that scientific information regarding the sex, age, and hide quality of harvested bears could be obtained by biologists. Beginning in 1968, the harvest limit in all units open to brown bear hunting was one bear every four regulatory years. Beginning in 1977, all hunters were required to purchase a tag before hunting a brown bear. However, in rural western Alaska, participation by subsistence users was very limited, and few subsistence harvests were reported through this system (Thornton 1992).

The issue of claw retention was examined extensively by the Brown Bear Claw Handicraft Working Group. The group was formed by the Federal Subsistence Board in 2009 to discuss a range of issues relating to brown bear claws including their use in handicrafts, the feasibility of tracking, and potential changes to regulations. Of particular concern to this group was preventing the illegal harvest and sale of brown bear parts that can garner significant monetary value in worldwide markets, and which may incentivize illegal harvest of brown bear claws, paws, and gall bladders are the primary illegal items sought for these markets (OSM 2010).

Sealing requirements help to track the sale of wildlife parts, to validate that an animal was legally harvested, and to provide documentation to allow individuals traveling to another country to obtain a CITES permit for the item to be legally transported across international borders (OSM 2010). For example, during Alaska Board of Game deliberations on Proposal 57 (sale of brown bear hides with claws attached and/or skulls, see Regulatory History, below) in March 2016, Alaska Wildlife Troopers testified that law enforcement tracks internet activity for hides and attempts to verify permit and sealing records when bear products are encountered. Very few brown bear hides had been encountered. At the time of the testimony, all bear hides sold by Alaska residents were appropriately harvested under a predation control permit. These permits are for the purpose of predation control to recover depleted prey populations such as moose and caribou (ADF&G 2023a).

## Western/Northwestern Alaska Brown Bear Management Areas

In 1992, the Alaska Board of Game adopted the Western Alaska and Northwestern Alaska brown bear management areas and more liberal subsistence harvesting regulations. Brown bear subsistence harvest

seasons in most of these areas were lengthened to September 1–May 31, and harvest limits were increased to one brown bear every regulatory year. Under subsistence regulations, Alaska residents did not have to seal brown bears unless the hide or skull was being removed from the area or presented for commercial tanning. For brown bears, sealing means taking the skull and hide (with claws and evidence of sex attached) of the bear you killed to an officially designated "sealing officer." The skull must be skinned from the hide (*5 AAC 92.165 - Sealing of bear skins and skulls*). Hides and skulls are permanently marked by ADF&G (*5 AAC 92.990 – Definitions*).

An Alaska resident hunting in these management areas was required to have a State subsistence registration permit and to salvage the meat, but the hide and skull need not be salvaged. Over time the Alaska Board of Game has further modified these regulations. Currently, State subsistence registration hunts in which the hide and skull need not be sealed, unless removed from the area or presented for commercial tanning, occur in Unit 9B, all drainages in Unit 9E that drain into the Pacific Ocean between Cape Kumliun and the border of Unit 9D and Unit 9E, Unit 17, Unit 18, that portion of Units 19A and 19B downstream of and including the Aniak River drainage, Unit 21D, Unit 22, Unit 23, Unit 24, and Unit 26A (*5 AAC 92.165 Sealing of bear skins and skulls*).

## **Regulatory History**

## Customary Trade

In 1992, the Federal Subsistence Board adopted final Federal subsistence regulations in which it defined customary trade to be the following: "*Customary trade means cash sale of fish and wildlife resources regulated herein, not otherwise prohibited by Federal law or regulation, to support personal and family needs; and does not include trade which constitutes a significant commercial enterprise*" (§\_\_\_\_.4 *Definitions*). The Board said it would continue to refine the definition of customary trade (57 Fed. Reg. 104, 22941 [May 29, 1992]). Customary trade is part of the definition of subsistence uses in Federal regulations.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Subsistence means the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for **customary trade** (§\_\_\_\_.4 Definitions)

bear was harvested by a Federally qualified subsistence user (§\_\_\_\_.25(j) Utilization of fish, wildlife, or *shellfish*, see regulations in the **Appendix**) (68 Fed. Reg. 81, 22309, [April 28, 2003]; 77 Fed. Reg. 114, 35498 [June 13, 2012]).

## Sale of Brown Bear Hides

In 2002, Proposal WP02-01, submitted by a resident of Fort Yukon, requested the Federal Subsistence Board to classify black bears and brown bears as furbearers, which opened up the possibility that bear hides may be sold (*If you are a Federally qualified subsistence user, you may sell the raw fur or tanned pelt with or without claws attached from legally harvested furbearers* ((25(j)(8))).

Regional Advisory Councils differed in their recommendations. The Southeast Alaska Council was the only one that supported legalizing the sale of brown bear and black bear hides. The Southeast Alaska Council justification read,

The Council was in favor of full use of subsistence resources and did not believe that allowing sale of bear parts would increase bear harvests, promote illegal trade, or cause conservations concerns. The Council noted that hunting regulations for bear limit the number of bears that can be taken and that sale of parts of legally taken bears would provide only a minor financial return to the harvester. There were no conservation concerns for the brown bear population under existing management; the southeast population is healthy, and fewer bears are taken than the harvest guideline would allow. This change in classification would not affect other users and could be positive for subsistence users (OSM 2002: 23).

One Council supported the sale of black bear pelts only, and five other Councils supported allowing the sale of only handcrafts that incorporate black bear fur (thereby aligning Federal and State regulations). One Council said the sale of bear parts could threaten bear populations and was not a customary and traditional use in the region. A Western Interior Alaska Council member abstained from voting on the proposal because of a cultural taboo that women do not talk about bears. Two Councils said that such decisions should be made on a region-by-region basis and not statewide (OSM 2002). The Board adopted a motion to only allow the sale of handicrafts incorporating black bear fur: *If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur, including claws, of a black bear (§\_\_\_.25(j)(6)) (67 Fed. Reg. 125, 43711 [June 28, 2002]).* 

In 2006, the Alaska Board of Game adopted regulations to allow the sale of raw brown bear hides, with claws attached, harvested in specific predator control management areas under a State permit: "*After the skin and skull is sealed as required under 5 AAC 92.165(a), a person may sell the untanned skin, with claws attached, and skull of a brown bear taken in an active brown bear predator control area listed in 5 AAC 92.125 only under a permit issued by the department" (5 AAC 92.031(d)).* The purpose of predation control is to recover depleted prey populations such as moose and caribou (ADF&G 2006a, 2006b:5, 2023a).

In 2016, the Alaska Board of Game adopted Proposal 57 to allow the sale of brown bear hides and/or skulls by Alaska residents in units where the harvest limit is two bears annually: *A person may sell, advertise, or otherwise offer for sale a skull or hide with claws attached of a brown bear harvested in an area where the bag limit is two brown bears per regulatory year.* . . . (5 AAC 92.031(g)). Currently, these units with two-bear harvest limits in State regulations are 16B, 17, 19A, 19D, 20E, 21, 22A, 22B, 22D, 22E, 23, 24B, 25D, and 26A (5 AAC 92.132 Bag limit for brown bears) (ADF&G 2016a, 2016b:32, 2016c:5).

In 2018, the Federal Subsistence Board rejected the recommendations of affected Councils on Proposal WP18-44 to allow the sale of brown bear hides with claws attached and/or skulls in Unit 23. The Board said black markets for illegally acquired brown bear parts are known to encourage poaching and increasing market availability for brown bear parts may intensify illegal harvest. The Board also noted there is insufficient evidence that residents of Unit 23 have an established pattern of customary trade involving brown bear hides and skulls, and few residents of Unit 23 harvest brown bears under the Federal subsistence regulation due to meat salvage and sealing requirements. The lack of a component to the proposal that would require a permit for sale in line with State regulations was also a factor in the Board's justification for rejecting the proposal (OSM 2018).

## Current General Regulations

Federal subsistence regulations prohibit the sale of wildlife or their parts unless specifically allowed under Federal subsistence regulations: "You may not exchange in customary trade or sell fish or wildlife or their parts, taken pursuant to the regulations in this part, unless provided for in this part" (§\_\_\_\_\_7(b) Restriction on use).

One specific authorization in Federal subsistence regulations for the sale of the non-edible byproducts of brown bears harvested for subsistence is for handicrafts: "*If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur, including claws, of a brown bear taken from Units 1–5, 9A–C, 9E, 12, 17, 20, 22, 23, 24B (only that portion within Gates of the Arctic National Park), 25, or 26*" (§\_\_\_\_.23(j) Utilization of fish, wildlife, or *shellfish*).

Federal subsistence regulations define a brown bear hide as having claws attached: . . . *skin, hide, or pelt of a bear shall mean the entire external covering with claws attached*" ( *§ \_\_\_\_.23(a) Definitions*).

Additionally, customary trade shall not constitute a significant commercial enterprise: *Customary trade means exchange for cash of fish and wildlife resources regulated in this part, not otherwise prohibited by Federal law or regulation, to support personal and family needs; and does not include trade which constitutes a significant commercial enterprise* (§\_\_\_\_.4 *Definitions*). Sales that rise to the level of a significant commercial enterprise are not defined on a statewide basis and instead may be defined on a region-by-region basis by placing monetary caps on sales and/or requiring permits for and reporting of *customary trades* (see examples of these regulations in the **Appendix** at §\_\_\_\_.27 *Subsistence taking of fish*).

## **Biological Background**

Brown bears on Kodiak Island are the only distinct subspecies (*Ursus arctos middendorffi*) because they are genetically and physically isolated from other Ursus arctos. However, all "grizzly bears" and "brown bears" are considered "brown bears" for purposes of harvest in Alaska.

Alaska has an estimated 30,000 brown bears statewide (ADF&G 2023b). Brown bears range throughout most of Alaska, except the islands of the Aleutian Chain west of Unimak and in Southeast Alaska south of Frederick Sound (**Figure 1**). High densities of brown bears occur on Kodiak Island, the Alaska Peninsula, and the Admiralty, Baranof, and Chichagof Islands of Southeast Alaska. The density of brown bears in Alaska varies considerably with habitat and ranges anywhere from 2.6 bears/1,000 km<sup>2</sup> on the North Slope (Lenart 2021) to 275 bears/1,000 km<sup>2</sup> in Southeast Alaska (Bethune 2021), although these estimates are extrapolated from an estimate derived from a reanalysis of 20-year-old data. Except for breeding pairs and females with offspring, brown bears are typically solitary creatures and avoid the company of other bears.



Figure 1. Map showing the range of brown bears in Alaska (ADF&G 2023c).

Brown bear populations are extremely sensitive to disruption. This is because brown bears exhibit the lowest reproduction rate of any North American mammal. In some areas with low population densities, such as in northern Alaska, brown bear populations are often managed conservatively for several reasons: large home ranges are required to meet resource needs (McLoughlin et al. 2002); female brown bears generally do not successfully reproduce until they are more than five years old and have low reproductive rates, small litters, and long intervals between litters. Sows exhibit high fidelity to home ranges with little emigration or immigration, and monitoring methods are imprecise and expensive (USFWS 1982, Reynolds 1989, Miller et al. 2011)

Brown bears are difficult to survey precisely due to their solitary nature and their sensitivity to disturbance, as is evident from the lack of current population data. Statewide, population estimates are sometimes based on surveys conducted in the 1990s or early 2000s and extrapolated to arrive at a current estimate. In Unit 4 in Southeast Alaska, there has not been a population estimate for brown bears for almost two decades (Bethune 2021). Historically, ADF&G estimated densities of between 227 and 275 bears/1000 km<sup>2</sup>, with population estimated for Unit 4 of 4,303 bears. In Unit 13, there is currently no population monitoring (Hatcher 2023). The last population estimate was in 1998 and it estimated 1,260 bears in the unit, with a density of 21.3 bears/1,000 km<sup>2</sup>. In Units 25 and 26 current population estimates are based on models using population data from 1999. These calculations give an estimated density of 2.6 bears/1,000 km<sup>2</sup>, with a non-statistically derived estimate of 333 bears for Unit 26B (Lenart 2021).

Most population data collected is from sealing records of harvested brown bears. In some areas, brown bears harvested under Federal or State subsistence regulations are not required to be sealed except under certain conditions. Where sealing is not required, a Federal or a State hunting permit is required that sometimes allows for the collection of similar data to sealing records The data collected from each is used to assess trends in harvest and to inform in-season management actions (Bethune 2021).

#### Harvest History

Harvests levels of brown bears have generally increased over the last 40 years with harvest peaking in the early 2010s followed by a downward trend to the current year (ADF&G 2022).

Concerning the sale of the hides with claws attached of legally harvested brown bears in State regulations since 2016, ADF&G has not detected increased harvest. Although brown bear harvest increased slightly (then decreased right back to "normal" levels) when brown bears were first allowed to be taken over bait, hunting seasons were also being lengthened that might have contributed to this slight increase in harvest around the same time. Staff have been instructed to issue sale permits to anyone that harvests a brown bear in a two-bear harvest limit area that might possibly be interested in selling it down the road (Bogle 2023, pers. comm.; Weber 2023, pers. comm.). As of August 2022, ADF&G had distributed 38 sale permits for hunts across 10 subunits and has received seven sale notifications from permit holders (Paragi 2023, pers. comm.).

In addition to a State tag or permit, a Federal subsistence permit has been available in some areas of Alaska to harvest brown bears since 1995. In the 20 years from 2002 to 2021, 158 subsistence hunters

have reported harvesting a total of 40 brown bears by Federal permit cumulatively from Units 5, 8, 9, and in the Southcentral Alaska Region (OSM 2023). Subsistence hunters use these Federal permits because it allows them to hunt in areas where there is competition in the State system to obtain permits (for example draw hunts in Units 8), where there formerly was competition in the State system to obtain permits (for example in Unit 15), the hunt area is on National Park or Monument lands (such as in Unit 9), which are closed to the harvest of brown bears except by subsistence users, or in areas with more liberal Federal harvest limits (in Unit 5 for example).

#### **Cultural Knowledge and Traditional Practices**

Alaska Natives have harvested bears and competed with them for subsistence resources for at least 14,000 years (Birkedal 2001). Brown bears have traditionally been a very important part of the Alaska Native cultures. Because of their powerful senses and ability to hear through the ground, brown bears are usually referred to indirectly and respectfully so that they will continue to give themselves to hunters. For this reason, the Yup'ik call them *carayak* (terrible fearsome thing), *ungungssiq* (land animal, quadruped), *naparngali* (one who stands upright) or *kavirluq* (red thing, as opposed to *tan'gerliq*, black bear)" (Fienup-Riordan 2007:164). Athabaskans call the brown bear *ghonoy*, *ghonoy tlaaga* or *dlil ta bahoolaanee*. Tlingits call it *yats'inEt* or *ya'Et'gu tutw'adi'at*. The Iñupiat call it *aklaq*.

Brown bears have been hunted for their meat and hides, and other parts of the bear have been used for traditional medicine or fashioned into such things as tools, amulets, ceremonial regalia, and art (Thornton 1992, Nelson 1983, Fall and Hutchinson-Scarborough1996, Loon and Georgette 1989, Behnke 1981, ADF&G 1990). Nelson (1983) reports that the brown bear takes an apex of power among Koyukon Athabascan spirits of the natural world, perhaps below only the wolverine. People's behavior toward the brown bear is subject to a number of culturally based requirements. Nelson (1983) reports that disregard or violation of these cultural requirements is sharply punished. Traditionally, when Koyukon men hunted brown bears, they followed prescribed rituals. For example, a man is not to openly discuss the brown bear hunt before or after it occurs, and care must be taken to prevent the hide from coming in contact with women. The Koyukon Athabascans have a taboo against women eating brown bear meat or young men eating meat from a brown bear's head (Nelson 1983). Dena'ina Athabascans in the Lake Clark and Katmai areas competed directly with brown bears for subsistence resources; it is thought that the Dena'ina likely displaced brown bear from the very best salmon fishing sites on certain rivers (Birkedal 2001). The Dena'ina reserved some secondary stream drainages for the exclusive use of bears and for bear hunting. It is reported that Aluting residents of the Alaska Peninsula believed that bears are human ancestors that must be shown respect (Sherwonit 1998). In the Chignik Bay, Chignik Lagoon, Chignik Lake, Ivanof Bay and Perryville area, brown bear hunting is governed by a system of traditional Alutiig beliefs that emphasize respectful treatment of the bear and protection of the hunters (Fall and Hutchinson-Scarborough 1996). According to these traditions, the skull and hide of the bear are left at the kill site; the skull is placed facing in a southern or southeastern direction. Traditional Southeast Alaska, brown bear hunting by Alaska Natives was surrounded by numerous behavioral prescriptions that were considered vital to the success of the hunt. Brown bears are an important symbol of Tlingit social and ceremonial life, and there is emphasis on the close relationship

between humans and bears (Thornton 1992). Bear hides were used for ceremonial robes, clothing, rugs and bedding. Thornton (1992) reported that the Tlingit traditionally preferred brown bear hides for children's bedding, as the hides provided not only warmth, but also were thought to prevent illnesses. Loon and Georgette (1989) and Georgette (2001) described the widespread respect of the Iñupiat for bears and the belief that the bears must be treated appropriately. An Iñupiat man is not to openly discuss the bear hunt before or after it occurs. Traditionally, the bear's head is given to the eldest member of the community or hung on a tree or pole in camp. The Iñupiat give the bear hide to an elder or use it for bedding and clothing. It has been customary practice of some Yup'ik villagers to use bear hides for mattresses, trimming on clothing and skin for boats and to bury the bear's skull facing east at the kill site. Brown bear harvesting is a specialized pursuit that is concentrated in certain villages and certain families (Coffing 1991).

## **Effects of the Proposal**

If Proposal WP24-01 is adopted, the sale of the hide of a brown bear legally harvested from Federal public lands under Federal regulations will be legal as long as the edible meat is salvaged for human consumption, claws are attached to the hide, and the hide is sealed by a representative of ADF&G.

However, this outcome might conflict with CITES and State regulations implementing CITES. CITES provides for the commercial trade of hides of legally harvested brown bears only if the state of export issues permits reporting that the trade will not be detrimental to the survival of the species in the wild. The State of Alaska currently issues these permits but only for the sale of the hides of brown bears legally harvested in areas with a two-brown bear harvest limit (in Units 16B, 17, 19A, 19D, 20E, 21, 22A, 22B, 22D, 22E, 23, 24B, 25D, and 26A).

It is already legal under State regulations to sell the hide of brown bears legally harvested in areas of Alaska where the harvest limit is two brown bears per year except for lands designated as National Park or Monument, which are only open to hunting under Federal subsistence regulations. Effects on nonsubsistence users are not anticipated. Effects on the resource, specifically whether, or how much, the harvest of brown bears will increase is anticipated to be minimal.

If Proposal WP24-01 is not adopted, the sale of brown bear hides will not be legal under Federal regulations but will remain legal in areas of Alaska under State regulations where the harvest limit is two brown bears per year including on most Federal public lands, except for lands designated as National Park or Monument. No effects on nonsubsistence users or the resource are anticipated.

#### **OSM PRELIMINARY CONCLUSION**

**Support** Proposal WP24-01 **with modification** to allow the sale of brown bear hides with claws attached in areas where the Federal harvest limit is two bears every regulatory year and after first obtaining a permit available at the time of sealing from an ADF&G sealing officer.

The modified regulation should read:

#### §\_\_\_\_.25 Subsistence taking of fish, wildlife, and shellfish: general regulations

(j) Utilization of fish, wildlife, or shellfish

. . .

(13) You may sell the raw/untanned and tanned hide or cape from a legally harvested caribou, deer, elk, goat, moose, musk ox, sheep, and brown bear with claws attached harvested in an area with a two brown bear limit per regulatory year\* in Federal regulations only after first obtaining a permit\* at the time of sealing from the Alaska Department of Fish and Game.

\*Note: Harvest limits of two brown bears per regulatory year in 2022/24 Federal regulations include all or portions of Units 22B, 22D, 23, 24B, 25D, and 26A. A "Permit to Sell a Brown/Grizzly Bear Hide and/or Skull" is available at the time of sealing from the sealing officer.

#### Justification

Conservation is a concern regarding brown bear populations in Alaska for several reasons including their low productivity rates, their solitary nature, difficulty obtaining population estimates, and high sport use in some areas. The OSM modification to the proposal puts limits on sales of brown bear hides. The sale of brown bear hides could only occur for brown bears shown to be legally harvested from Federal public lands under Federal regulations, and only in areas where there is a two brown bear harvest limit in Federal regulations. Currently, such areas are all or portions of Units 22B, 22D, 23, 24B, 25D, and 26A. Further, the edible meat must be salvaged ( $§\_.25(j)(2)(ii)$ ), the hide must have the claws attached ( $§\_.25(a)$ ), and the hide must be sealed by ADF&G before it can be removed from the area ( $§\_.26(j)$ ).

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) provides for the commercial trade of hides of legally harvested brown bears only if the state of export issues permits reporting that the trade will not be detrimental to the survival of the species in the wild. Therefore, a permit from ADF&G is required. The Alaska Department of Fish and Game issues this type of permit before selling the hide of a brown bear legally harvested under State regulations but only in areas with a two brown bear harvest limit (in Units 16B, 17, 19A, 19D, 20E, 21, 22A, 22B, 22D, 22E, 23, 24B, 25D, and 26A). Allowing the sale of the hide of a brown bear harvested from other areas would require negotiation with the State over the use of its permitting system.

These requirements would limit from where and how many hides would be sold by federally qualified subsistence users. Limiting legal sales to only brown bears taken from areas with two-bear harvest limits would be a protection from over harvest. Other tools exist for the Board to use if harvests were to rise above sustainable yields in an area. These tools include reducing seasons and harvest limits, placing monetary caps on sales on a region-by-region bases, and requiring permits for and reporting of customary trades.
This is a statewide proposal that will be reviewed by all 10 Regional Advisory Councils. Each Council can inform the Board whether the regulation is culturally appropriate for their region.

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#### Appendix

#### **Relevant Federal Regulations**

#### §\_\_\_\_.4 Definitions

The following definitions apply to all regulations contained in this part:

. . .

Customary trade means exchange for cash of fish and wildlife resources regulated in this part, not otherwise prohibited by Federal law or regulation, to support personal and family needs; and does not include trade which constitutes a significant commercial enterprise.

. . .

Subsistence means the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade.

#### §\_\_\_\_.25 Subsistence taking of fish, wildlife, and shellfish: general regulations

(a) Definitions

. . .

Bear means black bear, or brown or grizzly bear

. . .

Big game means black bear, brown bear, bison, caribou, Sitka black-tailed deer, elk, mountain goat, moose, musk ox, Dall sheep, wolf, and wolverine.

. . .

Edible meat means . . For black bear, brown and grizzly bear, "edible meat" means the meat of the front quarter and hindquarters and meat along the backbone (backstrap).

. . .

Handicraft means a finished product made by a rural Alaskan resident from the nonedible byproducts of fish or wildlife and is composed wholly or in some significant respect of natural materials. The shape and appearance of the natural material must be substantially changed by the skillful use of hands, such as sewing, weaving, drilling, lacing, beading, carving, etching, scrimshawing, painting, or other means, and incorporated into a work of art, regalia, clothing, or other creative expression, and can be either traditional or contemporary in design. The handicraft must have substantially greater monetary and aesthetic value than the unaltered natural material alone.

#### • • •

Sealing means placing a mark or tag on a portion of a harvested animal by an authorized representative of the ADF&G; sealing includes collecting and recording information about the conditions under which the animal was harvested, and measurements of the specimen submitted for sealing, or surrendering a specific portion of the animal for biological information.

#### . . .

Skin, hide, pelt, or fur means any tanned or untanned external covering of an animal's body. However, for bear, the skin, hide, pelt, or fur means the external covering with claws attached.

#### . . .

Trophy means a mount of a big game animal, including the skin of the head (cape) or the entire skin, in a lifelike representation of the animal, including a lifelike representation made from any part of a big game animal; "trophy" also includes a "European mount" in which the horns or antlers and the skull or a portion of the skull are mounted for display

# (j) Utilization of fish, wildlife, or shellfish.

(2) If you take wildlife for subsistence, you must salvage the following parts for human use: ...

(ii) The hide and edible meat of a brown bear, except that the hide of brown bears taken in Units 5, 9B, 17, 18, portions of 19A and 19B, 21D, 22, 23, 24, and 26A need not be salvaged;

. . .

. . .

. . .

(7) If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur, including claws, of a brown bear taken from Units 1–5, 9A–C, 9E, 12, 17, 20, 22, 23, 24B (only that portion within Gates of the Arctic National Park), 25, or 26.

(i) In Units 1, 2, 3, 4, and 5, you may sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of a brown bear taken from Units 1, 4, or 5.

(ii) Prior to selling a handicraft incorporating a brown bear claw(s), the hide or claw(s) not attached to a hide must be sealed by an authorized Alaska Department of Fish and Game representative. Old claws may be sealed if an affidavit is signed indicating that the claws came from a brown bear harvested on Federal public lands by a Federally qualified user. A copy of the Alaska Department of Fish and Game sealing certificate must accompany the handicraft when sold.

(13) You may sell the raw/untanned and tanned hide or cape from a legally harvested caribou, deer, elk, goat, moose, musk ox, and sheep.

#### §\_\_\_\_.27 Subsistence taking of fish.

(b) Methods, means, and general restrictions.

#### . . .

. . .

(11) Transactions between rural residents. Rural residents may exchange in customary trade subsistence-harvested fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from other rural residents. The Board may recognize regional differences and regulates customary trade differently for separate regions of the State.

(i) Bristol Bay Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Bristol Bay Fishery Management Area and exchanged in customary trade to rural residents may not exceed \$500.00 annually.

(ii) Upper Copper River District—The total number of salmon per household taken within the Upper Copper River District and exchanged in customary trade to rural residents may not exceed 50 percent of the annual harvest of salmon by the household. No more than 50 percent of the annual household limit may be sold under paragraphs (b)(11) and (12) of this section when taken together. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rests with the seller.

(iii) Customary trade of Yukon River Chinook salmon may only occur between Federally qualified rural residents with a current customary and traditional use determination for Yukon River Chinook salmon.

(12) Transactions between a rural resident and others. In customary trade, a rural resident may exchange fish, their parts, or their eggs, legally taken under the regulations in this part, for cash from individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption. If you are not a rural resident, you may not sell fish, their parts, or their eggs taken under the regulations in this part. The Board may recognize regional differences and regulates customary trade differently for separate regions of the State.

(i) Bristol Bay Fishery Management Area—The total cash value per household of salmon taken within Federal jurisdiction in the Bristol Bay Fishery Management Area and exchanged in customary trade between rural residents and individuals other than rural residents may not exceed \$400.00 annually. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rest with the seller.

(ii) Upper Copper River District—The total cash value of salmon per household taken within the Upper Copper River District and exchanged in customary trade between rural residents and individuals other than rural residents may not exceed \$500.00 annually. No more than 50 percent of the annual household limit may be sold under paragraphs (b)(11) and (12) of this section when taken together. These customary trade sales must be immediately recorded on a customary trade recordkeeping form. The recording requirement and the responsibility to ensure the household limit is not exceeded rest with the seller.

(iii) Customary trade of Yukon River Chinook salmon may only occur between Federally qualified rural residents with a current customary and traditional use determination for Yukon River Chinook salmon.

	WP24-07 Executive Summary
General Description	Proposal WP24-07 requests clarification of Federal trapping regulations that exempt Federally qualified subsistence users from Municipality of Anchorage trapping closures on Federal public lands in Units 7 and 14C. <i>Submitted by: Tom Lessard of</i> <i>Cooper Landing</i>
Proposed Regulation	§100.26(n)(7)(iii)( <b>B</b> ) & §100.26(n)(14)(iii)( <b>A</b> ) Federally qualified subsistence users trapping under these regulations are exempt from Municipality of Anchorage Ordinance AO 2019-050( <b>S</b> ) while on Federal public lands which are open to trapping.
OSM Preliminary Conclusion	Oppose Proposal WP24-07.
Southeast Alaska Subsistence Regional Advisory Council Recommendation	
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	
Kodiak/Aleutians Subsistence Regional Advisory Council Recommendation	
Bristol Bay Subsistence Regional Advisory Council Recommendation	
Yukon- Kuskokwim Delta Subsistence Regional	

	WP24-07 Executive Summary
Advisory Council Recommendation	
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	
Seward Peninsula Subsistence Regional Advisory Council Recommendation	
Northwest Arctic Subsistence Regional Advisory Council Recommendation	
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	
North Slope Subsistence Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	None

# DRAFT STAFF ANALYSIS WP24-07

#### **ISSUES**

Wildlife Proposal WP24-07, submitted by Tom Lessard of Cooper Landing, requests clarification of Federal trapping regulations that exempt Federally qualified subsistence users from Municipality of Anchorage trapping closures on Federal public lands in Units 7 and 14C.

#### DISCUSSION

The proponent states that Municipality of Anchorage Ordinance Number 2019-50(S) prohibits otherwise legal Federal subsistence trapping on Federal public lands within the Municipality of Anchorage in the Turnagain Arm and Portage Valley areas. The Anchorage Assembly created "Prohibited Trapping Zones" for safe trails within 50 yards of developed trails, excluding off-shoots; and within one-quarter mile of established trailheads, campgrounds, and permanent dwellings on Municipality of Anchorage managed lands. The proponent states that the Municipal ordinance prohibits trapping, punishable by fines, on approximately 20 square miles within Portage Valley, which is mostly Federal public land.

#### **Existing Federal Regulation**

None

## **Proposed Federal Regulation**

\$100.26(n)(7)(iii)(B) & \$100.26(n)(14)(iii)(A)

Federally qualified subsistence users trapping under these regulations are exempt from Municipality of Anchorage Ordinance AO 2019-050(S) while on Federal public lands which are open to trapping.

#### **Existing State Regulation**

5 AAC 92.510 Areas Closed to Trapping

(3) Unit 14(C) (Anchorage Area):

(A) the drainages into Eklutna River and Eklutna Lake, within Chugach State Park except Thunderbird Creek and those drainages flowing into the East Fork of the Eklutna River upstream from the bridge above the lake;

(B) the Eagle River Management Area;

(C) that portion of Chugach State Park outside of the Eagle River, Anchorage, and Eklutna management areas is open to trapping under Unit 14(C) seasons and bag limits, except that trapping of wolf, wolverine, land otter, and beaver is not allowed; killer style steel traps with an inside jaw spread seven inches or greater are prohibited; a person using traps or snares in the area must register with the Department of Natural Resources Chugach State Park area office and provide a trapper identification; all traps and snares in the area must be marked with the selected identification; the use of traps or snares is prohibited within

(i) 50 yards of developed trails;

(ii) one-quarter mile of trailheads, campground, and permanent dwellings;

(*iii*) repealed 7/1/2009;

(D) all land and water within the Anchorage Management Area as described in 5 AAC 92.530(3);

(E) in the Anchorage Coastal Wildlife Refuge in Unit 14(C), described in AS 16.20.031: all land and water south and west of and adjacent to the toe of the bluff that extends from Point Woronzof southeasterly to Potter Creek;

(F) the Joint Base Elmendorf-Richardson (JBER) Management Area, except for beaver, muskrat, mink, weasel, marten, otter, fox, and coyote in areas designated by the commander;

## **Extent of Federal Public Lands/Waters**

Unit 7 is comprised of 77% Federal public lands and consists of 52% U.S. Forest Service (USFS) managed lands, 23% National Park Service (NPS) managed lands, and 2% U.S. Fish and Wildlife Service (USFWS) managed lands.

Unit 14C is comprised of 16% Federal public lands and consists of 11% USFS managed lands and 5% Bureau of Land Management (BLM) managed lands.

#### **Customary and Traditional Use Determinations**

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for furbearers in Units 7 and 14C. Therefore, all rural residents of Alaska may harvest furbearers in these units.

## **Regulatory History**

In 2014, the Board rejected Proposal WP14-01, which requested Federal regulations requiring trapper identification tags on all traps and snares, the establishment of a maximum allowable time limit for checking traps, and establishment of a harvest/trapping report form to collect data on non-target species captured. The proposal analysis indicated statewide application would be unmanageable, would require substantial law enforcement and public education efforts, and could cause subsistence users to avoid the regulation by trapping under State regulations. The proposal was unanimously opposed by all ten Federal Subsistence Regional Advisory Councils, Alaska Department of Fish and Game (ADF&G), and the public as reflected in written public comments.

In 2015, the Alaska Board of Game (BOG) considered Proposal 180, to prohibit trapping within 250 feet of most public roads and trails in the Cooper Landing Area. They opposed the proposal, stating trappers and local residents need to work together to find a solution or compromise upon which all users can agree. BOG members also noted concerns about the enforceability of the proposal and loss of trapping opportunity by requiring trappers to travel 250 feet off trail and back to set and check traps (ADF&G 2015).

In 2016, the BOG considered Proposal 80, to restrict trapping in and around cities with populations over 1,000 people. Specifically, trapping within one-quarter mile of publicly maintained roads, 200 feet of publicly maintained trails, and one mile of permanent dwellings, schools, businesses, and campgrounds would be prohibited. ADF&G stated that proposals restricting trapping should be addressed at regional rather than statewide BOG meetings, so affected local communities can comment. ADF&G also referred to State regulations that limit trapping in management areas. The BOG opposed the proposal due to opposition by 26 Fish and Game Advisory Committees and concern for unintended consequences. The BOG also commented that these types of restrictions could be better handled through city or borough ordinances (ADF&G 2016).

In 2019, the Anchorage assembly passed Municipal ordinance AL No. 2019-50(S), which made it illegal to trap within a prohibited trapping zone. This ordinance established prohibited trapping zones within the Municipality of Anchorage boundaries on public lands owned by the municipality and any land within 50 yards of developed trails and one-quarter mile of trailheads, campgrounds, and permanent dwellings. It also required anyone trapping within the municipal boundary to mark each trap with trapper identification number or contact information of trapper. The Anchorage assembly passed this ordinance for the safety of trail users and pets in Anchorage (MOA 2019).

In 2020, Proposal WP20-20, submitted by Robert Gieringer, requested that hunting and trapping in Unit 7 be prohibited within one mile of roads and trails and that traps be marked with brightly colored tape. This proposal was on the consensus agenda but was removed at the Board meeting by request from a member of the public. The Board rejected the proposal. The Board stated Federal regulations would be more restrictive than State regulations, violating the rural subsistence priority mandated by the Alaska National Interest Land Conservation Act (ANILCA). Furthermore, all users would still be able to hunt and trap without restrictions under State regulations, decreasing the proposal's

effectiveness and increasing user confusion. The Board also stated marking traps with brightly colored tape could result in attracting more people to the trap and possibly pets (FSB 2020).

In March 2022, the BOG considered deferred Proposal 199 at their 2022 Statewide Regulations meeting. Proposal 199 requested 50-yard setbacks along certain multi-use trails and trailheads in Units 13, 14, and 16. This proposal was deferred from the January 2022 BOG meeting so a workshop could be held to reach a compromise on the proposal. The BOG attempted to modify the proposal several times with different amendments, including language created from the workshop. All versions of this proposal were rejected.

In April 2022, the Board considered Proposal WP22-15, submitted by the Cooper Landing Community Safe Trails Committee, requesting setbacks of 1,000 feet on both sides of certain trails; 1,000-foot setbacks around certain roads; and trapping moratoriums in campgrounds plus 1,000-foot setbacks around certain campgrounds. The Southcentral Alaska Subsistence Regional Advisory Council, ADF&G, Interagency Staff Committee and Office of Subsistence Management were all in opposition to this proposal due to potential of lost subsistence opportunity and regulatory confusion. While this proposal received 25 written public comments in support of the action, the Board rejected this proposal on the consensus agenda.

In March 2023, at the Southcentral Region BOG meeting in Soldotna, the BOG considered numerous trap setback proposals. Proposals 145–153 included trap setbacks at various locations throughout Units 7 and 15. While most of these proposals did not pass, three were adopted by the BOG. Amended Proposal 145 made it illegal to hunt and trap within one-quarter mile of wildlife crossings along the Sterling Highway. Amended Proposals 146 and 149 established trap setbacks along certain trails within Kachemak Bay State Park and along the perimeter of campgrounds in Unit 7, respectively. Setback distance was set at 50 yards unless the trap was elevated at least 3 feet above the ground, under water, under ice, or enclosed.

## **Effects of the Proposal**

If this proposal is adopted, clarification would be provided in codified Federal regulations that federally qualified subsistence users trapping under Federal regulations on Federal public lands in Units 7 and 14C are exempt from the trapping closures established by the Municipality of Anchorage Ordinance AO 2019-050(S). Functionally, this would have no effect on subsistence users or wildlife populations as State and municipal regulations do not apply to federally qualified subsistence users taking fish or wildlife on Federal public lands under Federal regulations. However, adoption of this proposal could reduce user confusion by explicitly clarifying this exemption.

# **OSM PRELIMINARY CONCLUSION**

**Oppose** Proposal WP24-07.

#### Justification

OSM opposes this proposal because the ordinance passed by the Anchorage assembly does not apply to Federal public lands. Therefore, federally qualified subsistence users trapping under Federal regulations are currently exempt from this ordinance.

### LITERATURE CITED

ADF&G. 2015. Meeting audio. Alaska Board of Game Southcentral Region meeting, March 13-18, 2015. Alaska Department of Fish and Game. Alaska Board of Game meeting information. http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-13-2015&meeting=anchorage. Accessed June 2, 2021.

ADF&G. 2016. Meeting audio. Alaska Board of Game Statewide Regulations, Cycles A&B meeting, March 18-28, 2016. Alaska Department of Fish and Game. Alaska Board of Game meeting information. http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-18-2016&meeting=fairbanks. Accessed June 2, 2021.

FSB. 2020. Transcripts of Federal Subsistence Board proceedings. April 21, 2020. Office of Subsistence Management, USFWS. Anchorage, AK.

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\_Regular\_822\_Agenda\_Packet\_5\_7\_2019\_5\_00\_00\_PM.pdf?meetingId=822&documentType=AgendaPacket&it emId=0&publishId=0&isSection=false. 480 pp. Retrieved May 18, 2023.

Gates of the Arctic (GAAR) Subsistence Resource Commission (SRC) call for NWRAC appointment to SRC



United States Department of the Interior National Park Service Gates of the Arctic National Park & Preserve 4175 Geist Road Fairbanks, Alaska 99709 907.457.5752 fax 907.455.0601 www.nps.gov/gaar



# GATES OF THE ARCTIC SUBSISTENCE RESOURCE COMMISSION

The Gates of the Arctic National Park Subsistence Resource Commission (SRC) provides local subsistence users an opportunity to inform the management of subsistence resources in Gates of the Arctic and the surrounding area (Units 23, 24A, 24B, 24C, 26A, 26B). Since the establishment of the Federal Subsistence Program in 1990, the nine-member commission has made recommendations on fish and wildlife proposals directly to Regional Advisory Councils and the Federal Subsistence Board.

The Northwest Arctic Subsistence Regional Advisory Council (RAC) appoints one member to the SRC. These members provide an important link between the SRC and the Federal Subsistence Management Program. In addition to the RAC appointments (Northwest Arctic, North Slope, and Western Interior), three members of the SRC are appointed by the Governor of Alaska and three members are appointed by the Secretary of the Interior.

At your October 2023 meeting, the RAC has the opportunity to take action on its appointment to the SRC. According to ANILCA Section 808(a), members of the RAC or local Advisory Councils (AC), such as the Upper Kobuk AC, who also engage in subsistence in the Park, are eligible for this appointment. To be eligible to engage in subsistence within the Park, rural residents must make their primary permanent home in one of the Park's resident zone communities, live within the Park, or hold a subsistence permit issued pursuant to 36 Code of Federal Regulations (CFR) 13.440. Subsistence users who have questions about or are interested in applying for a seat on the SRC should contact Marcy Okada at marcy\_okada@nps.gov/907.455.0639 or Eva Patton at eva patton@nps.gov/907.764.5377.

Name	Community	Appointing Source	Expires*
VACANT		Northwest Arctic RAC	
Pollock Simon Sr.	Allakaket	Western Interior RAC	1/3/2025
Esther Hugo	Anaktuvuk Pass	North Slope RAC	In process
Taqulik Hepa	Utqiagvik	Governor of Alaska	12/1/2024
Tim Fickus	Crevice Creek	Governor of Alaska	12/1/2024
Riley Sikvayugak Jr.	Anaktuvuk Pass	Governor of Alaska	12/1/2024
Raymond Woods	Shungnak	Secretary of the Interior	6/22/2025
Jack Reakoff	Wiseman	Secretary of the Interior	6/22/2025
Gary Hanchett	Fairbanks/Bettles	Secretary of the Interior	2/6/2026

## Gates of the Arctic SRC Roster August 2023

\* All members serve three-year terms. According to 54 U.S. Code § 100906(c), members continue to serve until reappointed or replaced. However, RAC appointees must be current members of a RAC or AC for their appointments to be valid.



#### FISHERIES RESOURCE MONITORING PROGRAM

### **INTRODUCTION**

The Fisheries Resource Monitoring Program (Monitoring Program) is a collaborative, interagency, interdisciplinary approach to enhance fisheries research and data in Alaska and effectively communicate information needed for subsistence fisheries management on Federal public lands and waters. In 1999, the Federal government assumed responsibility for management of subsistence fisheries on Federal public lands and waters in Alaska. Section 812 of the Alaska National Interest Lands Conservation Act (ANILCA) directs the Departments of the Interior and Agriculture to research fish and wildlife subsistence uses on Federal public lands and waters and to seek data from, consult with, and incorporate knowledge of rural residents engaged in subsistence. The Secretaries of the Interior and Agriculture are committed to increasing the quantity and quality of information available to manage subsistence fisheries; meaningful involvement by federally-recognized tribes and Alaska Native and rural organizations; and, collaboration among Federal, State, Alaska Native, and rural organizations.

Every two years, the Office of Subsistence Management announces a notice of funding opportunity for investigation plans addressing subsistence fisheries on Federal public lands. The Monitoring Program is administered through regions to align with stock, harvest, and community issues common to a geographic area. There are six distinct Monitoring Program regions (**Figure 1**) as well as a multi-region category for projects that encompass more than one region.



Figure 1. Geographic regions of the Fisheries Resource Monitoring Program in Alaska.

During each two-year funding cycle, the Monitoring Program funds ongoing projects from the previous cycle (projects may be 1–4 years in duration) as well as new projects. Funding allocation guidelines are established by geographic region (**Table 1**). The regional guidelines were developed using six criteria that included level of risk to species, level of threat to conservation units, amount of subsistence needs not being met, amount of information available to support subsistence management, importance of a species to subsistence harvest, and level of user concerns regarding subsistence harvest. Funding allocation guidelines provide an initial target for planning; however, they are not final and are adjusted annually as needed.

Region	U.S. Department of the Interior Funds	U.S. Department of Agriculture Funds
Northern Alaska	17%	0%
Yukon Drainage	29%	0%
Kuskokwim Drainage	29%	0%
Southwest Alaska	15%	0%
Southcentral Alaska	5%	33%
Southeast Alaska	0%	67%
Multi-Regional	5%	0%

**Table 1**. Regional allocation guideline for Fisheries Resource Monitoring Program Funds.

The Monitoring Program was first implemented in 2000 with an initial allocation of \$5 million. Since 2000, a total of \$139.9 million has been allocated for the Monitoring Program to fund a total of 524 projects (**Figure 2** and **Figure 3**).



**Figure 2.** Monitoring Program fund distribution since 2000, identified by primary recipient organization type.



**Figure 3.** Number of Monitoring Program projects funded since 2000, listed by primary recipient organization type.

The three broad categories of information solicited by the Monitoring Program are (1) harvest monitoring, (2) traditional ecological knowledge, and (3) stock status and trends. Projects that combine these approaches are encouraged.

**Harvest monitoring** studies provide information on numbers and species of fish harvested, locations of harvests, and gear types used. Methods used to gather information on subsistence harvest patterns may include harvest calendars, mail-in questionnaires, household interviews, subsistence permit reports, and telephone interviews.

**Traditional ecological knowledge** studies are investigations of local knowledge directed at collecting and analyzing information on a variety of topics such as the sociocultural aspects of subsistence, fish ecology, species identification, local names, life history, taxonomy, seasonal movements, harvests, spawning and rearing areas, population trends, environmental observations, and traditional management systems. Methods used to document traditional ecological knowledge include ethnographic fieldwork, key respondent interviews with local experts, place name mapping, and open-ended surveys.

**Stock status and trends** studies provide information on abundance and run timing, age-sex-length composition, migration and geographic distribution, survival of juveniles or adults, stock production, genetic stock identification, and mixed stock analyses. Methods used to gather information on stock status and trends include aerial and ground surveys, test fishing, towers, weirs, sonar, video, genetics, mark-recapture, and telemetry.

# **PROJECT EVALUATION PROCESS**

The Monitoring Program prioritizes high quality projects that address critical subsistence and conservation concerns. Projects are selected for funding through an evaluation and review process that is designed to advance projects that are strategically important for the Federal Subsistence Management Program, technically sound, administratively competent, promote partnerships and capacity building, and

are cost effective. Proposed projects are first evaluated by a panel called the Technical Review Committee. The Technical Review Committee's function is to provide evaluation, technical oversight, and strategic direction to the Monitoring Program. This committee is a standing interagency committee of senior technical experts that reviews, evaluates, and makes recommendations about proposed projects that are consistent with the mission of the Monitoring Program. Recommendations from the Technical Review Committee provide the basis for further comments from Subsistence Regional Advisory Councils, the public, the Interagency Staff Committee, and the Federal Subsistence Board, with final approval of the Monitoring Plan by the Assistant Regional Director of the Office of Subsistence Management.

To be considered for funding under the Monitoring Program, a proposed project must have a nexus to Federal subsistence fishery management. Proposed projects must have a direct association to a Federal subsistence fishery, and the subsistence fishery or fish stocks in question must occur in or pass-through waters within or adjacent to Federal public lands in Alaska (National Wildlife Refuges, National Forests, National Parks and Preserves, National Conservation Areas, National Wild and Scenic River Systems, National Petroleum Reserves, and National Recreation Areas). A complete project package must be submitted on time and must address the following five specific criteria.

- Strategic Priorities—Studies should be responsive to information needs identified in the 2024 Priority Information Needs available at the Monitoring Program webpage at <u>https://www.doi.gov/subsistence/frmp/funding</u>. All projects must have a direct linkage to Federal public lands and/or waters to be eligible for funding under the Monitoring Program. Projects should address the following topics to demonstrate links to strategic priorities:
  - Federal jurisdiction—The extent of Federal public waters in or nearby the project area
  - Direct subsistence fisheries management implications
  - Conservation mandate—Threat or risk to conservation of species and populations that support subsistence fisheries
  - Potential impacts on the subsistence priority—Risk that subsistence harvest users' goals will not be met
  - Data gaps—Amount of information available to support subsistence management and how a project answers specific questions related to these gaps
  - Role of the resource—Contribution of a species to a subsistence harvest (number of villages affected, pounds of fish harvested, miles of river) and qualitative significance (cultural value, unique seasonal role)
  - Local concern—Level of user concerns over subsistence harvests (upstream vs. downstream allocation, effects of recreational use, changes in fish abundance and population characteristics)

To assist in evaluation of submittals for projects previously funded under the Monitoring Program, investigators must summarize project findings in their investigation plans. This

summary should clearly and concisely document project performance, key findings, and uses of collected information for Federal subsistence management. It should also justify the continuation of the project, placing the proposed work in context with the ongoing work being accomplished.

- 2. *Technical-Scientific Merit*—Technical quality of the study design must meet accepted standards for information collection, compilation, analysis, and reporting. To demonstrate technical and scientific merit, applicants should describe how projects will:
  - Advance science
  - Answer immediate subsistence management or conservation concerns
  - Have rigorous sampling and/or research designs
  - Have specific, measurable, realistic, clearly stated, and achievable (attainable within the proposed project period) objectives
  - Incorporate traditional knowledge and methods

Data collection, compilation, analysis, and reporting procedures should be clearly stated. Analytical procedures should be understandable to the non-scientific community.

- 3. *Investigator Ability and Resources*—Investigators must show they are capable of successfully completing the proposed project by providing information on the ability (training, education, experience, and letters of support) and resources (technical and administrative) they possess to conduct the work. Investigators that have received funding in the past, via the Monitoring Program or other sources, are evaluated and scored on their past performance, including fulfillment of meeting deliverable and financial accountability deadlines. A record of failure to submit reports or delinquent submittal of reports will be considered when rating investigator ability and resources.
- 4. Partnership and Capacity Building—Investigators must demonstrate that capacity building has already reached the communication or partnership development stage during proposal development and, ideally, include a strategy to develop capacity building to higher levels, recognizing, however, that in some situations higher level involvement may not be desired or feasible by local organizations.

Investigators are requested to include a strategy for integrating local capacity development in their study plans or research designs. Investigators should inform communities and regional organizations in the area where work is to be conducted about their project plans. They should also consult and communicate with local communities to ensure that local knowledge is used and concerns are addressed. Investigators and their organizations should demonstrate their ability to maintain effective local relationships and commitment to capacity building. This includes a plan to facilitate and develop partnerships so that investigators, communities, and regional organizations can pursue and achieve the most meaningful level of involvement. Proposals

demonstrating multiple, highly collaborative efforts with rural community members or Alaska Native Organizations are encouraged.

Successful capacity building requires developing trust and dialogue among investigators, local communities, and regional organizations. Investigators need to be flexible in modifying their work plan in response to local knowledge, issues, and concerns, and must also understand that capacity building is a reciprocal process in which all participants share and gain valuable knowledge. The reciprocal nature of the capacity building component(s) should be clearly demonstrated in proposals. Investigators are encouraged to develop the highest level of community and regional collaboration that is practical including joining as co-investigators.

Capacity can be built by increasing the technical capabilities of rural communities and Alaska Native organizations. This can be accomplished via several methods, including increased technical experience for individuals and the acquisition of necessary gear and equipment. Increased technical experience would include all areas of project management including logistics, financial accountability, implementation, and administration. Other examples may include internships or providing opportunities within the project for outreach, modeling, sampling design, or project specific training. Another would be the acquisition of equipment that could be transferred to rural communities and tribal organizations upon the conclusion of the project.

A "meaningful partner" is a partner that is actively engaged in one or more aspects of project design, logistics, implementation, and reporting requirements. Someone who simply agrees with the concept or provides a cursory look at the proposal is not a meaningful partner.

5. Cost/Benefit—This criterion evaluates the reasonableness (what a prudent person would pay) of the funding requested to provide benefits to the Federal Subsistence Management Program. Benefits could be tangible or intangible. Examples of tangible outcomes include data sets that directly inform management decisions or fill knowledge gaps and opportunities for youth or local resident involvement in monitoring, research, and/or resource management efforts. Examples of possible intangible goals and objectives include enhanced relationships and communications between managers and communities, partnerships and collaborations on critical resource issues, and potential for increased capacity within both communities and agencies.

Applicants should be aware that the Government shall perform a "best value analysis" and the selection for award shall be made to the applicant whose proposal is most advantageous to the Government. The Office of Subsistence Management strives to maximize program efficiency by encouraging cost sharing, partnerships, and collaboration.

#### POLICY AND FUNDING GUIDELINES

Several policies have been developed to aid in implementing funding. These policies include:

• Projects of up to four years in duration may be considered

- Proposals requesting Monitoring Program funding that exceeds \$235,000 in any one year are not eligible for funding
- Studies must not duplicate existing projects
- Long term projects will be considered on a case-by-case basis

Activities that are not eligible for funding include:

- Habitat protection, mitigation, restoration, and enhancement
- Hatchery propagation, restoration, enhancement, and supplementation
- Contaminant assessment, evaluation, and monitoring
- Projects where the primary or only objective is outreach and education (for example, science camps, technician training, and intern programs), rather than information collection

The rationale behind these policy and funding guidelines is to ensure that existing responsibilities and efforts by government agencies are not duplicated under the Monitoring Program. Land management or regulatory agencies already have direct responsibility, as well as specific programs, to address these activities. However, the Monitoring Program may fund research to determine how these activities affect Federal subsistence fisheries or fishery resources.

The Monitoring Program may fund assessments of key Federal subsistence fishery stocks in decline or that may decline due to climatological, environmental, habitat displacement, or other drivers; however, applicants must show how this knowledge would contribute to Federal subsistence fisheries management. Similarly, the Monitoring Program may legitimately fund projects that assess whether migratory barriers (e.g., falls, beaver dams) significantly affect spawning success or distribution; however, it would be inappropriate to fund projects to build fish passes, remove beaver dams, or otherwise alter or enhance habitat.

# 2024 NOTICE OF FUNDING OPPORTUNITY

The 2024 Notice of Funding Opportunity focused on priority information needs developed by the Subsistence Regional Advisory Councils with input from subject matter specialists. Investigation plans were due in February 2023. Submitted plans were reviewed and evaluated by the Office of Subsistence Management and U.S. Forest Service staff, and then scored by the Technical Review Committee. Each investigation plan was scored on the following five criteria: strategic priority, technical and scientific merit, investigator ability and resources, partnership and capacity building, and cost/benefit.

## 2024 FISHERIES RESOURCE MONITORING PLAN

A Fisheries Resource Monitoring Plan is developed during each Monitoring Program cycle that provides an overview of the process, the submitted materials, and the final list of funded projects. The 2024

Fisheries Resource Monitoring Plan will include regional overviews and comments from Regional Advisory Councils and the Interagency Staff Committee. Regional Overviews for each of the seven Monitoring Program regions contain area specific background information as well as the 2024 Technical Review Committee justifications and project executive summaries specific to those regions. The Regional Overviews are distributed for comment through Subsistence Regional Advisory Council meetings, beginning in September 2023. Regional Advisory Council comments are recorded and included in the draft 2024 Fisheries Resource Monitoring Plan that will be forwarded to the Interagency Staff Committee for their comments and finally to the Federal Subsistence Board.

The draft 2024 Fisheries Resource Monitoring plan will be presented to the Federal Subsistence Board at their January/February 2024 public meeting. The Board will review the draft plan and will forward their comments and recommendations to the Assistant Regional Director of the Office of Subsistence Management. Final project selection and funding approval lie with the Assistant Regional Director of the Office of Subsistence Management. For this funding cycle, a total of 26 investigation plans were received and 25 were considered eligible for funding. Investigators are expected to be notified in writing of the status of their proposals by late spring or early summer 2024.

# FISHERIES RESOURCE MONITORING PROGRAM NORTHERN REGION OVERVIEW

Since the inception of the Monitoring Program in 2000, a total of 59 projects have been funded in the Northern Region at a cost of \$16.3 million (**Figure 1**). The State of Alaska had the most projects funded in the region, followed by the United States Department of the Interior agencies, Alaska rural organizations, and other organizations (**Figure 2**). See **Appendix 1** for more information on Northern Region projects completed since 2000 and a list of all organizations that have received funding through the Monitoring Program.



Figure 1. Monitoring Program fund distribution in the Northern Region since 2000.



Figure 2. Number of Monitoring Program projects funded in the Northern Region since 2000.

## PRIORITY INFORMATION NEEDS

The 2024 Notice of Funding Opportunity for the Northern Region contained the following 20 priority information needs identified by the North Slope, Northwest Arctic, and Seward Peninsula Regional Advisory Councils:

- Chinook, Chum and Coho salmon abundance estimate for Boston, Fish, Pargon, and Wagon Wheel rivers.
- Summer and Fall Chum Salmon abundance estimates for the Agiapuk River drainage including American River and Igloo Creek.
- Chinook, Chum, and Coho salmon abundance estimate for the Pikmiktalik River, with comparison to historical counts.
- Changes in Grayling, Dolly Varden, and Sheefish populations related to climate change.
- Inventory and baseline data of fish in major rivers tied to subsistence use in Northwest Alaska. Investigators should consult with local subsistence users and draw on Traditional Ecological Knowledge literature in designing and carrying out research. When possible, applicants are encouraged to include fisheries proximal to the communities of Shishmaref, Buckland, Deering, Selawik, Kivalina, Point Hope and villages along the Kobuk and Noatak rivers.
- Evaluate changes in water levels, discoloration and mineral deposits, water temperature, and reduced oxygen in major river systems associated with subsistence fishery resources in the Northwest Arctic Region, and how these changes will affect fish vital for subsistence. Investigators should consult with local subsistence users and draw on their knowledge of historic and recent water conditions in designing and carrying out research.
- The effects of expanding beaver populations and range on subsistence fisheries, including whitefish, in the Northwest Arctic Region. Include effects of dams on fish migration and effects of changes to water quality on fish health. Investigators should consult with local subsistence users and draw on their knowledge of historic and changing beaver impacts in designing and carrying out research. Research should also consider the impacts of these changes on subsistence users themselves.
- Document Herring abundance, seasonal movements, and health and investigate causes of large herring mortality events in the Northwest Arctic. Investigators should consult with local subsistence users and draw on their knowledge in designing and carrying out research.
- Document the effects of changing river and tributary conditions on salmon spawning in the Noatak and Kobuk river drainages, with focus on the potential effects of factors such as erosion, discoloration and mineral deposits, and changing precipitation on spawning viability. Investigators should consult with local subsistence users and draw on their knowledge in designing and carrying out research.
- Document abundance, and migration timing, especially of Dolly Varden, Lake Trout, and Whitefish species in the Northwest Arctic, to address changing availability of subsistence fishery

resources. Investigators should consult with local subsistence users and draw on their knowledge in designing and carrying out research.

- Identify the spawning areas, critical habitat and range expansion in major rivers tied to subsistence for Whitefish, Northern Pike, salmon, Grayling, and Dolly Varden in the Northwest Alaska Region. Investigators should consult with local subsistence users and draw on their knowledge in designing and carrying out research.
- Using Traditional Ecological Knowledge and harvest monitoring, document new fish species and changes in abundance, size, timing, and distribution of existing fish species, as well as impacts of new or expanding species on other fish that are important to subsistence in the North Slope Region.
- Document and investigate the possible causes of mold, disease, and discoloration on Broad Whitefish in the Colville River in the vicinity of Nuiqsut. Compare environmental conditions in the Colville River—including temperature—with those in the Ikpikpuk River, where whitefish are healthy, and mold has not been observed to date. Investigators are encouraged to draw on both stock status and trends and Traditional Ecological Knowledge research methods.
- Document the effects of climate change, including late freeze-up, on subsistence fishing access, harvests, and preservation and the impact of these changes on community-wide harvest levels and food security on the North Slope. Research could investigate adaptations for continuing community-wide harvest levels where traditional preservation methods are impacted. Studies including Ikpikpuk River are of particular interest.
- Baseline fish habitat and water quality monitoring (especially temperature, dissolved oxygen, and silt) on the rivers and tributaries important to subsistence fishing for communities of the North Slope Region. Investigators are encouraged to include overwintering area.
- Distribution, abundance, and health of stocks of Broad Whitefish on the Sagavanirktok River.
- Seasonal movement and overwintering habitat of Whitefish on the Colville Delta.
- Document population structure, abundance and health of lake trout in Peters, Schrader, Chandler, and Shainin lakes.
- Health and abundance of Arctic Grayling populations in in Anaktuvuk Pass area.
- Evaluate changes in water levels, discoloration and mineral deposits, water temperature, and reduced oxygen in major river systems associated with subsistence fishery resources in the North Slope Region, and how these changes will affect fish vital for subsistence.

## 2024 MONITORING PLAN DEVELOPMENT FOR THE NORTHERN REGION

For the 2024 Monitoring Plan, four proposals were submitted for the Northern Region (Table 1).

**Table 1**. Projects submitted for the Northern Region 2024 Monitoring Plan including project duration and total funds requested.

Project Number	Title	Project Duration (Years)	Total Project Request
24-100	An Investigation of Temperature and Dissolved Oxygen Variation in Perennial Spring Overwintering Habitats used by Dolly Varden and Arctic Grayling in NE Alaska	4	\$473,957
24-101	Mixed Stock Analysis of Northwest Alaska Dolly Varden Subsistence Harvests	1	\$51,117
24-102	Selawik Northern Pike population dynamics, movement, and habitat use	3	\$367,881
24-103	Kukpuk River Arctic Grayling – Characterizing Critical Habitats, Seasonal Movements, and Examining Effects of Climate Change-related Stressors	4	\$291,696
Total			\$1,184,651

## EXECUTIVE SUMMARIES AND TECHNICAL REVIEW COMMITTEE JUSTIFICATIONS

The following executive summaries were written by the principal investigator and submitted to the Office of Subsistence Management as part of a proposal package. They may not reflect the opinions of the Office of Subsistence Management or the Technical Review Committee. The executive summaries may have been altered for length.

Technical Review Committee justifications are a general description of the committee's assessment of proposals when examining them for strategic priority, technical and scientific merit, investigator ability and resources, partnership and capacity building, and cost/benefit. More in-depth reviews are provided to investigators following project selection.

#### **Investigator Submitted Executive Summary:**

Project Number:	24-100	
Title:	An Investigation of Temperature and Dissolved Oxygen Variation in	
	Perennial Spring Overwintering Habitats used by Dolly Varden and Arctic	
	Grayling in NE Alaska	
Geographic Region:	Northern	
Data Types:	Stock Status and Trends	
Principal Investigator:	Randy J. Brown, U.S. Fish and Wildlife Service	
<b>Co-investigator:</b>	Michael P. Carey, U.S. Geological Survey Alaska Science Center	
	Vanessa R. von Biela, U.S. Geological Survey Alaska Science Center	

 Project Request:
 2024:
 \$82,451
 2025:
 \$153,275
 2026:
 \$153,275
 2027:
 \$84,956

 Total Request:
 \$473,957

**Issue Addressed:** Dolly Varden (*Salvelinus malma*) and Arctic grayling (*Thymallus arcticus*) are two of the most widely distributed and important fish species available to subsistence fishers in NE Alaska. The conservation of both species was specifically included in the purpose statement of the Arctic National Wildlife Refuge's enabling legislation within the Alaska National Interest Lands Conservation Act (ANILCA). It is important to note that char in this region were referred to as "Arctic char (*S. alpinus*)" at the time of legislation and later study revelated these fish to be Dolly Varden char, a closely related species (Reist et al. 1997). Among residents of the area the species is still called Arctic char or Iqalukpik in Iñupiaq.

In NE Alaska and NW Canada, Dolly Varden and Arctic grayling populations are sustained during winter in rivers containing perennial springs that provide stable aquatic habitats when no other liquid water is available. Despite the presence of liquid water in the perennial spring in the Shaviovik River, several hundred Dolly Varden and Arctic grayling died during the winter and were discovered in April, indicating that perennial spring overwintering habitats can become unsuitable for life. We suspect that dissolved oxygen (DO) declined to lethal levels in the pool of water under ice where these fish died, but no measurements were taken there, or to our knowledge, in any other similar perennial springs in the region. Given the importance of perennial spring habitats for fish occupancy in the rivers of NE Alaska, a better understanding of the temperature and DO dynamics they experience during winter would be valuable. This project proposal would specifically address the following Priority Information Need identified for the Northern Alaska Region in the 2024 FRMP call for proposals: "*Baseline fish habitat and water quality monitoring (especially temperature, dissolved oxygen, and silt) on the rivers and tributaries important to subsistence fishing for communities of the North Slope Region. Investigators are encouraged to include overwintering area.*"

**Objectives:** We propose to monitor water quality for three consecutive winters in five small perennial springs that are known to be used by Dolly Varden and potentially Arctic grayling. Specifically, we will:

- 1) deploy three sets of temperature and DO data logging units in late October or early November in different locations within each of five perennial springs;
- 2) A continuous record of temperature and DO will be collected throughout three winter deployment periods creating a multi-year record of temperature and DO variation through the winter season.
- 3) We will retrieve the temperature and DO data loggers in late April, prior to breakup, and in the process will examine the perennial spring habitats for evidence of fish mortality and survival.
- 4) We will analyze these datasets to identify critical periods of time in which DO minimums decline to < 3 mg/L, which is generally considered to be a lethal threshold for salmonid fishes. Dolly Varden and Arctic grayling are apparently more tolerant of low DO than most other salmonids and have been shown to survive in cold water at concentrations as low as 1 mg/L.

5) By examining these water quality parameters for three seasons, we hope to improve our understanding of environmental conditions that result in fish mortality in these critical habitats.

**Methods:** We propose to monitor temperature and DO in five perennial springs in NE Alaska that are known to support overwintering Dolly Varden. Four of these springs are in the upper Canning River and a fifth is in the upper Kavik River, a tributary of the Shaviovik River. During a multi-year telemetry project with Dolly Varden in the Canning River, almost half of the fish overwintering in isolated perennial springs in the upper Canning River died during winter of unknown causes. To monitor temperature and DO in these overwintering habitats, we will deploy three sets of datalogging equipment in each perennial spring in late October as the winter comes on. They will remain in place through the winter and be retrieved in late April, as the end of winter approaches. We will examine the overwintering population experienced lethal conditions or not. We will download data in a controlled environment and analyze the trends of temperature and DO over time, compare data between the three sites within each of the springs, and then among the five springs for common trends and resulting mortality or not.

**Partnerships and Capacity Building:** Because of the complexity, personnel limitations, and costs of the field component of this project, we have been unable to directly involve residents of the area in project operations. We do, however, have an indirect partnership with Tom Glass, Louise Bishop, and Kevin Fraley with the Wildlife Conservation Society, the group who discovered the fish kill on the Shaviovik River last April. Vanessa von Biela joined Tom in bringing the matter to the attention of the North Slope RAC last October. The Wildlife Conservation Society subsequently developed a plan to monitor water quality parameters in a selection of overwintering habitats including the Shaviovik perennial spring and other overwintering areas to the west of our study area. We have coordinated our methodologies in such a way that we expect to have comparable data from the two research efforts.

We're also partnering with Dr. Ken Dunton from the University of Texas to share our findings each year with the Traditional Knowledge Panel that was established in Kaktovik. We will also be presenting our findings each year with the North Slope RAC. We believe these outreach activities are effective forums for discussion with residents of the area on the tenuous nature of these essential overwintering habitats and the need to preserve them.

**Technical Review Committee Justification:** This proposed project studies overwintering habitat in Dolly Varden and Arctic Grayling, two important subsistence fish species. When liquid water is limited during winter, their populations are sustained in rivers containing perennial springs that provide stable aquatic habitats. Overwintering fish survival in the perennial springs was estimated to be 45% during a previous Monitoring Project. The proposed study evaluates winter water temperature and dissolved oxygen to determine if they are limiting factors for fish survival in these springs. A discussion of the survival rate effects on the overall population health would provide information about the population's sustainability. The project consists of deploying data loggers to monitor temperature and dissolved oxygen in the fall and collecting the loggers in the spring to download the data. The investigation plan lacks a discussion of how the data will be used for subsistence management and the continuation of subsistence practices. The principal investigators have successfully completed other Monitoring Program

projects and the co-investigators have the experience to execute the project. Capacity building is minimal consisting of presenting at meetings. The costs are high due to the remoteness of the sample sites. Most funds are requested for travel. There is a 20% match composed entirely of USGS salaries included in the budget.

#### **Investigator Submitted Executive Summary:**

Project Number:	24-101
Title:	Mixed Stock Analysis of Northwest Alaska Dolly Varden Subsistence
	Harvests
Geographic Region:	Northern Alaska
Data Types:	Stock Status and Trends
<b>Principal Investigator:</b>	James Savereide, Alaska Department of Fish and Game
Project Request: 2024:	\$51,117
<b>Total Request:</b> \$51,1	17

**Issue Addressed:** Dolly Varden (*Salvalinus malma*) in northwest Alaska constitute one of the most important subsistence resources for residents of Noatak, Kivalina, and Kotzebue and Dolly Varden that spawn in the Noatak River contribute to fishery harvests occurring in Noatak, Kotzebue, and Kivalina. Fish are captured in subsistence fisheries with gillnets and beach seines during open water periods, through the ice with jigs/spoons in the winter in the Noatak, Wulik, and Kivalina Rivers, and are incidentally caught in commercial fisheries in Kotzebue Sound. Dolly Varden spawn in most tributaries of the Noatak River including the Kelly, Kugururok, Nimiuktuk, Kaluktavik, Nakolik, and Anisak Rivers as well as in multiple smaller creeks in both the lower and upper Noatak River (Figure 1). While current harvests appear to be sustainable, managers have little to no information to decide whether or not a subsistence and/or sport fishery should be restricted or liberalized if fisheries change due to changing climate, increased oil and gas exploration, or shifting resource use by locals.

This proposal is a 1-year extension of a previously funded project through OSM, F20AC00233 Lifehistory variability and mixed-stock analysis of Dolly Varden in the Noatak River. During that study an attempt to collect samples from the subsistence fishers using local hires was not successful and the principal investigators decided to collect the samples themselves, which was successful but taxing on the budget, and the desired number of samples from each year was not achieved. This project will collect the remaining samples needed to reliably quantify the contribution of the spawning stocks to the subsistence harvests. This project also speaks to a 2022 priority information need to address the changing availability of Dolly Varden subsistence fishery resources in the Northern Region by using mixed-stock analysis (MSA) to identify the genetic make-up of the significant subsistence harvests as it relates to northwest Alaska Dolly Varden spawning populations. Adding to the limited genetic baseline will provide managers with the opportunity to throroughly identify the relative contribution of spawnming stocks to the subsistence harvests that ultimately influence overall population dynamics. Objective: Estimate the stock proportions of Dolly Varden sampled from the Noatak and Kivalina subsistence harvests and the Kotzebue commercial fishery bycatch harvest in 2024 using mixed-stock analysis with genetic characters (N=200 per fishery sample).

**Methods:** Mixed-stock analysis will be used to estimate the stock proportions of Dolly Varden sampled from subsistence harvests and as bycatch in the Kotzebue commercial fishery in 2024. Fin clips will be collected from N=200 Dolly Varden from subsistence fisheries in Noatak and Kivalina, and from Dolly Varden bycatch in the Kotzebue commercial fishery.

The baseline for Dolly Varden in western Alaska comprises 50 populations sampled from the North Slope of Alaska to the Nushagak River in Bristol Bay assayed at 11 microsatellite loci. Additional baseline samples will be collected from the Kukpuk River (N=200). For the Kukpuk River, if insufficient spawning adults are available, juveniles will be sampled to obtain the required sample size.

**Partnerships and Capacity Building:** ADF&G recognizes the importance of continuing to develop the capability, understanding, and expertise of rural and Alaska Native organizations to participate in federal subsistence fisheries management. We have a demonstrated history of working with rural subsistence users by cooperatively collecting fishery and baseline samples in numerous FRMP studies. During previous years' fieldwork, many local residents were interested in our research program, especially our results. In an effort to develop a shared understanding of the need for fisheries research, we will continue to seek informal interactions with local subsistence users to build on improving understanding and collaboration with each other. Strong relationship and local acceptance are key to success in remote rural projects.

Finally, substantial time will be spent ensuring that research results are shared both with the local subsistence users and the Northwest Alaska RAC. Investigators will participate in annual educational outreach trips to Noatak to describe project results, and to one outreach trip to Kivalina. A project investigator will also attend the Northwest Alaska RAC meeting held in Kotzebue annually to describe project results and updates.

In summary, the mutual exchange of knowledge between the proposed research team and Noatak and Kivalina residents gained during fieldwork and outreach will increase the collective knowledge about Dolly Varden. With an increase in collective knowledge, residents, scientists, and managers will be empowered to make more informed decisions regarding management of Dolly Varden, should an active management program need to be implemented to address the changing availability of subsistence fishery resources, as stated in the 2020 Priority Information Needs.

**Technical Review Committee Justification:** This proposed project completes work begun in project 20-*101 Life-history variability and mixed-stock analysis of Dolly Varden in the Noatak River*. The investigators are seeking one additional year of funding to collect samples as the previous attempt to collect samples from the subsistence fishers using local hires was not successful and sample sizes were not fully met. Awarded funds will allow the investigators to finish collecting the needed samples to complete the analysis. The project methods clearly lay out and built upon previous work. They include a detailed sampling design, data collection, compilation, analyses, and reporting procedures. A summary of what was accomplished through the previous projects would clarify the importance of this project. While the initial project included strong capacity building component the current investigation plans has limited partnership and capacity building opportunities. Costs are reasonable for a one-year project to ensure successful completion of a prior project funded through this program.

Project Number:	24-102		
Title:	Selawik Northern Pike	population dynamics, mo	vement, and habitat use
<b>Geographic Region:</b>	Northern Alaska		
Data Types:	Stock Status and Trends		
Principal Investigator:	Jeffrey D. Muehlbauer, U.S. Geological Survey		
<b>Co-investigator:</b>	William K. Carter, III, U.S. Fish and Wildlife Service		
<b>Project Request:</b>	<b>2024:</b> \$98,020	2025: \$132,436	<b>2026:</b> \$137,425
Total Request:	\$367,881		

### **Investigator Submitted Executive Summary:**

**Issue:** Northern pike (*Esox lucius*) are an important subsistence resource in the northwest Arctic. In spite of the prevalence of Federally managed lands in the area and the widespread distribution and subsistence use of pike throughout this area, very little is known about the habitat use requirements, movement by life history, and population structure of pike in the region. This knowledge gap has led to the listing of such pike population structure and movement data as a Priority Information Need (PIN) by the Northwest Arctic Subsistence Regional Advisory Council. Specifically, pike are mentioned in the proposed 2024 PINs within the following category:

"Identify the spawning areas, critical habitat and range expansion in major rivers tied to subsistence for Whitefish, Northern Pike, salmon, Grayling, and Dolly Varden in the Northwest Alaska Region. Investigators should consult with local subsistence users and draw on their knowledge in designing and carrying out research."

This PIN is of particularly high interest to managers and researchers in Selawik NWR, especially given the reliance on pike by people in the Village of Selawik.

This project seeks to provide baseline information about pike movement, habitat use by life history, and identification of potentially discrete sub-populations within Selawik NWR. The proposed project has the support of the refuge, including in particular Refuge Biologist William (Bill) Carter, who is a co-investigator on the project and has been actively involved in its development. No studies, with FRMP funding or otherwise, have been carried out on pike within the refuge. This represents a major data limitation for fisheries and subsistence management on the refuge, but also points to an area of high potential for rapid knowledge generation to greatly benefit managers and subsistence users of pike populations in the Northwest Arctic.

## **Objectives:**

The overarching goal of this project is to determine the life history and movement of pike in Selawik NWR, specifically the Selawik River Delta near the Village of Selawik. Our specific objectives are twofold:

- 1. To track the movement of pike to discover how pike habitat use varies seasonally and according to pike life history.
- 2. To identify the extent to which pike in the area exhibit high site fidelity, and thus provide evidence for whether there may be multiple, distinct sub-populations or whether all pike in the area are part of a single, larger population.

## **Project Activities and Methods:**

Project Area: *Project objectives will be met principally by a combination of radiotelemetry monitoring and pike cleithra aging.* This project will concentrate on the pike in the Selawik River Delta near the Village of Selawik where the majority of the subsistence fishery takes place. Sampling and tracking will particularly emphasize the confluence of the Fish River and the connected lakes north of the village. Through our consultations with local fishers we will determine the most productive and appropriate fishing areas to deploy the radio tags.

Pike movement will be assessed by implanting approximately 100 pike with radiotransmitters in summer 2024 and 100 more in late winter/early spring 2025 Pike used in this study will be captured using hookand-line angling within at least 5-10 known locations of pike abundance based on local knowledge. Pike initial capture and subsequent radiotracking will be accomplished primarily by motorboat, with tracking occurring over two years, with aircraft and snowmachine surveys when conditions require. Pike movements by life history will be assessed additionally with limited used of pike cleithra (membrane bone at the rear of the gill cavity) to determine individual fish age. Habitat conditions will be assessed by deployment of multi-parameter water quality sensors for measuring temperature, dissolved oxygen, and other variables. Collectively, these data will allow pike abundance and movements to be correlated to localized water conditions to understand why pike may be choosing certain habitats.

Partnerships and Capacity Building: Critically for the project and for long-term recruitment of rural residents into science and management of Federal subsistence fisheries, we will actively recruit an Alaska Native Science and Engineering Program (ANSEP) student to take on the project as their masters thesis research at UAF. We will also involve local individuals and Alaska Native organizations to the extent feasible, particularly by recruiting project fieldwork assistance from the Native Village of Selawik. A local motorboat, captain, and technician will be recruited and paid to assist with the project for two weeks every year, particularly with angling and radiotelemetry. The angling activities will benefit especially from local knowledge. These activities also represent a fisheries training opportunity for those hired individuals and will promote further interaction between the village and Selawik NWR. We will also involve youth volunteers as a means of outreach, training, and engagement to promote future interest of local individuals in science and working within the refuge. We will recruit older teenagers (2-5 people, ideally) from the refuge's annual Science and Culture camp to join in radiotelemetry and fishing activities. The youth would play a direct role in meaningful sampling and data collection activities and would gain firsthand knowledge that they can "do science", including on the refuge and close to home. We also propose to involve youth in a similar way in the winter, in this case by snowmachine and by foot over Spring Break, to access sites for fishing and tracking pike through the ice.

We will brief village leadership at least yearly be in regular communication with the village and administrators with regards to staffing and youth involvement activities. At least once near project

completion, and earlier pending interest, we will facilitate a local presentation about the project and its results, for any interested members of the local public.

**Technical Review Committee Justification:** While Northern Pike are an important subsistence fish in Northwestern Alaska, relatively little is known about them in this area. The proposal addresses a priority information need to identify Northern Pike spawning areas, critical habitat, and range expansion in major rivers tied to subsistence. The proposed project would use radio-telemetry technology to collect habitat and movement data in the Selawik River Delta. The proposal states that local traditional knowledge will be used to identify the sample sites. The investigator is encouraged to continue to include local knowledge in the implementation of the proposal. Efforts would be made to track the fish year-round. Both the investigator and co-investigator have a long history of successfully completing similar projects. The investigators plan to involve local Selawik residents and youth in the project in addition to a graduate student in fisheries. The costs are reasonable for a project of this size and there is a substantial in-kind match from the Selawik National Wildlife Refuge.

<b>Project Number:</b>	24-103
Title:	Kukpuk River Arctic Grayling – Characterizing Critical Habitats, Seasonal
	Movements, and Examining Effects of Climate Change-related Stressors
Geographic Region:	Northern Alaska
Data Types:	Stock Status and Trends, Harvest Monitoring
Principal Investigator	r: Dr. Kevin Fraley
Project Request: 2	2024:         \$92,085         2025:         \$77,568         2026:         \$74,154         2027:         \$47,889
Total Request: \$	291,696

#### **Investigator Submitted Executive Summary:**

Issue: (Briefly discuss the issue(s) that the project would address)

Our project will address the Arctic grayling portion of four Priority Information Needs (PINs) identified by the 2024 Fisheries Resource Monitoring Program through information gathered from Northern Alaska Subsistence Regional Advisory Committees. These PINs include baseline information from major rivers tied to subsistence use, changes in populations due to climate change, identifying spawning and critical habitat areas, and quantifying effects on subsistence fisheries of discoloration and mineral deposits in rivers. The findings from our project will enhance the current information known about grayling, allowing federal subsistence managers to make informed decisions in the future based on the movements, habitat use, and stressors on these fish in rivers of northwest Alaska. Additionally, the results from this project will be of great interest to subsistence fishers, particularly given recent reports of poor grayling harvests in the Kukpuk River and satellite imagery evidence of rusty-colored mineral seeps in its headwaters.

**Objectives:** (Numerically list the objectives in the sequence they would be completed)

1) Identify the seasonal movements and critical habitats (spawning, feeding, overwintering) of Arctic grayling in the Kukpuk River of northwest Alaska with the use of radio telemetry tagging and tracking.

2) Characterize locations, frequency of occurrence, and magnitude of rusty-colored mineral seeps affecting the Kukpuk River drainage using Sentinel-2 satellite imagery available from 2017-2025.

3) Identify grayling movements, habitat preference, or avoidance in relation to river discoloration.

4) Assess heavy metal contaminant loads in grayling caught in the Kukpuk (seeps) and Ipewik (no seeps) rivers to establish baseline levels and identify any differences associated with river discoloration

Methods: (Briefly describe the methods that would be used to conduct the project)

To accomplish our goals, we will surgically implant radio telemetry tags in up to seventy adult grayling in the Kukpuk River and its tributaries and will track their habitat use and movements over the course of two years using fixed wing aircraft. One tracking flight will occur during each of three critical ecological periods every year (spawning, feeding, overwintering) to identify habitats used. Sentinel-2 satellite imagery, available every few days when atmospheric conditions allow, will be perused to identify the locations, frequency, and magnitude of permafrost thaw seeps and river discoloration, which will be compared to grayling critical habitat areas and movements. Finally, forty adult grayling will be caught in the Kukpuk River and its tributaries and retained for heavy metal contaminant load analyses. This will include assessing the concentration of iron, lead, mercury, copper, and zinc in filets, which can be harmful to humans if consumed in high quantities.

**Partnerships/Capacity Building:** (Describe the ways in which this project would develop partnerships and build the capacity of rural and Alaska Native organizations to participate in management of Federal subsistence fisheries)

This project will be a collaborative effort between the Wildlife Conservation Society, residents of Point Hope, and other scientists involved in fisheries management and research in the region. Collaborating with the community of Point Hope is paramount to the success of this project, and fostering local and Indigenous partnerships is principal for all WCS work (both globally and with respect to the Arctic Beringia program). It is essential that this partnership is ongoing and meaningful during each phase of the project, beginning with design. The community of Point Hope, through North Slope Borough Subsistence Research Specialist Michael Tuzroyluk, was involved in the study design, helped shape the outreach approach, and assisted in revising the project proposal into its current form. Additionally, the initial project idea was based upon remarks from Michael and his Uncle, Guy Omnik, who mentioned that grayling were being harvested in lower numbers, causing great concern within the community.

During project implementation, we will fund local consultation and field support through the Native Village of Point Hope to ensure the success of our activities. This will provide opportunities for outreach, co-production of knowledge, and will cover the cost of any services that local residents may provide during the project duration. Upon completion of the project, we will conduct an outreach meeting to present findings from the study, modeling this after the successful February 2023 fisheries meeting put on by WCS in Point Hope.
**Technical Review Committee Justification:** Point Hope subsistence users have expressed concerns about declining Arctic Grayling populations to the North Slope Subsistence Regional Advisory Council since 2010. This proposed project provides baseline information about Arctic Grayling ecology. In addition, the investigator will explore the effects of water discoloration from minerals seeping into the rivers from permafrost thaws on Arctic Grayling habitat. The investigator uses standard radio telemetry technics to track the Arctic Grayling. The investigator has a proven track record with similar studies. The capacity building component consists of contracting with the Village of Point Hope, consulting with stakeholders and educational outreach. This investigation plan does not provide any examples of long-term capacity building. The costs seem reasonable for a study this size.

#### APPENDIX 1 PROJECTS FUNDED IN THE NORTHERN REGION SINCE 2000

Project Number	Project Title	Investigators					
North Slope							
00-002	Eastern NS Dolly Varden Spawning and Over-wintering Assessment	ADF&G, USFWS					
01-113	Eastern NS Dolly Varden Genetic Stock ID Stock Assessment	ADF&G, USFWS					
01-101	Eastern NS (Kaktovik) Subsistence Fish Harvest Assessment	AD&FG, KIC					
02-050	NS (Anaktuvuk Pass) Subsistence Fish Harvest Assessment	ADF&G, NSB, AKP					
03-012	SST of Arctic Cisco and Dolly Varden in Kaktovik Lagoons	USFWS					
04-103	North Slope Dolly Varden Sonar Feasibility	USFWS					
06-108	North Slope Dolly Varden Aerial Monitoring	ADF&G					
07-105	North Slope Dolly Varden Genetic Baseline Completion	USFWS					
07-107	Hulahula River Dolly Varden Sonar Enumeration	USFWS					
12-154	North Slope Salmon Fishery HM/TEK	ADF&G					
14-103	Beaufort Sea Dolly Varden Dispersal Patterns	UAF					
16-101	Arctic Dolly Varden Telemetry	USFWS					
16-106	Aerial Monitoring of Dolly Varden Overwintering Abundance	ADF&G, USFWS					
16-107	Chandler Lake Trout Abundance Estimation	ADF&G					
16-152	Meade River Changes in Subsistence Fisheries	ADF&G					
18-100	Colville River Grayling Habitat and Migration	ADF&G					
Northwest Arctic							
00-001	Northwestern Dolly Varden and Arctic Char Stock Identification	ADF&G, USFWS					
00-020	Hotham Inlet Kotzebue Winter Subsistence Sheefish Harvest	ADF&G					
01-136	Northwestern Alaska Dolly Varden Genetic Diversity	ADF&G, USFWS					
01-137	Northwestern Alaska Dolly Varden Spawning Stock Assessment	ADF&G					
02-023	Qaluich Nigingnaqtuat: Fish That We Eat	AJ					
02-040	Kotzebue Sound Whitefish Traditional Knowledge	ADF&G, MQ					
03-016	Selawik River Harvest ID, Spring and Fall Subsistence Fisheries	USFWS					
04-101	Selawik River Inconnu Spawning Abundance	USFWS					

Project Number	Project Title	Investigators				
04-102	Selawik Refuge Whitefish Migration and Habitat Use	USFWS				
04-109	Wulik River Dolly Varden Wintering Stocks	USFWS, ADF&G				
04-157	Exploring Approaches to Sustainable Fisheries Harvest Assessment	ADF&G, MQ				
07-151	Northwest Alaska Subsistence Fish Harvest Patterns and Trends	ADF&G, MQ				
08-103	Kobuk River Sheefish Spawning and Run Timing	ADF&G, USFWS				
10-100	Selawik Drainage Sheefish Winter Movement Patterns	UAF, USGS, USFWS, NVK				
10-104	Hotham Inlet Kotzebue Winter Subsistence Sheetish Harvest	USFWS				
10-152	Climate Change and Subsistence Fisheries in Northwest Alaska	UAF				
12-100	Selawik River Sheefish Spawning Abundance and Age Structure	USFWS				
12-103	Kobuk River Sheefish Spawning Frequency, Location, and Run Timing	ADF&G, USFWS				
12-104	Noatak River Dolly Varden Evaluation of Overwintering Populations	ADF&G, NPS				
12-153	NW AK Key Subsistence Fisheries Harvest Monitoring Program	ADF&G, MQ				
14-104	Selawik R Inconnu Spawning Population Abundance	USFWS				
16-103	Kobuk River Dolly Varden Genetics	ADF&G, USFWS				
16-104	Selawik Sheefish Age Structure and Spawning Population	USFWS				
16-105	Kobuk River Sheefish Abundance	ADF&G				
18-101	Kobuk River Dolly Varden Genetic Diversity	ADF&G, USFWS				
20-101	Life-history Variability and Mixed-stock analysis of Dolly Varden in the Noatak River.	ADF&G				
20-150	Traditional Ecological Knowledge of Dolly Varden and whitefish species in Northwest Alaska	ADF&G				
22-101	Kotzebue Sound Sheefish – Describing Coastal Movement, Temperature Preference, and Potential Range Expansion	WCS				
22-104	Selawik River Inconnu Spawning Population Age Structure Evaluation and Spawner Recruitment Response to a 2004 Permafrost Thaw Slump	USFWS				
22-150	Traditional Ecological Knowledge of Salmon in the River Drainages of Kotzebue Sound	ADF&G				
Seward Peninsula						
01-224	Nome Sub-district Subsistence Salmon Survey	ADF&G, KI				
02-020	Pikmiktalik River Salmon Site Surveys and Enumeration	USFWS, NPS, STB, KI				
04-105	Pikmiktalik River Chum and Coho Salmon Enumeration	KI				
04-151	Customary Trade of Fish in the Seward Peninsula Area	ADF&G, KI				
05-101	Unalakleet River Coho Salmon Distribution and Abundance	ADF&G, NVU				
06-101	Pikmiktalik River Chum and Coho Salmon Enumeration	KI				
10-102	Unalakleet River Chinook Salmon Abundance Estimate	ADF&G, BLM, NSEDC				
10-151	Local Ecological Knowledge of Non-Salmon Fish in the Bering Strait	KI				
14-101	Unalakleet River Chinook Salmon Abundance Estimate	NSEDC,NVU ADF&G, BLM				
18-103	Unalakleet River Chinook Salmon Escapement Assessment	NSEDC,NVU ADF&G, BLM				

Project Number	Project Title	Investigators
20-100	Fish Assemblages and Genetic Stock Determination of Salmon in Bering Land Bridge National Preserve	NPS
22-103	Unalakleet River Chinook Salmon Escapement Assessment	ADF&G

Abbreviations used for investigators are: **ADF&G** = Alaska Department of Fish and Game, **AJ** = Anore Jones, **AKP** = City of Anaktuvuk Pass, **BLM** = Bureau of Land Management, **KI** = Kawarek Inc., **KIC** = Kaktovik Inupiat Corp., **MQ** = Maniilaq, **NSEDC** = Norton Sound Economic Development Corporation, **NVU** = Native Village of Unalakleet, **NSB** = North Slope Borough, **STB** = Stebbins IRA, **SWCA** = SWCA Environmental Consultants, **UAF** = University Alaska Fairbanks, **USFWS** = U.S. Fish and Wildlife Service, and **USGS** = U.S. Geological Survey.

# 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.

# Lower Kobuk Adult Moose Survival Study

Alaska Department of Fish and Game Joelle Hepler

#### **Background:**

Numbers of moose on the Kobuk River showed a steady decline from 2006 to 2017.

First, we looked at indicators of moose nutrition and calf mortality (2017-2021). We found no indicators of poor nutrition and calf mortality was similar to other populations with comparable densities.

#### Current study (look at next age group):

- Collar, weigh, and take measurements of up to 60 nine/ten-month-olds for 3 years (2023-2025).
  - 30 males and 30 females
- Measure annual survival for up to 7 years.
- Investigate causes of mortality.
- Conduct another browse survey.



10-month-old moose with a VHF collar on.

#### Spring 2023:

- Collared 46 ten-month-old moose and 2 two-year-olds (30 cows and 18 bulls).
- 4 animals died within a week of capture, these animals were in poor body condition, and we suspect lacked the reserves to survive until summer. Spring typically has the highest natural mortality as moose are coming out of winter.
- 4 other known mortalities throughout the summer.
  - 2 mortalities likely from brown bears, 1 from wolves, and 1 still has to be investigated.



Alaska	Department of Fish and Game Subsistence Division
	Review of Arctic Area Subsistence Division Projects
SA	Helen Cold ADF&G Subsistence Division
	Presentation to the Northwest Arctic RAC October 16-17, 2023











# Winter 2024 Regional Advisory Council Meeting Calendar

#### Last updated 5/2/2023

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	
					Mar. 1	Mar. 2	
Mar. 3	Mar. 4 Window Opens	Mar. 5	Mar. 6	Mar. 7	Mar. 8	Mar. 9	
		All F	All Regions Meeting (Anchorage)				
Mar. 10	Mar. 11	Mar. 12	Mar. 13	Mar. 14	Mar. 15	Mar. 16	
Mar. 17	Mar. 18	Mar. 19	Mar. 20	Mar. 21	Mar. 22	Mar. 23	
Mar. 24	Mar. 25	Mar. 26	Mar. 27	Mar. 28	Mar. 29 Window Closes	Mar. 30	

# Fall 2024 Regional Advisory Council Meeting Calendar

### Last updated 3/3/2023

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 <b>Window</b> <b>Opens</b>	Aug. 20	Aug. 21	Aug. 22	Aug. 23	Aug. 24
	NSRAC (	Utqiagvik)				
Aug. 25	Aug. 26	Aug. 27	Aug. 28	Aug. 29	Aug. 30	Aug. 31
Sep. 1	Sep. 2 <b>Labor</b> Day	Sep. 3	Sep. 4	Sep. 5	Sep. 6	Sep. 7
	Holiday		KA	RAC (Unalaska	ı)	
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
			WIRAC	(Aniak)		
Oct. 6	<i>Oct.</i> 7	<i>Oct.</i> 8	Oct. 9	Oct. 10	Oct. 11	Oct. 12
		EIRAC	(Tanana)	SCRAC (A	nchorage)	
Oct. 13	<i>Oct. 14</i> Columbus Day	Oct. 15	Oct. 16	Oct. 17	Oct. 18	Oct. 19
	Holiday		YKDRAC (Bethe	el)		
Oct. 20	Oct. 21	Oct. 22	Oct. 23	Oct. 24	Oct. 25	Oct. 26
				SPRAC	(Nome)	
		SE	EARAC (Ketchik	an)		
Oct. 27	Oct. 28	Oct. 29	Oct. 30	Oct. 31	Nov. 1 <b>Window</b> Closes	Nov. 2
		BBRAC (	Dillingham)			
	NWARAC	(Kotzebue)				



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

## Northwest Arctic Subsistence Regional Advisory Council

## Charter

- 1. **Committee's Official Designation.** The Council's official designation is the Northwest Arctic Subsistence Regional Advisory Council (Council).
- 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 three members to each of the Cape Krusenstern National Monument and the Kobuk Valley National Park Subsistence Resource Commissions and 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 \$150,000, including all direct and indirect expenses and 1.0 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.

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.

Alternate members may be appointed to the Council to fill vacancies if they occur out of cycle. An alternate member must be approved and appointed by the Secretary before attending the meeting as a representative. The term for an appointed alternate member will be the same as the term of the member whose vacancy is being filled.

Council members will elect a Chair, Vice-Chair, and Secretary for a 1-year term.

Members of the Council will serve without compensation. However, while away from their homes or regular places of business, Council and subcommittee members engaged in Council, or subcommittee business, approved by the DFO, may be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in Government service under Section 5703 of title 5 of the United States Code.

- **13.** Ethics Responsibilities of Members. No Council or subcommittee member will participate in any Council or subcommittee deliberations or votes relating to a specific party matter before the Department or its bureaus and offices including a lease, license, permit, contract, grant, claim, agreement, or litigation in which the member or the entity the member represents has a direct financial interest.
- 14. Subcommittees. Subject to the DFO's approval, subcommittees may be formed for the purpose of compiling information or conducting research. However, such subcommittees must act only under the direction of the DFO and must report their recommendations to the full Council for consideration. Subcommittees must not provide advice or work products directly to the Agency. Subcommittees will meet as necessary to accomplish their assignments, subject to the approval of the DFO and the availability of resources.
- **15. Recordkeeping.** The Records of the Council, and formally and informally established subcommittees or other subgroups of the Council, must be handled in accordance with General Records Schedule 6.2, and other approved Agency records disposition schedules. These records must be available for public inspection and copying, subject to the Freedom of Information Act (5 U.S.C. 552).

/signature on the field original/\_\_\_\_\_\_ Secretary of the Interior Dec. 10, 2021 Date Signed

Dec. 13, 2021 Date Filed



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