



Federal Subsistence Board Public Meeting

Meeting Materials - Volume I

*April 2-5, 2024
Anchorage, Alaska*



Volume I

Consensus Agenda Wildlife Proposals and Closure Reviews

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Cover Photo: Female Lynx by Lisa Hupp, USFWS.

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**FEDERAL SUBSISTENCE BOARD
PUBLIC MEETING AGENDA
April 2 – 5, 2024**

April 2, 2024: 1:30 p.m. to 5:00 p.m. (or until recessed)
April 3 - 5, 2024: 9:00 a.m. to 5:00 p.m. (or until recessed) daily
Lakefront Anchorage Hotel, 4800 Spenard Road
Anchorage, Alaska

A toll-free number will be shared on our website in advance of the meeting

On April 2, prior to the start of the Public Meeting, the Federal Subsistence Board will meet at 9:00 a.m. to conduct Tribal Government-to-Government and ANCSA Corporation consultations regarding proposals to change Federal subsistence management regulations for the harvest of wildlife on Federal Public lands and waters in Alaska. **The Public Meeting will begin at 1:30 p.m.**

Updates on the Board's progress through the agenda will be posted on the Federal Subsistence Management Program website at <https://www.doi.gov/subsistence/board/> and on Facebook at www.facebook.com/subsistencealaska.

Updates may also be received by calling (800) 478-1456 or (907) 786-3888.

Public Meeting

*** Asterisk denotes Action Item**

- 1. Call to Order and Welcome**
- 2. Review and Adopt Agenda***
- 3. Federal Subsistence Board Information Sharing Session**
- 4. Regional Advisory Council Chairs Discuss Topics of Concern with the Board**
- 5. Public Comment Period on Non-Agenda Items**
(This opportunity is available at the beginning of each day)
- 6. 2021–2023 Subparts C&D Proposals and Closure Reviews (Wildlife Regulations)**
 - a. Tribal Government-to-Government and ANCSA Corporation Consultation Summary
 - b. Announcement of Consensus Agenda *(see detailed agenda that follows)*
 - c. Public Comment Period on Consensus Agenda Items *(This opportunity is available at the beginning of each subsequent day prior to the final action)*
 - d. Board deliberation and action on Non-Consensus Agenda items*
(see detailed agenda that follows)

- e. Adoption of Consensus Agenda*

7. RFR22-01 Request for Reconsideration of Fisheries Proposal FP21-10 *

8. Delegation of Authority Letters* (*Requests to change existing letters*)

- a. Unit 6 Deer
- b. Units 17A & 17C Nushagak Caribou

9. Council Correspondence to the Board Update

10. Schedule of Upcoming Board Meetings*

- a. 2024 Summer Work Session and Executive Session (*Council Annual Report Replies & Council Appointment Recommendations*)
- b. 2025 Winter Public Meeting (*Fish and Shellfish Regulations – Date Options*)

11. Adjourn

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FEDERAL SUBSISTENCE BOARD
CONSENSUS AGENDA

The following proposals and closure reviews have been included on the consensus agenda. These are proposals and closure reviews for which there is agreement among Federal Subsistence Regional Advisory Councils, the Federal Interagency Staff Committee, and the Alaska Department of Fish and Game concerning Board action. Anyone may request that the Board remove a proposal or closure review from the consensus agenda and place it on the regular agenda. The Board retains final authority for removal of proposals and closure reviews from the consensus agenda. The Board will take final action on the consensus agenda after deliberation and decisions on all other proposals and closure reviews.

Proposal/Closure Review	Unit/Species	Recommendations	Page
WP24-07	Units 7, 14C / Furbearers	Oppose	1
WP24-08	Units 7, 15 / All	Support	11
WCR24-03	Unit 7 / Moose	Retain Status Quo	24
WCR24-41	Unit 6 / Moose	Rescind the Closure	41
WP24-10	Unit 8 / Brown Bear	Support	66
WP24-16 & 17	Unit 9E / Caribou	Support	86
WP24-18	Unit 17 / Caribou	Support	109
WP24-20	Unit 18 / Moose	Support	134
WP24-22	Unit 18 / Muskox	Support	163
WP24-23	Unit 18 / Muskox	Support	177
WP24-24	Unit 19 / All	Support with OSM Modification	193
WCR24-43	Unit 19 / Moose	Retain Status Quo	200
WP24-27	Units 22, 23 / Muskox	Support	218
WCR24-10	Unit 22 / Muskox	Retain Status Quo	268
WCR24-28	Unit 22 / Muskox	Retain Status Quo	280
WCR24-29	Unit 22 / Muskox	Retain Status Quo	305
WCR24-30	Unit 22 / Muskox	Retain Status Quo	319
WCR24-44	Unit 22 / Muskox	Retain Status Quo	330
WCR24-15	Unit 22 / Moose	Retain Status Quo	344
WCR24-19	Unit 23 / Muskox	Rescind the Closure	361
WCR24-35	Unit 12 / Caribou	Retain Status Quo	373
WCR24-42	Unit 12 / Caribou	Retain Status Quo	396
WP24-34	Unit 25D West / Moose	Withdrawn	NA
WP24-35	Unit 25D West / Moose	Withdrawn	NA

**FEDERAL SUBSISTENCE BOARD
NON-CONSENSUS AGENDA**

Procedure for considering proposals:

- Analysis (*Lead Author*)
- Summary of public comments (*OSM Staff*)
- Open floor to public testimony
- Tribal/Alaska Native Corporation comments (*Native Liaison*)
- Regional Advisory Council recommendation(s) (*Chair or designee*)
- Alaska Department of Fish and Game comments (*State Liaison*)
- Interagency Staff Committee comments (*ISC Chair*)
- Federal Subsistence Board discussion with Council Chairs and State Liaison
- Federal Subsistence Board action

Proposal/Closure Review	Region/Location/Species	Page
WP24-01	Statewide / Brown Bear	419
WP24-02/03	Unit 1C / Goat	448
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WP24-06	Unit 4 / Deer	782
WP24-09	Units 13A, 13B / Caribou	942
WP24-11	Unit 8 / Deer	Supplemental
WP24-12/13/14	Unit 9B / Moose	979
WP24-15	Unit 9C / Caribou	989
WCR24-04/06	Unit 9C & 9E / Caribou	1028
WP24-19	Unit 18 / Moose	1054
WCR24-38	Unit 18 / Moose	1071
WP24-21	Unit 18 / Moose	1083
WP24-25	Units 24A, 24B / Sheep	1115
WP24-26	Units 24A, 26B / Sheep	1136
WCR24-20	Unit 24 / Moose	1174
WP24-28	Units 21D, 22, 23, 24, 26A / Caribou	Supplemental
WP24-29	Unit 23 / Caribou	Supplemental

Proposal/Closure Review	Region/Location/Species	Page
WP24-30/31	Unit 23 / Caribou	1202
WP24-32	Units 12, 19, 20, 21, 24, 25 / Marten	Supplemental
WP24-33	Units 25B, 25C, 25D / Moose	1229
WP24-36	Unit 25A / Sheep	1250
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WP24-37/38	Unit 26C / Muskox	1304
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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 Cooper Landing</i>
Proposed Regulation	<p><i>§100.26(n)(7)(iii)(B) & §100.26(n)(14)(iii)(A)</i></p> <p><i>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.</i></p>
OSM Conclusion	Oppose Proposal WP24-07.
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	Oppose
Kodiak/Aleutians Subsistence Regional Advisory Council Recommendation	Oppose
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.
ADF&G Position	Neutral
Written Public Comments	None

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 (**Figure 1**).

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.

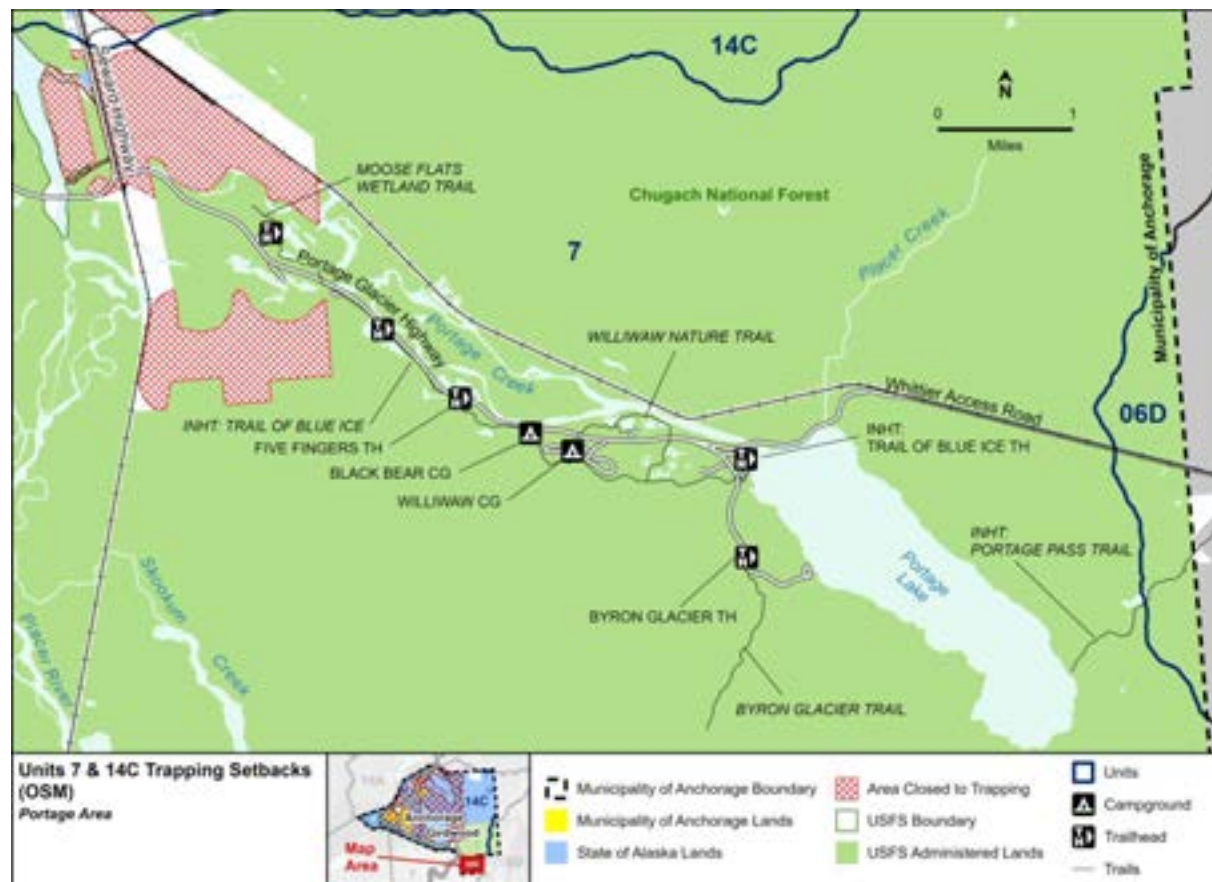


Figure 1. Map of trapping closed area in the Portage Valley area.

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 a trapper identification number or contact information of the 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 on 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.

Other Alternatives Considered

One alternative considered was to clarify in the Federal regulations booklet that municipal ordinances do not apply to federally qualified subsistence users hunting or trapping under Federal regulations. However, this action is not regulatory and can be accomplished administratively by Office of Subsistence Management staff.

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 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.

While this clarification is not needed in codified Federal regulations, it could be added to the Federal regulations booklet, which most users reference.

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.

Municipality of Anchorage. 2019. Assembly Agenda. Regular Meeting, May 07, 2019. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://meetings.muni.org/AgendaOnline/Documents/ViewDocument/Assembly_-_Regular_822_Agenda_Packet_5_7_2019_5_00_00_PM.pdf?meetingId=822&documentType=AgendaPacket&itemId=0&publishId=0&isSection=false. 480 pp. Retrieved May 18, 2023.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Oppose WP24-07. The Council recognized that Municipality of Anchorage regulations do not apply on Federal public lands and therefore, this proposal is unnecessary.

Kodiak/Aleutians Subsistence Regional Advisory Council

Oppose WP24-07. The Council was informed by OSM that this proposal was presented to them to comment on because it would affect all federally qualified subsistence users trapping under Federal Regulations. The Council had considerable discussion and questions for staff on this proposal. The Council agreed that clarification of these regulations in codified Federal Regulations would be important, but the Council recommended finding a way to provide outreach/education on the issue, improve the maps in regulation, and add clarification in the Federal Regulations booklet.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Draft Comments on WP24-xxx
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Alaska Department of Fish and Game Comments

Wildlife Proposal WP24-07

This proposal seeks to clarify that federally qualified users (FQU) are exempt from Municipality of Anchorage trapping closures on federal public lands in Units 7 and 14C.

Position

While the Alaska Department of Fish & Game (ADF&G) recognizes that municipal code has no authority over any other lands besides municipal land and thus putting something of this nature in regulation is not needed, we do **support** any effort the Office of Subsistence Management (OSM) can take to clarify this for trapping under federal regulations on federal public lands. An example of such measures would be to provide some form of statement in the federal regulation book.

Background

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 described as any land within 50 yards of developed trails and one-quarter mile of trailheads, campgrounds, and permanent dwellings. It also required anyone trapped within the municipal boundary to mark each trap with trapper identification number or contact information of trapper.

If this proposal is adopted, clarification would be provided in codified federal regulations that FQUs 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 FQUs taking fish or wildlife on federal public lands under federal regulations.

Impact on Subsistence Users

If adopted this proposal would clarify regulations for subsistence users.

Impact on Other Users

If adopted this proposal would not impact any other trappers' other users.

Opportunity Provided by State

Draft Comments on WP24-xx
1/31/2024, Page 1 of __

State customary and traditional use findings: The Alaska Board of Game (BOG) has made negative customary and traditional use findings for Units within the Anchorage-Matsu-Kenai Nonsubsistence area encompassing the areas described in this proposal.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the BOG to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

As Units 7 & 14C are within the state nonsubsistence area, no ANS can be established.

Conservation Issues

There are no conservation issues associated with this proposal.

Enforcement Issues

There are no enforcement issues associated with this proposal.

WP24-08 Executive Summary	
General Description	Wildlife Proposal WP24-08 requests to establish quarter mile trapping and hunting setbacks from wildlife crossing structures along the Sterling Highway. <i>Submitted by Alaska Wildlife Alliance.</i>
Proposed Regulation	<p>50 CFR 100.26(n)(7) <i>(ii) In the following areas, the taking of wildlife for subsistence uses is prohibited or restricted on public lands:</i></p> <p>(C) You may not hunt, trap, or take wildlife within a quarter mile of wildlife crossing structures along the Sterling Highway.</p> <p>50 CFR 100.26(n)(15) <i>(ii) In the following areas, the taking of wildlife for subsistence uses is prohibited or restricted on public lands:</i></p> <p>(A) You may not take wildlife, except for grouse, ptarmigan, and hares that may be taken only from October 1 through March 1 by bow and arrow only, in the Skilak Loop Management Area, which consists of that portion of Unit 15A bounded by a line beginning at the easternmost junction of the Sterling Highway and the Skilak Loop (milepost 76.3), then due south to the south bank of the Kenai River, then southerly along the south bank of the Kenai River to its confluence with Skilak Lake, then westerly along the northern shore of Skilak Lake to Lower Skilak Lake Campground, then northerly along the Lower Skilak Lake Campground Road and the Skilak Loop Road to its westernmost junction with the Sterling Highway, then easterly along the Sterling Highway to the point of beginning.</p> <p>(B) You may not hunt, trap, or take wildlife within a quarter mile of wildlife crossing structures along the Sterling Highway.</p>
OSM Conclusion	Support
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	Support

WP24-08 Executive Summary	
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.
ADF&G Position	Support
Written Public Comments	None

STAFF ANALYSIS WP24-08

ISSUES

Wildlife Proposal WP24-08, submitted by Alaska Wildlife Alliance, requests to establish quarter mile trapping and hunting setbacks from wildlife crossing structures along the Sterling Highway.

DISCUSSION

The proponent states that the Sterling Highway MP 45–60 Project contains plans for 5 wildlife crossing structures along the road (**Figure 1**). These structures are expected to reduce moose-vehicle collisions and to allow them and other wildlife species to move freely across the road. Monitoring of existing structures on the Kenai National Wildlife Refuge (KNWR) has shown current use by wildlife, with more use expected once trails have been established. If wildlife use were to increase, these structures would create an unnatural choke point where wildlife would be concentrated and more easily harvested. On the KNWR, hunting and trapping is currently prohibited around these structures through safety restrictions implemented through refuge specific regulations. However, without regulations prohibiting the taking of wildlife at the to-be-constructed crossings on lands managed by the U.S. Forest Service (USFS), these new structures meant to benefit wildlife may be targeted by those harvesting wildlife. The proponents submitted a similar State proposal 145, which the Alaska Board of Game (BOG) adopted at their March 2023 meeting.

Existing Federal Regulation

No existing Federal regulation.

Proposed Federal Regulation

50 CFR 100.26(n)(7)

(ii) In the following areas, the taking of wildlife for subsistence uses is prohibited or restricted on public lands:

(C) You may not hunt, trap, or take wildlife within a quarter mile of wildlife crossing structures along the Sterling Highway.

50 CFR 100.26(n)(15)

(ii) In the following areas, the taking of wildlife for subsistence uses is prohibited or restricted on public lands:

(C) *You may not take wildlife, except for grouse, ptarmigan, and hares that may be taken only from October 1 through March 1 by bow and arrow only, in the Skilak Loop Management Area, which consists of that portion of Unit 15A bounded by a line beginning at the easternmost junction of the Sterling Highway and the Skilak Loop (milepost 76.3), then due south to the south bank of the Kenai River, then southerly along the south bank of the Kenai River to its confluence with Skilak Lake, then westerly along the northern shore of Skilak Lake to Lower Skilak Lake Campground, then northerly along the Lower Skilak Lake Campground Road and the Skilak Loop Road to its westernmost junction with the Sterling Highway, then easterly along the Sterling Highway to the point of beginning.*

(D) *You may not hunt, trap, or take wildlife within a quarter mile of wildlife crossing structures along the Sterling Highway.*

Existing State Regulation

5 AAC 92.510(a)(8)

(F) all land within one-fourth mile of the two wildlife underpasses and one wildlife overpass on the Sterling Highway are closed to hunting;

5 AAC 92.510(a)(12)

(D) all land within one-fourth mile of the two wildlife underpasses on the Sterling Highway are closed to hunting;

5 AAC 92.550(4)

(E) all land within one-fourth mile of the two wildlife underpasses on the Sterling Highway are closed to trapping;

5 AAC 92.550(9)

(A) all land within one-fourth mile of the two wildlife underpasses and one wildlife overpass on the Sterling Highway are closed to trapping;

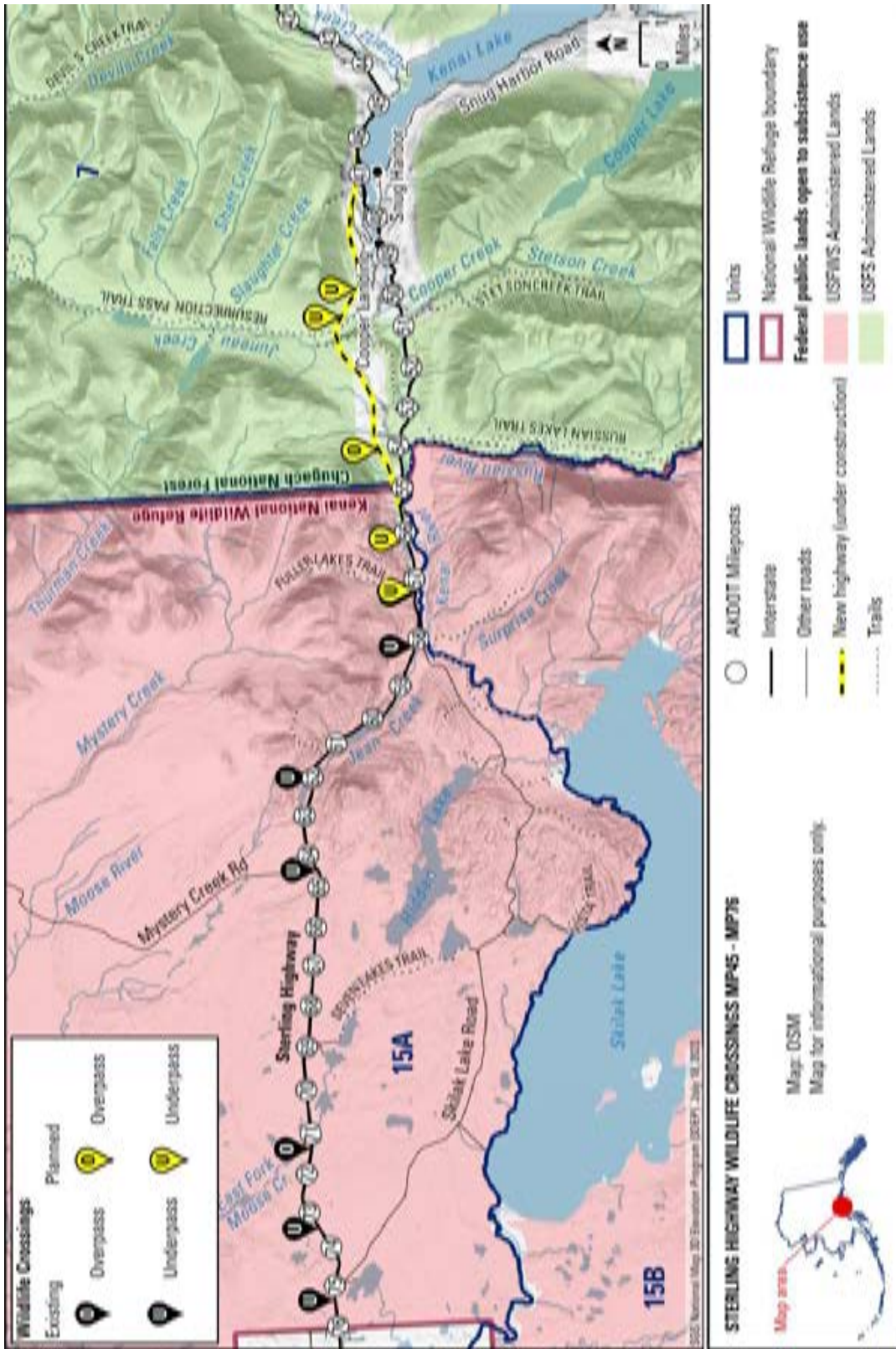


Figure 1. Map showing locations of wildlife crossing structures along the west end of the Sterling Highway project.

Extent of Federal Public Lands/Waters

Unit 7 is comprised of 77% Federal public lands and consists of 52% USFS managed lands, 23% National Park Service (NPS) managed lands, and 2% U.S. Fish and Wildlife Service (USFWS) managed lands.

Unit 15A is comprised of 58% Federal public lands and consists of 57% USFWS and 1% USFS managed lands.

Customary and Traditional Use Determinations

Residents of Cooper Landing, Hope, and Moose Pass have a customary and traditional use determination (C&T) for caribou in Unit 7. Residents of Port Graham and Nanwalek have C&T for goats in Unit 7, Brown Mountain hunt area. Residents of Chenega Bay, Cooper Landing, Hope, Moose Pass, Nanwalek, Ninilchik, Port Graham, Seldovia, and Tatitlek have C&T for goat in Unit 7, remainder. Residents of Chenega Bay, Cooper Landing, Hope, Moose Pass, and Tatitlek have C&T for moose in Unit 7. Residents of Cooper Landing and Moose Pass have C&T for sheep in Unit 7.

Residents of Ninilchik have C&T for black bear in Unit 15A and 15B and for brown bear in Unit 15. Residents of Cooper Landing, Hope, Moose Pass, Nanwalek, Ninilchik, Port Graham, and Seldovia have C&T for goat in Units 15A and 15B. Residents of Cooper Landing, Ninilchik, Moose Pass, Nanwalek, Port Graham, and Seldovia have C&T for moose in Units 15A and 15B. Residents of Cooper Landing and Ninilchik have C&T for sheep in Units 15A and 15B. All rural residents of Unit 15 have C&T for ptarmigan and spruce grouse in Unit 15.

Regulatory History

In 2015, the 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 ¼ 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 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 Federal Subsistence Board (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 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 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 on 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 it on the consensus agenda.

In March 2022, the BOG considered deferred Proposal 199 at their 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 March 2023, at the Southcentral Region BOG meeting in Soldotna, the BOG considered numerous trap setback proposals. The BOG adopted amended Proposal 145, submitted by the Alaska Wildlife Alliance, making it illegal to hunt, trap, and take game within a quarter mile of wildlife crossing structures along the Sterling Highway. The BOG felt that as more of these structures are installed statewide there needed to be protection in place to keep the unintentional choke point that is created from being targeted by hunters. The amendment to the proposal prohibited the take of game within the buffer zone by anyone outside of the buffer zone.

KNWR requires special conditions be followed while trapping on the refuge. One such condition prohibits most trapping within one mile of any public road. This is in effect along the Sterling Highway at the existing wildlife structures located within the NWR boundary. However, this condition does allow for use of smaller traps to target species such as mink and muskrat. Trapping of these two species is currently allowed in and around the wildlife structures (Eskelin 2023, pers. comm.).

Current Events Involving the Species

The two wildlife crossing structures at mileposts 57.2 and 56.3 have already been completed. The other three structures are still under construction with an anticipated completion date of 2024 (ADOT&PF 2023).

Alternatives Considered

Another alternative to consider is to expand the language of this proposal to cover wildlife crossing structures along all public roadways in Units 7 and 15, not just the Sterling Highway. But as there are currently no other existing or planned wildlife crossing structures in these units, this would only cover future structures if there are any built. This alternative could be expanded even further and make protection of wildlife crossing structures a statewide regulation and therefore cover any wildlife crossing structures that may be constructed within the state of Alaska in the future. However, OSM did not further consider this alternative as it is beyond the scope of the proposal.

Effects of the Proposal

If this proposal is adopted, Federal public lands within a quarter mile of wildlife crossing structures in Units 7 and 15 would be closed to the Federal subsistence hunting, trapping, and take of wildlife. This change would align Federal regulations with State regulations, reducing regulatory complexity and confusion. Adopting this proposal is not expected to have any negative impacts on wildlife populations in the area. Rather, it could benefit wildlife populations by facilitating their use of these crossing structures in the absence of hunting and trapping pressure.

Establishment of these closures would slightly reduce subsistence opportunity as the ability to target mink and muskrat within a quarter mile of the wildlife crossing structures would cease on Kenai NWR lands. However, adopting this proposal would also mitigate safety concerns associated with wildlife-vehicle collisions as well as hunting and trapping near a busy highway.

OSM CONCLUSION

Support Proposal WP24-08.

Justification

If wildlife movement is funneled toward and concentrated around these wildlife crossing structures, any trapping or hunting effort in the vicinity may have an undue impact on the wildlife and could also create public safety concerns. Adopting this proposal will mitigate public safety concerns and reduce regulatory complexity and confusion by aligning Federal and State regulations regarding take adjacent to wildlife crossing structures.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Support WP24-08. The Council supported the proposal, but expressed concern that a setback of $\frac{1}{4}$ mile was more restrictive than needed. However, they additionally noted that there was little objection to that distance at the Alaska Board of Game meeting where a similar proposal was approved, and that the regulation could be reviewed again and modified in the future if needed.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Draft Comments on WP24-xx
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Alaska Department of Fish and Game Comments

Wildlife Proposal WP24-08

This proposal would establish quarter mile trapping and hunting setbacks from wildlife crossing structures along the Sterling Highway.

Position

ADF&G **SUPPORTS** this proposal. The Alaska Board of Game (BOG) has already passed regulations similar to this proposal and providing commensurate closures would be beneficial to the protection of those species utilizing these wildlife crossing structures.

Background

The Alaska Board of Game has imposed area specific hunting and trapping closures when it has been found to be in the best interest of game management. Additionally, municipalities and land holders have imposed restrictions on hunting and trapping specific to non-state lands.

In March 2023, at the Southcentral Region meeting in Soldotna, the BOG considered numerous trap setback proposals. They adopted an amended Proposal 145 making it illegal to hunt, trap, and take game within a quarter mile of wildlife crossings along the Sterling Highway adding sections or paragraphs to the following administrative code sections which are in italics below.

5 AAC 92.510. Areas closed to hunting.

(F) all lands within one-fourth mile of the two wildlife underpasses and one wildlife overpass on the Sterling Highway are closed to hunting;

5 AAC 92.510. Areas closed to hunting.

(D) all land within one-fourth mile of the two wildlife underpasses on the Sterling Highway are closed to hunting;

5 AAC 92.550. Areas closed to trapping.

(E) all land within one-fourth mile of the two wildlife underpasses on the Sterling Highway are closed to trapping;

(9) Unit 7:

(A) all and within one-fourth mile of the two wildlife underpasses and one wildlife overpass on the Sterling Highway are closed to trapping;

Proposal 145, amended and passed by the BOG, described "closing all lands within ¼ mile of the five wildlife structures (including the structures themselves) [to hunting and trapping] being created as part of the Sterling Highway MP 45-60 Project: two underpasses and one overpass in Unit 7 and two underpasses in Game Management Unit (Unit) 15A."

Draft Comments on WP24-xx
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It is important to note that Proposal 145 as written described current and *future* structures which may or not have come to pass. At present the Kenai National Wildlife Refuge (KNWR) describes eight crossing structures on their land in 15A (KNWR personal communication) of varying size ranging from oversized culverts to the East Fork of the Moose River bridge. These are already in existence and below are those labels and mileposts. In the Office of Subsistence Management (OSM) analysis, it only includes those at MP 57.2 and 56.3, but should also include:

1. West Skilak Entrance-76
2. Lily Lake-74
3. East Fork of the Moose-71.5
4. Mystery Creek-65
5. Jean Creek-62
6. East Skilak Entrance-58
7. Fuller Creek-57.2
8. Easternmost Crossing-56.3

Impact on Subsistence Users

If adopted federally qualified users would have a very slight restriction to the amount of land to hunt and trap.

Impact on Other Users

If adopted this regulation would not have any impact on other users as the BOG has already passed a similar restriction.

Opportunity Provided by State

State customary and traditional use findings: The Alaska Board of Game has made negative customary and traditional use findings for Units within the Anchorage-Matsu-Kenai Nonsubsistence Area encompassing the areas described in this proposal.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the BOG to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

As Unit 7 is within a state nonsubsistence area, no ANS can be established.

Draft Comments on WP24-xx
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Conservation Issues

There are no conservation issues associated with this proposal.

Enforcement Issues

This proposal may potentially ease enforcement issues by aligning state and federal regulations.

WCR24-03 Executive Summary	
General Description	Wildlife Closure Review WCR24-03 reviews the moose hunting closure, except by residents of Chenega and Tatitlek in the portion of Unit 7 draining into Kings Bay.
Current Regulation	<p style="text-align: center;">Unit 7–Moose</p> <p style="text-align: center;"><i>Unit 7, that portion draining into Kings Bay - Federal public lands are closed to the taking of moose except by residents of Chenega Bay and Tatitlek</i></p> <p style="text-align: right;"><i>No open season.</i></p>
OSM Conclusion	Retain the status quo
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	Retain the status quo
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	Retain the status quo
Written Public Comments	None

FEDERAL WILDLIFE CLOSURE REVIEW

WCR24-03

Issue: Wildlife Closure Review WCR24-03 reviews the moose hunting closure, except by residents of Chenega and Tatitlek in the portion of Unit 7 draining into Kings Bay.

Closure Location and Species: Unit 7, draining into Kings Bay—Moose (**Figure 1**)

Current Federal Regulation

Unit 7–Moose

Unit 7, that portion draining into Kings Bay - Federal public lands are closed to the taking of moose except by residents of Chenega Bay and Tatitlek

No open season.

Closure Dates: Year-round

Current State Regulation

Unit 7–Moose

Residents and Nonresidents: Unit 7, remainder – One bull with a spike on at least one side or 50-inch antlers or antlers with 3 or more brow tines on at least one side

*Sept 1-
Sept 25*

Regulatory Year Initiated: In 1997, the Federal season was established for residents of Tatitlek and Chenega, but Federal lands were closed to non-Federally qualified users; then in 2006, the Federal Subsistence Board (Board) closed the Kings Bay hunt area to all users.

Extent of Federal Public Lands/Waters: Unit 7 is comprised of 77% Federal public lands and consists of 52% U.S. Forest Service (USFS), 23% National Park Service (NPS) and 2% U.S. Fish and Wildlife Service (USFWS) managed lands.

That portion of Unit 7 draining into Kings Bay is comprised of 81.9% Federal public lands and consists of 100% USFS managed lands (**Figure 1**).

Customary and Traditional Use Determination: Rural residents of Chenega, Cooper Landing, Hope, Moose Pass and Tatitlek have a customary and traditional use determination for moose in Unit 7.



Figure 1. Location of closure in Kings Bay drainage area.

Regulatory History

In 1997, the Federal Subsistence Board (Board) adopted proposal P97-18b, which established a customary and traditional use determination for moose in the Kings Bay drainage area of Unit 7 to include the residents of Chenega and Tatitlek (**Figure 1**) (OSM 1997a). At the same meeting, the Board adopted proposal P97-21 with modification to create a moose hunt with a harvest limit of one bull with spike-fork or 50-inch antlers or 3 or more brow tines on either antler from Aug. 10–Sep. 20 with a harvest quota of one moose per community for residents of Chenega and Tatitlek and closed Federal public lands to all other users (OSM 1997b).

In 2001, the Board approved Wildlife Special Action WSA01-02, which closed the moose season in the Kings Bay drainage area of Unit 7 to all users (OSM 2001). The Board determined that the moose population was too small to support a harvest. The special action was in effect for one regulatory year as there was no subsequent proposal to continue the closure. Therefore, the original Aug.10–Sep. 20 season was reinstated starting with the 2002 season.

In 2006, Wildlife Proposal WP06-16 requested to change the moose season from Aug. 10–Sep. 20 to Aug.10–Feb. 28 and to change the harvest limit from one bull with spike-fork or 50-inch antlers or 3 or more brow tines on either antler to one moose (OSM 2006). Wildlife Proposal WP06-17 requested the Federal lands closure in Unit 7, that portion draining into Kings Bay, be eliminated. At the March 2006 Southcentral Alaska Subsistence Regional Advisory Council (Council) meeting, the Council discussed changing the Kings Bay drainage moose harvest limit and season and removing the Federal closure.

The Council voted to support WP06-16 with modification to change the harvest limit to one bull, add a permit with a 7-day reporting requirement, change the season dates to Sep. 1–Dec. 31, and retain the closure of Federal public lands to non-Federally qualified users. The Council suggested the season change to accommodate a winter harvest but added a restriction of one bull harvest and recommended retaining the Federal closure to non-Federally qualified users because the Council was concerned about the small population of moose in the area. Subsequently, the Board closed the Federal moose season and Federal public lands in this portion of Unit 7 to the hunting of moose by all users due to conservation concerns at its May 2006 meeting.

The Board adopted WP08-22a in 2008 giving C&T for moose in Unit 7 to residents of Cooper Landing. This determination was for all of Unit 7, including the Kings Bay drainage area.

In 2010, the Council voted to maintain the status quo and continue the closure to all users for the conservation of a healthy population. The analysis for Wildlife Closure Review WCR10-03 found the moose population was at a low density and there were no indications of any population increases to justify subsistence or non-subsistence harvest (OSM 2010). Also in 2010, the Board adopted proposal WP10-33 which gave C&T for moose in Unit 7 to residents of Hope and Sunrise.

In 2012, the Board rejected Wildlife Proposal WP12-29, which requested a moose season be established in Unit 7 for that portion draining into Kings Bay, due to conservation concerns (OSM 2012).

In 2014, the Board adopted Wildlife Proposal WP14-11 with modification to allow residents of Chenega and Tatitlek to harvest moose in this portion of Unit 7 once the closure is lifted (OSM 2014). Therefore, Federal public lands were closed to the taking of moose, except by residents of Chenega and Tatitlek; however, the Federal season remained closed. The Board decided to maintain the closure based on the results of the 2014 moose survey. But the Board believed that if the two communities harvested one moose each, every four years it would have little impact on the population once the conservation concern is over and the closure has been lifted.

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

In 2020, the Board voted to maintain status quo on Wildlife Closure Review WCR20-03 because there was little information about the status of the population in the Kings Bay hunt area. The most recent survey conducted by ADF&G at the time did not observe any moose. The Council recommended to maintain the closure as well.

Closure last reviewed: 2020 – WCR20-03

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 adopted Proposal P97-21 with modification to establish a Federal season for moose in the Kings Bay hunt area. This proposal also closed Federal public lands to non-Federally qualified users to protect this small moose population (OSM 1997b). Due to conservation concerns, the Board closed the Federal season and closed Federal public lands to all users in 2006.

Council Recommendation for Original Closure:

The Council supported Proposal P97-21 with modification to establish an Aug. 20–Sep. 30 season over a Sep. 1–Dec. 31 season, implement antler restrictions and limit harvest to one bull each for the communities of Chenega and Tatitlek. The Council also recommended that the Board limit the Federal lands closure to the 1997/98 regulatory year with reauthorization to occur on an annual basis (FSB 1997). The Board adopted the proposal with modification, changing the dates of the season from Sep. 1–Dec. 31 to Aug 10–Sep 20 to avoid adverse impacts from the season extending into the rut.

State Recommendation for Original Closure:

The Alaska Department of Fish and Game (ADF&G) did not support the original closure. ADF&G supported a 1996 special action that created a temporary closure in the affected area but did not support adopting a permanent Federal lands closure beyond the 1997/98 regulatory year. ADF&G stated that a permanent closure of this area to all but Federally qualified subsistence users was not necessary. They did not support the area description for the hunt because it applied to the entire Kings and Nellie Juan river systems draining into Kings Bay. The State was concerned that Alaska residents who fly into Nellie Juan Lake in the fall to fish for grayling and hunt for moose and black bear would not be able to hunt if Proposal P97-21 was adopted (OSM 1997b). ADF&G preferred a modification of the closure area to the lower three miles of the Nellie Juan River and the public lands of Kings River draining into Kings Bay (FSB 1997).

Biological Background

The amount of moose habitat in the Kings Bay area is small and consists of narrow riparian areas along the Kings and Nellie Juan rivers. Informal habitat evaluations by the USFS in Kings Bay occurred in September 2019 and as expected found that moose habitat was limited. Browse species were mostly confined to the forest/tideland interface of the Nellie Juan and Kings River delta, as well as inactive stream channels, gravel bars, and the banks of active stream channels. The most concentrated moose sign, consisting of moose droppings, beds, and evidence of browsing, was seen in a boggy meadow (USFS 2019). The small area of moose habitat at Kings Bay is isolated with only one accessible route

for moose to enter the area across the mountains from Paradise Lakes or the Nellie Juan Lake areas and then down the Nellie Juan River—15 to 20 miles over difficult terrain. Interchange of moose with other areas is therefore likely minimal. Severe winters with deep snow are common in this area and probably contribute to a high mortality rate and the relatively low moose densities (McDonough 2010).

A comprehensive moose survey has never been conducted in Unit 7 (Herreman 2012, 2018). Aerial surveys in the vicinity of Kings Bay in Unit 7 were conducted 1996–2002, 2005, and 2014 (**Table 1**). An aerial survey conducted by ADF&G in January 1997 revealed a minimum of 20 moose in the area, consisting of 8 bulls, 10 cows, and 2 calves. The drainages of the Nellie Juan and Kings rivers were flown in March 2001 by ADF&G, from Nellie Juan Lake downstream to the head of Kings Bay and up the Kings River to the glacial headwaters. Nine moose were counted during the survey in conditions characterized as being excellent for aerial surveying (Spraker 2001, OSM 2005).

A moose index survey was flown in 2006 by ADF&G. A total of 5 moose were observed. Two were seen south of the Nellie Juan River confluence with Kings Bay and two were seen in the area between the Nellie Juan River and Kings rivers (Zemke 2006, pers. comm.). One bull moose was observed upstream in the Kings River watershed (Zemke 2006 pers. comm., OSM 2018). No calves were observed in the area. The surveyors stated that, although additional moose could be present in this heavily timbered steep country, they were relatively certain there were a very limited number of moose in the area during the survey period. The number of moose in this area during the fall would be hard to predict from this late spring survey as some moose may have migrated out of the area before heavy winter snowfall. No moose were observed in the Kings Bay drainage portion of Unit 7 during the 2014 survey conducted by the U.S. Forest Service and ADF&G (Burcham 2018). USFS biologists surveyed the Kings Bay area with trail cameras in 2019. No moose were observed on the cameras, although they did photograph bears, coyotes, and wolves (USFS 2019).

Black bears occur in high densities in western Prince William Sound (Crowley 2002), and brown bears are regularly present in the Kings Bay area as well. These two predators may elevate the importance of safe calving habitat, which appears to be limited. Productivity and viability of this small group of moose, therefore, is marginal. The restricted area used by moose in the Kings Bay area makes them vulnerable to hunters who walk up the river valley or use authorized motorized access.

Table 1. Population data from moose surveys conducted in Unit 7 in the vicinity of Nellie Juan River and Kings River which drain into Kings Bay from 1996 to 2015 (Herreman 2012, 2018).

Year	Number of Bulls	Number of Cows	Number of Calves	Total Moose	Bulls:100 Cows	Calves:100 Cows	% Calves
1996/1997	8	10	2	20	80	20	10
1997/1998	0	1	1	15 ^a	-	100	6.7
1999/2000	-	-	-	7 ^b	-	-	-
2000/2001	3	3	3	9	100	100	33.3
2001/2002	4	7	1	12	57	14	8.3
2005/2006	1	-	0	5 ^c	20 ^d	-	-
2014/2015	0	0	0	0	0	0	0
Mean	2.7	4.2	1.2	9.7			

^a Age and sex data not recorded for 14 adult moose

^b Age and sex not recorded during survey

^c Age and sex not recorded for 4 moose

^d Minimum count

Cultural Knowledge and Traditional Practices

The subsistence practices of the rural residents of Chenega and Tatitlek reflect the cultural traditions of the Tanimiut/Chenega people and the Taatilaq/Tatitlek, as well as Russian and American settlers (Stratton and Chisum 1986, Stratton 1990, Tatitlek Corporation 2019, Chenega Corporation 2022). The Tanimiut and the Taatilaq are both part of the Alutiiq tribal family and have lived in the Prince William Sound area for approximately 10,000 years (Tatitlek Corporation 2019, Chenega Corporation 2022). Subsistence practices in Chenega and Tatitlek have been, and continue to be, based primarily on the harvesting of marine resources (Stratton and Chisum 1986, Stratton 1990, Tatitlek Corporation 2019, Chenega Corporation 2022). Deer have also become important to local subsistence economies since being introduced to the area in 1916 (Stratton and Chisum 1986). Likewise, historical accounts and archaeological evidence indicate that goat and bear hunting has also been common in the area, serving as particularly important subsistence resources in the fall and winter seasons (Stratton and Chisum 1986, Stratton 1990). Moose have also been hunted where available (Stratton and Chisum 1986). Moose were transplanted to the Copper River Delta between 1949 and 1959, while a relatively smaller population of moose are indigenous to the Western Prince William Sound area near Kings Bay and the Nellie Juan River (Stratton 1990).

According to the recollections of several hunters from Chenega and Tatitlek, Kings Bay has been used for moose hunting by residents of these two communities since at least the 1960s (Stratton and Chisum 1986, Stratton 1990). Opportunistic and planned moose harvests have often taken place in the Kings Bay area, as a complementary activity to commercial fishing and seal or goat hunting. Kings Bay provides the closest moose population to Chenega, and Chenega residents reported hunting moose at Kings Bay in conjunction with goat hunting and/or commercial fishing activities (Stratton and Chisum 1986). Similarly, Tatitlek hunters remembered first encountering moose while on a goat hunt in the Kings Bay area in the mid-1900s (Stratton 1990). Tatitlek hunters have returned to hunt moose in the

Kings Bay area since this time (Stratton 1990). ADF&G has conducted numerous subsistence studies at Chenega and Tatitlek since the 1980s (Stratton and Chisum 1986, Stratton 1990, Fall 1991a, Fall 1991b, Simeone and Miraglia 2000, Keating et al. 2020). Many of these studies have noted that while moose harvests are not as common as other subsistence harvests, Kings Bay has been an important site for the moose hunting that does occur in the area. At an SCRAC meeting in 1997, Council member Donald Kompkoff spoke on behalf of Chenega and Tatitlek, noting that “several elders in Chenega...hunted goat over in Day Harbor and sometimes they’d get luck and get a moose going out in springtime” (SCRAC 1997: 16). Mr. Kompkoff also noted that “on Kings Bay, they have several moose hunts over there... We hunted in there [Kings Bay] and have hunted about seven moose taken from there from Chenega” (SCRAC 1997: 16). Mr. Kompkoff explained that, on average, residents of Chenega, Tatitlek, and Cordova had harvested roughly one moose per year in the Kings Bay area since 1983 (SCRAC 1997).

Chenega and Tatitlek households have historically harvested a variety of wild resources that continue to be key sources of subsistence in these communities (Stratton and Chisum 1986, Stratton 2000, Keating et al. 2020). Marine mammals and salmon have traditionally composed the bulk of local diets in Chenega and Tatitlek. However, there does appear to be a trend over time toward decreased harvests of marine mammals and increased reliance upon salmon and non-salmon fish at Chenega (see **Table 2**). More specific information about the average amount and composition of subsistence harvests in Chenega and Tatitlek can be found in **Tables 2 and 3** below.

Land mammal and marine resource harvests have primarily been accomplished through planned, seasonal trips by residents at Chenega and Tatitlek (Stratton and Chisum 1986; Stratton 1990). These harvests have traditionally taken place in the waters, coastline, and uplands near each community. Chenega residents have a long history of engaging in subsistence harvests in places such as Dangerous Passage, Ewan Bay, Paddy Bay, Jackpot Bay, Knight Island, and Bainbridge Island (Stratton and Chisum 1986). Kiniklit, Shuqlurmiut, and Atyarmiut, and Alukarmiut are areas that have been extensively used by Tatitlek hunters (Stratton 1990). Deer and marine mammals are the primary species that hunters would travel long distances to acquire, hunting in areas of Perry Island, Blackstone Bay, Kings Bay, Eaglek Bay, and Wells Bay (Stratton and Chisum 1986; Stratton 1990). Over time, Chenega and Tatitlek residents have come to use some of the same resource harvest areas as a result of the many interrelationships between the two communities (Stratton and Chisum 1986, Stratton 1990).

Harvested resources are typically shared within each community, and often between community members in nearby settlements (Stratton and Chisum 1986). The prevalence of resource sharing at Chenega and Tatitlek has long been linked to the interrelatedness of community households and the cultural values attached to reciprocity (Stratton 1990, also Stratton and Chisum 1986). Harvested game meat and fish have traditionally been preserved through drying, smoking, salting, pickling, or fermenting processes (Stratton and Chisum 1986). Freezing has also become widespread with the expansion of electrical services to Prince William Sound communities (Stratton and Chisum 1986; Stratton 1990).

Today, Chenega is home to approximately 65 people and Tatitlek is home to 81 (State of Alaska 2021a, 2021b). The median yearly household income between 2016 and 2020 was \$73,125 in Chenega and \$64,375 in Tatitlek (State of Alaska 2021a, 2021b). The mean household income for 2020 was \$70,892 in Chenega, and \$66,409 in Tatitlek (US Census 2020a, US Census 2020b). However, Chenega and Tatitlek are not as heavily engaged in commercial fishing as they were before the Exxon Valdez oil spill (Jones and Mitchell 2016, Ream and Mitchell 2016). The service industry and local and tribal government operations have become key employment sectors in recent years (Jones and Mitchell 2016, Ream and Mitchell 2016). Construction, retail trade, and agriculture, forestry, and fishing are also important industries in the area (Jones and Mitchell 2016, Ream and Mitchell 2016). Year-round or seasonal employment in these industries is combined with the maintenance of more traditional subsistence harvest activities that remain very important both economically and culturally in these communities (Jones and Mitchell 2016, Ream and Mitchell 2016).

Table 2. Composition of subsistence harvests by weight at Chenega from the 1960s to 2014 (ADF&G Chenega 1984, 1985, 1989, 1990, 1991, 1992, 1993, 1997, 2003, 2014, Stratton and Chisum 1986).

Chenega	Average Total Harvest per Household (lbs.)	Marine Mammals	Salmon	Non-Salmon Fish	Land Mammals	Moose
1960s	7,284	67%	18%	3.50%	8%	2%
1984	1,127	47%	20%	9%	20%	3%
1985	1,336	38%	21%	17%	21%	3%
1989	519	2%	63%	18%	14%	0%
1990	502	21%	27%	18%	28%	0%
1991	1,266	6%	40%	9%	12%	0%
1992	1,441	6%	45%	26%	17%	0%
1993	993	13%	40%	32%	7%	0%
1997	1,615	3%	39%	37%	16%	4%
2003	1,324	10%	48%	25%	11%	3%
2014	531	0%	50%	21%	15%	8%

Table 3. Composition of subsistence harvests by weight at Tatitlek from 1987 to 2014 (ADF&G Tatitlek 1987, 1988, 1989, 1990, 1991, 1993, 1997, 2003, 2014, Stratton 1990).

Tatitlek	Average Total Harvest per Household (lbs.)	Marine Mammals	Salmon	Non-Salmon Fish	Land Mammals	Moose
1987	1,410	21%	23%	23%	24%	2%
1988	2,329	20%	41%	14%	14%	0%
1989	850	23%	45%	8%	21%	0%
1990	674	16%	39%	26%	11%	0%
1991	1,384	14%	43%	26%	12%	0%
1993	932	18%	39%	14%	19%	0%
1997	1,219	18%	39%	14%	19%	0%
2003	788	41%	23%	16%	11%	0%
2014	811	35%	29%	27%	7%	0%

Harvest History

Harvest data indicate that no moose were reported harvested from this area from 1997–2021 under Federal regulations (OSM 2022). In 2001, some hunting occurred from the village of Tatitlek with no success (Vlasoff 2001, OSM 2005). The hunters of Chenega informally discussed this hunt in 2001, concluding that they knew of no one from Chenega that had hunted moose in the Kings Bay area in recent years (Robertson 2001, pers. comm.; OSM 2005). Records indicate there has been no moose harvest under Federal regulations in the Kings Bay area (OSM 2022). Federally qualified subsistence use of the Kings Bay hunt area is assumed to be low. No records indicate much use of the area, and there are no harvest records to indicate otherwise.

No moose harvest has occurred on the Federal public lands in the Kings Bay hunt area under State regulations since 1997 when Federal public lands were closed, except by residents of Chenega and Tatitlek. Since 2006, no legal moose harvest has occurred at all on the Federal public lands in this hunt area since the Federal season closed and Federal public lands remain closed, preventing hunting under State regulations. As Federal public lands comprise over 80% of this hunt area and moose numbers are extremely low, very little harvest under State regulations on State-managed lands likely occurs. However, as the State hunt occurs by harvest ticket within a much larger hunt area, exact harvest numbers are unknown.

Effects

If the closure were retained, no changes to this hunt would occur. Anyone hunting under State regulations could only hunt moose on the non-Federal lands within the closure area. The small moose population that currently exists in the area would remain protected from overharvest, especially because all Federal lands are closed and there has been no legal moose harvest under Federal regulations in this area since 2006.

The current closure could be partially rescinded to open to all Federally qualified subsistence users with C&T for the Kings Bay area. However, as the Federal season is currently closed, this would not result in any increased hunting opportunity or harvest; a proposal would need to be submitted to establish a Federal season.

If the closure were completely rescinded and Federal public lands opened to all users, Federally qualified subsistence users could not hunt under Federal regulations unless the Board opens a Federal moose season. However, hunting of moose in this area could occur under State regulations, which may result in unsustainable harvest.

OSM CONCLUSION

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

Justification

There is little recent information on the status of the moose population in this area. Based on the most recent survey results, the moose population has been at a low density and there are no indications that there have been any increases in the moose population. Interchange of moose with other areas is likely minimal due to the difficult terrain. Therefore, the continuation of the current closure to moose hunting is necessary for the conservation of the wildlife resource.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Retain the status quo on WCR24-03. The Council voted to maintain the closure due to lack of data and conservation concerns, but strongly encouraged additional surveys in the area.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

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Alaska Department of Fish and Game Comments

Wildlife Closure WCR24-03

This is the routine review of the closure to non-federally qualified users (NFQU) and federally qualified users (FQU), except for those residents of Chenega Bay and Tatilek, for that portion of Unit 7 that drains into Kings Bay which excludes all moose hunters from federal public lands.

Position

The Alaska Department of Fish & Game (ADF&G) **SUPPORTS** the closure remaining in place until such a time that significant habitat changes occur and a rise in the moose population can be documented. At such time, the area should be open to moose hunting for all users.

Background

Moose harvest in the Kings Bay region was originally closed to all users on federal public lands in 2006 due to conservation concerns. In 2014, the Federal Subsistence Board (FSB) modified the closure to allow residents of Chenega Bay and Tatitlek to harvest moose in this area. Moose surveys are not regularly conducted in this area and no habitat changes are known to have occurred that would positively affect moose population levels since the closure was enacted. ADF&G has no information that suggests moose numbers have increased in this area.

Impact on Subsistence Users

If this closure remains in place those hunters not residing in Chenega Bay and Tatilek will continue to be excluded from moose hunting in this area.

Impact on Other Users

If this closure remains in place those hunters not residing in Chenega Bay and Tatilek will continue to be excluded from moose hunting in this area.

Opportunity Provided by State

State customary and traditional use findings: Although the Alaska Board of Game (BOG) has made a positive customary and traditional use finding for moose in Units 7 & 15(C) outside the Anchorage-Matsu-Kenai Nonsubsistence Area, all of Unit 7, including the Kings Bay region, is within the nonsubsistence area.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the BOG to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

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ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

As Unit 7 is within the state nonsubsistence area, no ANS can be established. The season and bag limit for Unit 7 is:

Unit/Area	Bag Limit	Open Season (Permit/Hunt #)	
		Resident*	Nonresident
Unit 7 remainder	One bull with a spike on at least one side or 50 inch antlers or antlers with 3 or more brow tines on at least one side	Sept. 1-Sept. 25 (HT)	Sept. 1-Sept. 25 (HT)

* General Hunt Only.

Special instructions: Hunters must complete the Moose Hunter Orientation prior to hunting (5 AAC 92.003(b)).

Conservation Issues

The most recent survey conducted in 2014 found no moose in the Kings River drainage. No major habitat changes have occurred that would suggest an improvement of population levels and there is no additional data or information that suggests an increase in moose population levels in the Kings River drainage.

Enforcement Issues

There are no enforcement issues identified regarding this closure review.

WCR24-41 Executive Summary	
General Description	Wildlife Closure Review WCR24-41 reviews the closure to moose hunting in Unit 6C from Nov. 1-Dec. 31, except by federally qualified subsistence users.
Current Regulation	<p>Unit 6C-Moose</p> <p><i>Unit 6C - 1 antlerless moose by Federal drawing permit (FM0603) only. Sep. 1 – Oct 31</i></p> <p><i>Permits for the portion of the antlerless moose quota not harvested in the Sep. 1 – Oct. 31 hunt may be available for redistribution for a Nov. 1 – Dec. 31 hunt</i></p> <p><i>Unit 6C - 1 bull by Federal drawing permit (FM0601) only. Sep. 1 – Dec. 31</i></p> <p><i>In Unit 6C, only one moose permit may be issued per household. A household receiving a State permit for Unit 6C moose may not receive a Federal permit. The annual harvest quota will be announced by the U.S. Forest Service, Cordova Office, in consultation with ADF&G. The Federal harvest allocation will be 100% of the antlerless moose permits and 75% of the bull permits.</i></p> <p><i>Federal public lands are closed to the harvest of moose except by federally qualified users with a Federal permit for Unit 6C moose, Nov. 1-Dec. 31.</i></p>
OSM Conclusion	Rescind the Closure
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	Rescind the Closure
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.

WCR24-41 Executive Summary	
ADF&G Position	Neutral
Written Public Comments	None

**FEDERAL WILDLIFE CLOSURE REVIEW
WCR24-41**

Issue: Wildlife Closure Review WCR24-41 reviews the closure to moose hunting in Unit 6C from Nov. 1-Dec. 31, except by federally qualified subsistence users.

Closure Location and Species: Unit 6C—Moose

Current Federal Regulation

Unit 6C—Moose

Unit 6C - 1 antlerless moose by Federal drawing permit (FM0603) only. Sep. 1 – Oct 31

Permits for the portion of the antlerless moose quota not harvested in the Sep. 1 – Oct. 31 hunt may be available for redistribution for a Nov. 1 – Dec. 31 hunt

Unit 6C - 1 bull by Federal drawing permit (FM0601) only. Sep. 1 – Dec. 31

In Unit 6C, only one moose permit may be issued per household. A household receiving a State permit for Unit 6C moose may not receive a Federal permit. The annual harvest quota will be announced by the U.S. Forest Service, Cordova Office, in consultation with ADF&G. The Federal harvest allocation will be 100% of the antlerless moose permits and 75% of the bull permits.

Federal public lands are closed to the harvest of moose except by federally qualified users with a Federal permit for Unit 6C moose, Nov. 1-Dec. 31.

Closure Dates: Nov. 1-Dec. 31

Current State Regulation

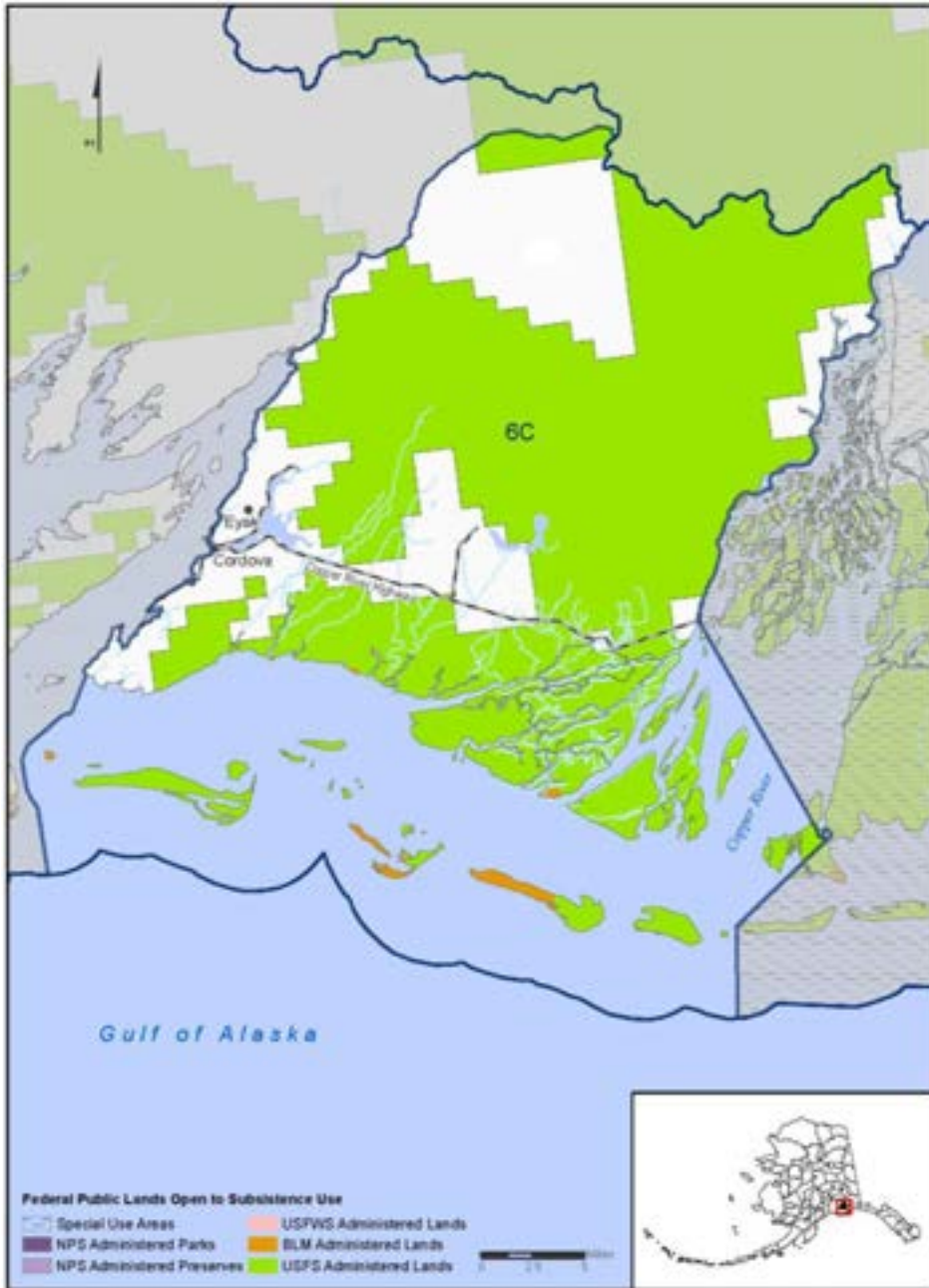
Unit 6C—Moose

Residents: Unit 6C - One bull by permit DM 167 Sep.1 – Oct. 31

Regulatory Year Initiated: 2014

Extent of Federal Public Lands

Federal public lands comprise approximately 72% of Unit 6C and consists of 71.87% U.S. Forest Service (USFS) managed lands and 0.56% Bureau of Land Management (BLM) managed lands (**Map 1**).



Map 1. Federal public lands in Unit 6C.

Customary and Traditional Use Determination

Residents of Units 6A, 6B, and 6C have a customary and traditional use determination for moose in Units 6B and 6C.

Regulatory History

Prior to 2000, State residents could take one moose by State drawing permit in Unit 6C from Sep. 1-Oct. 31, but a Federal season for moose in Unit 6 was not open. In 2000, the Native Village of Eyak submitted Proposal P00-17 to establish a Federal subsistence hunt for moose in Units 6B and 6C. The Federal Subsistence Board (Board) adopted the proposal with modification to establish a moose hunt in Unit 6C only. The season was Aug. 15-Dec. 31, and the harvest limit was one cow by Federal registration permit with only five permits total issued (which was the total allowable cow moose harvest at that time) but left the rest of the State-managed moose harvest in place (OSM 2000).

In 2002, Mr. George Covell of Cordova submitted Proposal WP02-48, requesting that 100% of the bull moose harvest in Unit 6C come from Federal subsistence drawing permits and that the season start date be changed from Aug. 15 to Sep. 1. The Board adopted the proposal with modification, allocating 75% of the allowable bull moose harvest for Unit 6C, and 100% of the allowable cow moose harvest for Unit 6C, to federally qualified subsistence users.

Additionally, the cow moose season closing date was changed from Dec. 31 to Oct. 31, while the bull season was Sept. 1-Dec. 31. Only one moose permit could be issued per household and the harvest quota would be announced annually by the USFS in consultation with the Alaska Department of Fish and Game (ADF&G). The Board's decision to split the bull moose harvest allocation in Unit 6C with the State (75% and 25% of allowable harvest in Federal and State management programs, respectively) was, in part, in recognition of the presence of non-Federal lands within the unit (OSM 2002).

In 2007, the Board adopted Proposal WP07-19, which requested the harvest limit for the Unit 6C Federal draw permit hunt be changed from 1 cow moose to 1 antlerless moose. The Cordova Ranger District submitted the proposal in order to allow federally qualified subsistence users to continue to target cow moose without the possibility of unintentional violation should an antlerless bull be harvested (OSM 2007).

At its March 2013 meeting, the Alaska Board of Game (BOG) adopted amended Proposal 129 to establish a State registration moose hunt in Unit 6C (RM169), with a harvest limit of 1 moose, and a to-be-announced season Nov. 1 – Dec. 31. The State's proposal was intended to allow for the harvest of moose allocated to the Federal quota that may not have been taken during the Federal subsistence hunt.

In 2014, the Board adopted Proposal WP14-18, which closed Federal public lands in Unit 6C to the harvest of moose except by federally qualified subsistence users with a Federal permit from Nov. 1 – Dec. 31. Additionally, it allowed federally qualified subsistence users an opportunity to harvest antlerless moose that were not harvested during the early season (Sep. 1

– Oct. 31), if needed to control the population (OSM 2014). Details of this closure can be found below in the Justification for the Original Closure section.

At the Interior/Northeast Arctic Regional meeting in February 2017, the BOG adopted Proposal 145 to reauthorize the antlerless moose season in Unit 6C. This season was reauthorized again in 2020 at the BOG meeting when Proposal 157 was adopted.

In 2018, the Board rejected Proposal WP18-15, submitted by Tom Carpenter of Cordova, requesting that residents receiving a State or Federal Unit 6C moose permit be ineligible to receive a Federal Unit 6C moose permit the following year, because there was no conservation concern and thus no need to restrict local users (OSM 2018).

In 2018, the Board delegated authority to the Cordova District Ranger of the U.S. Forest Service to be the in-season manager for both moose and deer in Unit 6 via a delegation of authority letter (DAL) (**Appendix 1**). The DAL includes the ability to set harvest quotas, set sex restrictions, close, reopen or adjust seasons, adjust harvest and possession limits, close and reopen Federal public lands to nonsubsistence hunting, and close Federal public lands to the taking of moose and deer.

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 Subsistence Regional Advisory Councils (Councils) for a recommendation and then to the Board for a final decision. Previously, closure reviews were only presented to Councils who then decided whether to maintain the closure or to submit a regulatory proposal to modify or eliminate the closure.

In 2020, the Board voted to maintain status quo for this closure. Their justification was that the dual management system, between the USFS Cordova Ranger District and ADF&G for moose in Unit 6C was meeting the long-term needs of local users in Cordova, maximized hunting opportunity, addressed moose population biology, and accounts for variable access in Unit 6 (OSM 2022b).

Antlerless moose hunts must be reauthorized annually by the BOG. The BOG had consistently reauthorized the State antlerless moose hunt in Unit 6C until 2021. In 2021, the Copper River/Prince William Sound Fish and Game Advisory Committee (AC) did not meet and was unable to reauthorize the hunt, resulting in the Unit 6C antlerless moose hunt being removed from State regulations. In 2022, ADF&G submitted Proposal 62, which requests re-establishing the antlerless moose season in Unit 6C. Specifically, the proposal requested a hunt from Nov. 1-Dec. 31 with a harvest limit of one moose by registration permit only. In its

proposal, ADF&G notes that because the antlerless moose quota is harvested under Federal subsistence regulations, the State has not held an antlerless hunt in Unit 6C since 1999. The BOG adopted Proposal 62 at its March 2023 meeting.

Closure last reviewed: 2020 – WCR20-41

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...

Proposal WP14-18 aligned with the intentions of existing Federal regulations, which allocated 100% of the harvest quota for antlerless moose in Unit 6C to federally qualified subsistence users. Providing the opportunity for additional harvest of antlerless moose and closing Federal public lands to moose hunters without a valid Federal permit for Unit 6C moose from Nov. 1 - Dec. 31, maintained the Federal subsistence priority and allowed for continuation of subsistence uses on the Federal public lands. As a result of the BOG adopting Proposal 129 in 2013, which opened some of the antlerless moose harvest to all State residents through a State registration hunt, federally qualified subsistence users could have seen a reduced opportunity to harvest antlerless moose in Unit 6C due to competition with non-federally qualified users. Proposal WP14-18 allowed additional antlerless moose harvest by federally qualified subsistence users, should the need exist to harvest additional moose after the regular season ends on Oct. 31. It also limited the effect of the new State regulation, by restricting those without a valid Federal permit for Unit 6C moose to only hunt on private and State lands within Unit 6C during the early winter season (OSM 2014).

Council Recommendation for Original Closure:

The Southcentral Council supported the closure to provide additional subsistence opportunities even though there were no conservation concerns. Federal permits allow for control and monitoring of the harvest.

State Recommendation for Original Closure:

The State opposed the proposal, stating that the latest population estimate was 535-665 moose (90% CI) with a midpoint of 600 moose and that this translated to an overall density of 3 moose/mi², and a core winter range density of 6-9 moose /mi². The State claimed that this population was subject to relatively low predation and must be harvested accordingly to keep it from increasing and to protect winter range from over-browsing.

During the 2012 State and Federal moose hunt in Unit 6C, ADF&G found that a harvestable surplus of moose remained at the end of the regular hunting season. This was because ADF&G staff must

estimate the available harvest a year in advance of the hunt, and due to better than anticipated survival during the winter of 2011/12, there were a number of unfilled tags, including 33% of bull tags (5 of 22 issued) and 15% of cow tags (7 of 39 issued) (Burcham 2018, pers. comm.). ADF&G considered a late season emergency opening for antlerless moose but did not have support from the Copper River/Prince William Sound AC and therefore did not pursue it. ADF&G felt that more flexibility for administration of this hunt would be helpful if this situation occurred again; therefore, Proposal 129 was submitted to the BOG in March 2013.

Biological Background

The moose population in Unit 6 originated from 24 moose calves that were transplanted to the west Copper River Delta from the Kenai Peninsula, Anchorage, and the Matanuska-Susitna area between 1949 and 1958 (Paul 2009). This action was a cooperative effort of the Cordova Chapter of the Isaac Walton League, other local citizens, and the U.S. Fish and Wildlife Service (Nowlin 1998). This introduced population rapidly expanded eastward, reaching a high of 1,600 moose in 1988 (Griese 1990). In addition, there has probably been immigration of moose from surrounding areas as habitat has become more suitable following the 1964 earthquake. The only moose endemic to Unit 6 is a small population of approximately 40 animals in the Lowe River drainage of Unit 6D. The first moose hunt was held in 1960 and hunts have occurred annually since 1962. The Unit 6C moose hunt became a State drawing permit hunt in 1984 (Stratton 1989).

During the 1990s, the Copper River/Prince William Sound AC, local residents, and ADF&G developed a cooperative moose management plan. The resulting plan considered

1. the long-term needs of the community (Cordova)
2. population biology
3. maximizing hunting opportunity
4. the variable access in Unit 6

The current management strategies in Unit 6 are a direct result of this moose management plan (Westing 2018a). Current cooperative moose management objectives in Unit 6C are to maintain a post-hunting population of 600-800 moose with a minimum bull:cow ratio of 25:100 (Westing 2017, 2018a).

Population surveys, which are dependent on snow cover and weather conditions for flying, are usually conducted between mid-January and mid-March. From 1991 to 2012 the study design was based on stratified random sampling using the Gasaway technique. Since 2013 the sampling design has used the Geospatial Population Estimate (GSPE). Moose population estimates have ranged from 296 - 677 moose from 2005 to 2023 (**Table 1**). In 2011, 2013, and 2017 the moose population in Unit 6C was within the Unit 6 moose management objective of

600-800 moose (Smythe 2015, Westing 2018b). However, the most recent estimate in 2022 is below objectives at 504 moose. There is little or no indication of nutritional stress due to habitat loss despite a relatively high moose density of 1,250 - 1,900 moose/1,000 km² (or 3.2-4.9 moose/mi²) since 2005 (Westing 2014).

Composition surveys to determine the potential effects of selective hunting pressure are conducted during the fall. Similar to the population estimate survey methods, the composition surveys are dependent on adequate snow cover and weather conditions for flying. The survey method used prior to 2013 focused on maximizing the number of moose observations, but was not standardized (Crowley 2010 Westing 2014). The GPSE survey protocol, which uses a random sample of units is less biased but can also be less efficient (Westing 2014). From 2006 to 2008, the number of bulls, including large bulls, declined due to heavy harvest (Crowley 2012). Harvest adjustments implemented in 2009 have resulted in an increase in adult bulls and the number of large bulls in the population. The bull:cow ratio, calf:cow ratio, and percent of calves observed increased in 2013 with the increasing moose population, but declined in 2020 (**Table 2**).

Fall calf:cow ratios of < 20 calves:100 cows, 20-30 calves:100 cows, and > 30-40 calves:100 cows indicate declining, stable, and growing moose populations, respectively (ADF&G 2001). This suggests the Unit 6C moose population has decreased since 2013 (**Table 1**). The percentage of cows with twins during the fall composition surveys increased to 19% in 2014, compared to 12% in 2009 and 6% in 2010 (Westing 2014). The high bull:cow and calf:cow ratios in 2013/14 was most likely due to the high cow harvest during 2013/14 (Westing 2014). The twinning rates from 2007-2015 ranged from 41-76% (Westing 2018a).

Table 1. Moose population estimates in Unit 6C 2005-2023 (Crowley 2006, 2010, 2012; Namitz pers. comm. 2023; Westing 2014, 2018a, b).

Year	Calves (%)	Adult Estimate	Moose Observed	Population Estimate	90% CI
2005/06	10	438	361	488	423-553
2006/07	20	447	409	560	453-667
2007/08	15	367	347	430	389-471
2008/09	19	314	269	388	334-443
2009/10	17	245	183	296	164-426
2010/11	17	331	296	398	324-471
2011/12	21	472	535	601	536-666
2012/13 ^a	-	-	-	-	-
2013/14	20	487	291	609	483-734
2017/18	32	464	509	677	468-888
2022/23	22	389	464	504	497-510

^a Population data not collected

Table 2. Moose composition estimates in Unit 6C 2005-2021 (Crowley 2006, 2010, 2012; Westing 2014, 2018a, 2022).

Year	Bulls	Cows	Calves	Total Moose	Bulls:100 Cows	Calves: 100 Cows	Calves (%)
2005/06	45	151	44	240	30	29	18
2006/07	-	-	-	-	-	-	-
2007/08	32	83	14	129	36	17	11
2008/09 ^a	-	-	-	-	-	-	-
2009/10	34	230	34	298	14	15	11
2010/11	40	183	35	258	22	19	14
2011/12 ^a	-	-	-	-	-	-	-
2012/13 ^a	-	-	-	-	-	-	-
2013/14	63	129	63	255	49	49	25
2020/21	33	137	28	198	24	20	14

^a Composition data not collected

Cultural Knowledge and Traditional Practices

The subsistence practices of the rural residents of Unit 6 reflect the cultural traditions of the Eyak of the Copper River Delta, the Alutiiq of Prince William Sound, and Russian and American settlers (Stratton 1989). Subsistence lifestyles in the region have traditionally been based on the harvesting of marine resources, with land mammals serving as key, secondary resources (Stratton and Chisum 1986, Stratton 1989, 1990). Historical and ethnographic accounts indicate that bears (Simeone 2008) and mountain goats (Stratton and Chisum 1986, Stratton 1990) have traditionally been two of the most important large game species in the area. Deer and moose, however, have become increasingly significant game species since their relatively recent introductions to Units 6C and 6D (Stratton and Chisum 1986, Stratton 1989, 1990).

Sitka black-tailed deer were introduced to the Prince William Sound area in 1916 (Stratton and Chisum 1986). A relatively small population of moose are indigenous to the western Prince William Sound area and have been hunted in the Lowe River and Nellie Juan River valleys, along the Kings River, and near the south end of Kings Bay (Stratton 1989: 13). Moose were also transplanted into the Copper River Delta, along the Copper River Highway, between 1949 and 1959 (Stratton 1989). Recently, some residents in the Cordova area noted that deer have replaced black bear in terms of importance to local subsistence economies (Simeone 2008). Likewise, moose have also become a preferred game species since being introduced to the Copper River Delta. Land mammal resources have often been particularly significant sources of subsistence in the fall and winter seasons for rural communities living in this region (Stratton and Chisum 1986; Stratton 1989, 1990).

In a subsistence study conducted by ADF&G in the Cordova area in 1985, surveyed households reported harvesting an average of approximately 403 pounds of wild resources for the year (see **Table 3**) (Stratton 1989). Salmon, land mammals, and non-salmon fish combined to compose about 88% of households' yearly subsistence harvest (Stratton 1989). Significantly, moose and deer accounted for the vast majority of households' land mammal harvest (Stratton 1989). Moose provided about 51% of the land mammal harvest, while deer provided another 39% of this harvest during the 1985 study year (Stratton 1989). Overall, an average of approximately 30 moose were reported harvested from Unit 6C every year between 1960 and 1986 (Stratton 1989).

In 1998, Cordova households reported harvesting an average of 542 pounds of wild resources (see **Table 3**) (Fall and Utermohle 1999). Salmon, land mammals, and non-salmon fish combined once again to compose the vast majority of households' subsistence harvests. Moose (39%) and Deer (46%) accounted for 85% of the total land mammal harvest during this study year (Fall and Utermohle 1999).

In 2003, households in the Cordova area reported harvesting an average of 469 pounds of wild resources (see **Table 3**) (Simeone 2006). Non-salmon fish harvests decreased, while salmon harvests increased in 2003. Still, Salmon, land mammals, and non-salmon fish combined to compose an average of about 91% of households' subsistence harvests during this study year (Simeone 2006). Significantly, deer (44%) and moose (45%) accounted for 89% of the total land mammal harvest in 2003 (Simeone 2006).

Cordova households' subsistence harvests were somewhat lower in 2014 than in previous study years (see **Table 3**) (Kukkonen and Johnson 2016). Surveyed households harvested an average of 318 pounds of wild resources during 2014 (Kukkonen and Johnson 2016). Similar to 2003, Cordova households' non-salmon fish harvests decreased in 2014. Salmon and land mammals, however, remained the most heavily harvested resources in terms of weight. Deer (19%) and moose (74%) combined to account for roughly 93% of Cordova households' total land mammal harvest in 2014 (Kukkonen and Johnson 2016). Overall, **Table 3** shows that moose have been an important component of Cordova households' subsistence economies since at least the 1980s, with previous research documenting moose harvests taking place in the area as far back as the 1960s (Stratton 1989). Harvested fish and game resources have traditionally been shared regularly within and between communities in the Cordova area (Stratton and Chisum 1986, Stratton 1989, 1990, Kukkonen and Johnson 2016). Moose meat and other key subsistence resources are still widely shared between households here (Kukkonen and Johnson 2016). In 2014, about 67% of households reported using moose, while only 24% reported attempting to harvest moose (Kukkonen and Johnson 2016). Roughly 22% of households reported giving moose, while 54% reported receiving moose in 2014 (Kukkonen and Johnson 2016). Harvested game meat

and fish has traditionally been preserved through drying, smoking, salting, pickling, or fermenting processes (Stratton and Chisum 1986). Freezing has also become widespread with the expansion of electrical services to the area (Stratton and Chisum 1986; Stratton 1989, 1990).

Today, Cordova is home to an estimated 2,545 people (State of Alaska 2021). This number includes residents living within the city limits, as well as those living out towards Merle K Smith Airport, along Power Creek Road on the northwest shore of Eyak Lake, along Whitshed Road, and members of the Native Village of Eyak. The median yearly income for Cordova households was \$91,422 in 2020, while the mean yearly income was \$94,279 (US Census 2020a, US Census 2020b). Commercial fishing, local and tribal government operations, the service industry, and retail trade are the primary employment sectors in Cordova (Kukkonen and Johnson 2016). Many residents of Cordova combine year-round or seasonal employment in these industries with the maintenance of more traditional subsistence harvest activities that remain very important here both economically and culturally (Kukkonen and Johnson 2016).

Table 3. Composition of Cordova Households' Subsistence Harvests as a Percentage of Total Weight in 1985, 1998, 2003, and 2014 (Fall and Utermohle 1999, Kukkonen and Johnson 2016, Simeone 2006, Stratton 1989)

Cordova	Average Total Harvest per Household (lbs.)	Salmon	All Land Mammals Combined	Non-Salmon Fish	Deer	Moose
1985	403	39%	26%	23%	11%	14%
1998	542	35%	30%	24%	14%	12%
2003	469	44%	31%	16%	14%	14%
2014	318	38%	35%	15%	7%	26%

Harvest History

Because of relatively easy access to Unit 6C, especially by road and airboat, hunter success often approaches 100% for moose permit holders. Between 25 and 123 moose permits were issued each season between 2001 and 2021, depending on the relationship of the estimated moose population to the management objective. Beginning in 2006, the number of harvest permits was increased to account for the concern that the moose population was exceeding carrying capacity. However, this appears to have resulted in overharvest of the population by 2010, especially the bull moose component (**Table 4**). Reduced permit numbers beginning in 2008 have allowed the population to grow to current levels (**Tables 1, 4**).

Over 90% of the moose taken in Unit 6C are by residents of Cordova (Crowley 2012). Harvest in 2021 was 62 moose, which has been below the average of 78 since 2013 and above the 10-year annual average of 52 moose from 2002-2012. Between 2013 and 2021, an average of 10

total moose permits and three antlerless moose permits were not filled, indicating a few surplus moose have still been available for harvest at the end of the season.

Table 4. State and Federal moose harvest in Unit 6C, 2001-2012 (ADF&G 2022, Crowley 2006, 2008, 2010, 2012; Westing 2014, 2017, 2018a, b, 2022; OSM 2018, 2022a; WinfoNet 2018).

Regulatory Year	Permits Issued			Total	Harvest ^a			Total
	Bull		Antlerless		Bull		Antlerless	
	Federal (FM0601)	State (DM167)	Federal (FM0603)		Federal	State	Federal	
2001	0	20	5	25	0	19	5	24
2002	16	5	5	26	16	5	4	25
2003	16	5	5	26	16	5	5	26
2004	26	9	5	40	26	8	5	39
2005	26	9	5	40	25	9	4	38
2006	28	9	40	77	26	9	40	75
2007	55	18	50	123	53	13	45	111
2008	39	13	25	77	36	12	22	70
2009	41	13	10	64	37	11	10	58
2010	19	6	15	40	14	4	13	31
2011	16	13	10	39	10	6	10	26
2012	22	7	39	68	17	6	33	56
2013	24	7	50	81	23	7	45	75
2014	37	12	35	84	35	10	36	81
2015	37	12	35	84	34	11	31	76
2016	37	12	35	84	31	10	32	73
2017	46	15	35	96	41	14	33	88
2018	45	15	35	95	40	14	35	89
2019	45	15	35	95	36	13	33	82
2020	40	15	42	97	26	14	39	79
2021	35	5	35	75	27	4	30	62

^a Unreported, illegal, or accidental kills combined are probably less than 5 animals each year.

Effects

The current management strategies in Unit 6C are a direct result of the cooperative moose management plan developed by the Prince William Sound/Copper River Delta AC, ADF&G, and local residents. The dual management system, between the USFS Cordova Ranger District and ADF&G, has been achieving the management plan's considerations of meeting the long-term needs of local users in Cordova, maximizing hunting opportunity, population biology and variable access in Unit 6. Part of the management system is allocating 75% of the bull harvest permits to federally qualified subsistence users and the remaining 25% for people hunting under State regulations, while 100% of the antlerless

moose permits are allocated to federally qualified subsistence users. Retaining this system provides for a meaningful priority for federally qualified subsistence users.

The BOG adopted Proposal 62 in March 2023, re-establishing antlerless moose harvest in Unit 6C (see **Regulatory History** section). The current Federal regulations and management system allocations only allow for federally qualified subsistence users to harvest antlerless moose in Unit 6C. Thus, an antlerless moose hunt has not occurred under State regulations for over 20 years. As the State season closes Oct. 31 and all antlerless moose are allocated to the Federal subsistence hunt, the current Federal closure seems unnecessary.

Additionally, the DAL (**Appendix 1**) provides the Cordova District Ranger of the U.S. Forest Service, as the in-season manager, the capability of closing and reopening Federal public lands to nonsubsistence hunting or of closing Federal public lands to the take of moose by all users. If this closure is rescinded, the in-season manager maintains the capability of closing Federal public lands to address conservation concerns with the moose in Unit 6C.

As Unit 6C is easily accessible by the road system for both residents and non-residents, rescinding the closure could bring in non-federally qualified users to compete with the federally qualified subsistence users. However, the non-federally qualified users would continue to only be allocated 25% of the bull harvest permits. Rescinding the closure would not pose any conservation concerns as the Unit 6C moose population is closely managed by both limiting the number of permits and the allocation of permits. The meaningful priority for federal subsistence users would be maintained as federally qualified subsistence users would still receive the majority of the moose permits.

OSM CONCLUSION:

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

Justification

The DAL provides the in-season manager the capability to open and close Federal public lands and set harvest quotas addressing conservation concerns for moose in Unit 6C. A meaningful priority would still be maintained if this closure were rescinded as 75% of bull and 100% of antlerless moose permits are allocated to federally qualified subsistence users in codified regulations. As the State season closes Oct. 31, all antlerless moose are allocated to the Federal subsistence hunt, and the in-season manager can close Federal lands if needed, the current Federal closure is unnecessary. Rescinding the closure removes an extra layer of regulation, simplifying regulations and preventing unnecessary restrictions on nonsubsistence uses.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Rescind the closure on WCR24-41. The Council understands that the moose population can be managed by removing this layer of regulation. Rescinding the closure will benefit subsistence users in the region and is supported by the evidence provided to the Council. There is hope for continued success by monitoring the population.

INTERAGENCY STAFF COMMITTEE COMMENT

The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENT

Wildlife Closure WCR24-41

This is the routine review of the closure to moose hunting by non-federally qualified users (NFQU) in Game Management Unit (Unit) 6C from Nov. 1-Dec. 31.

Position

The Alaska Department of Fish & Game (ADF&G) is **NETURAL** on this proposal. ADF&G has not utilized the RM169 hunt, that this closure seeks to address, since its inception and there is no anticipated reason to.

Background

When the RM169 hunt was enacted and this closure went into place, there was much debate about the population size, trajectory, and status relative to carrying capacity. In 2015, a revised carrying capacity estimate was generated by Sharon Smythe. Her work suggested that the moose population was very far from carrying capacity, was using a larger winter range, and that browse rates were low compared with other populations (Smythe, 2015). Additionally, two more surveys in 2014 and 2018 confirmed the size of the population.

ADFG maintains an antlerless hunt in regulation but has no plans to utilize it. If it were appropriate to use, it would not be without substantial coordination and conversation with federal partners.

Impact on Subsistence Users

If the closure is rescinded there would likely be no impact since there are no plans to use RM169. If after consultation, ADF&G determined it was necessary, the United States Forest Service (USFS) could use its delegated authority to close the hunt on federal lands and revisit the issue. If the closure is maintained, it will not have an impact because the RM169 hunt is not used.

Impact on Other Users

If the closure is rescinded, and after the process described above, ADF&G could plan to utilize the RM169 hunt to provide opportunity under the state system.

Opportunity Provided by State

State customary and traditional use findings: The Alaska Board of Game (BOG) has made negative customary and traditional use findings for moose in Unit 6.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the BOG to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

There is no ANS for moose in Unit 6.

State seasons are as follows:

<u>Unit/Area</u>	<u>Bag Limit</u>	<u>Open Season (Permit/Hunt #)</u>	
		<u>Resident</u>	<u>Nonresident</u>
6C	One bull	Sep 1-Oct 31 (DM167) (Drawing)	None (No hunt)
Not listed in the regulation book			
6C	One antlerless moose	Nov 1-Dec 31 (RM169) (Registration)	None (No hunt)

Conservation Issues

There are no conservation issues.

Enforcement Issues

There are no enforcement issues.

Literature Cited

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Appendix 1



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

Federal Subsistence Board

1011 East Tudor Road, MS121
Anchorage, Alaska 99503-6199



FOREST SERVICE

OCT 26 2018

OSM 180088.CM

Cordova District Ranger
Chugach National Forest
P.O. Box 280
Cordova, Alaska 99574

Dear Cordova District Ranger:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the Cordova District Ranger of the U.S. Forest Service 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 6, for the management of moose and deer on these lands.

It is the intent of the Board that actions related to management of moose and deer 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), Bureau of Land Management (BLM) Anchorage Field Office Manager (for BLM-effected lands), National Park Service (NPS) Wrangell – St. Elias National Park and Preserve Superintendent (for NPS-effected lands), 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. Delegation: The Cordova District Ranger is hereby delegated authority to issue emergency or temporary special actions affecting moose and deer on Federal public 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. Authority: 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 the frameworks established by the Board."

3. Scope of Delegation: 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

- You may set Federal subsistence harvest quotas, close, reopen or adjust seasons, and adjust harvest and possession limits for moose and deer, to include the sex that may be harvested. You may also close Federal public lands to the take of moose and deer by all users.

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 moose and deer 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 lands subject to this delegated authority are those within Unit 6.

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

5. Guidelines for Delegation: 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

Cordova District Ranger

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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

Cordova District Ranger

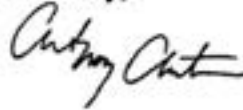
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immediately. A summary of special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of each calendar year for presentation to the Council(s).

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. Support Services: 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
Council Coordinator, Southcentral Alaska Subsistence Regional Advisory Council
Chair, Southcentral Alaska Subsistence Regional Advisory Council
Commissioner, Alaska Department of Fish and Game
Special Assistant to the Commissioner, Alaska Department of Fish and Game
Superintendent, Wrangell-St. Elias National Park and Preserve
Anchorage Field Office Manager, Bureau of Land Management
Interagency Staff Committee
Administrative Record

WP24-10 Executive Summary	
General Description	<p>WP24-10 requests that the requirement to obtain a State locking tag be eliminated for federally qualified subsistence users hunting under a Federal registration permit for brown bears in Unit 8.</p> <p><i>Submitted by: Koniag, Inc. and Kodiak National Wildlife Refuge</i></p>
Proposed Regulation	<p>Unit 8 – Unit Specific Regulations</p> <p><i>You may hunt brown bear in Unit 8 with a Federal registration permit in lieu of a State locking tag if you have obtained a Federal registration permit prior to hunting.</i></p>
OSM Conclusion	Support WP24-10
Kodiak/Aleutians Subsistence Regional Advisory Council Recommendation	Support
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Position	Neutral
Written Public Comments	4 Support

STAFF ANALYSIS WP24-10

ISSUES

WP24-10, submitted by Koniag, Inc. and Kodiak National Wildlife Refuge, requests that the requirement to obtain a State locking tag be eliminated for federally qualified subsistence users hunting under a Federal registration permit for brown bears in Unit 8.

DISCUSSION

The proponents state that the current requirement that federally qualified subsistence users (FQSUs) hunting brown bears under Federal regulations in Unit 8 obtain a State locking tag is burdensome and inconsistent with Federal regulations in surrounding Game Management Units (GMUs). The proponents note that the \$25 fee for a State locking tag adds to the high cost of subsistence hunting. According to the proponents, the cost as well as the accessibility of obtaining the state locking tag has acted as a deterrent to participation in the hunt, particularly in the shorter December season. The proponents explain that because the December season is short, and the expired locking tag must be repurchased before the April to May season, some hunters forego the December season altogether if they do not already have a locking tag. Further, the proponents are concerned that this cost detracts from the ability of residents to pass on their knowledge pertaining to brown bear hunting. The proponents say that bear hunting and processing is laborious and done to share with the wider community, so obstacles to subsistence brown bear hunting should be removed. Finally, the proponents note that State locking tags are not required in some surrounding GMUs.

Relevant Federal Regulation

Relationship to State procedures and regulations

(a) State fish and game regulations apply to public lands and such laws are hereby adopted and made a part of the regulations in this part to the extent they are not inconsistent with, or superseded by, the regulations in this part.

Unit 8 – Brown Bear

1 bear by Federal registration permit only. Up to 2 permits may be issued in Akhiok; up to 1 permit may be issued in Karluk; up to 3 permits may be issued in Larsen Bay; up to 3 permits may be issued in Old Harbor; up to 2 permits may be issued in Ouzinkie; and up to 2 permits may be issued in Port Lions. Permits will be issued by the Kodiak Refuge Manager

Dec. 1–Dec. 15
Apr. 1–May 15

Sealing of Bear Skins and Skulls

(1) Sealing requirements for brown bear taken apply in all Units, except as specified in this [paragraph \(j\)](#)...

(2) You may not possess or transport from Alaska the untanned skin or skull of a bear unless the skin and skull have been sealed by an authorized representative of ADF&G in accordance with State or Federal regulations, except that the skin and skull of a brown bear taken under a registration permit in Units 5, 9B, 9E, 17, 18, 19A, and 19B downstream of and including the Aniak River drainage, and Units 21D, 22, 23, 24, and 26A need not be sealed unless removed from the area.

(3) You must keep a bear skin and skull together until a representative of the ADF&G has removed a rudimentary premolar tooth from the skull and sealed both the skull and the skin; however, this provision does not apply to brown bears taken within Units 5, 9B, 9E, 17, 18, 19A, and 19B downstream of and including the Aniak River drainage, and Units 21D, 22, 23, 24, and 26A and which are not removed from the Unit.

(i) In areas where sealing is required by Federal regulations, you may not possess or transport the hide of a bear that does not have the penis sheath or vaginal orifice naturally attached to indicate conclusively the sex of the bear.

Proposed Federal Regulation

Unit 8 – Unit-specific Regulations

You may hunt brown bear in Unit 8 with a Federal registration permit in lieu of a State locking tag if you have obtained a Federal registration permit prior to hunting.

Existing State Regulation

Statewide Provisions – Licenses and Tags

A resident may not take a brown bear, except as provided in 5 AAC 92.015, or a musk ox, without possessing a numbered, nontransferable, appropriate tag, issued to that person. The person taking game shall, prior to leaving the kill site, affix the locking tag to the portion of the animal required to be salvaged from the field, and the person shall keep the tag affixed until the animal is prepared for storage, consumed, or exported.

Hunting seasons and bag limits for brown bear

Unit 8, that portion of Kodiak Island and adjacent islands, including all drainages into Chiniak, Anton Larsen, and northeast Ugak (east of Saltery Creek drainage) Bays: 1 bear every 4 regulatory years by registration permit only *Oct. 25 - Nov. 30
Apr. 1 – May 15*

Remainder of Unit 8: 1 bear every 4 regulatory years by permit *Oct. 25 - Nov. 30
Apr. 1 - May 15*

Extent of Federal Public Lands/Waters

Unit 8 is comprised of 49% Federal public lands and consists of 48% U.S. Fish and Wildlife Service (USFWS) managed lands and 0.2 % Bureau of Land Management (BLM) managed lands.

Customary and Traditional Use Determinations

Residents of Old Harbor, Akhiok, Larsen Bay, Karluk, Ouzinkie, and Port Lions have a customary and traditional use determination for brown bear in Unit 8.

Regulatory History

Following Statehood in 1959, no subsistence brown bear hunt was permitted on Kodiak Island; opportunity existed through State drawing permits (Mishler 2001). In 1996 the Federal Subsistence Board (Board) adopted proposal P96-26, recognizing the customary and traditional use of brown bears in Unit 8 by residents of Old Harbor, Akhiok, Larsen Bay, Karluk, Ouzinkie, and Port Lions. That same year, the Board deferred proposal P96-27, which requested establishment of a Federal brown bear hunting season and harvest limit in Unit 8. Both proposals were submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council.

In 1997, the Board adopted deferred proposal P96-27, establishing brown bear seasons in Unit 8 from December 1 to 15 and April 1 to May 15 with a harvest limit of one bear by Federal registration permit. Up to 11 permits were to be distributed as follows: “up to 1 permit may be issued to Akhiok, up to 1 permit may be issued to Karluk; up to 3 permits may be issued to Larsen Bay; up to 2 permits may be issued in Old Harbor; up to 2 permits may be issued in Ouzinkie; and up to 2 permits may be issued in Port Lions” (62 FR 29040).

In 2014, the Board adopted WP14-20, increasing the number of Federal subsistence brown bear permits available in Unit 8 for the communities of Akhiok and Old Harbor, so that now a total of up to 13 permits could be issued, with up to two of these going to Akhiok and up to three going to Old Harbor. The permits were to be issued by the Kodiak Refuge Manager.

In a proximal unit, Unit 9E, the Board adopted WP04-41 in 2004 with modification to remove the State locking tag requirement in that unit when a Federal registration permit is used. The Board was

confident that reporting requirements would still be met through the permitting process. Because Unit 9E is adjacent to Unit 8, this history is included for context (**Table 1**). With this change to allow a Federal registration permit in lieu of a State locking tag, the Board also relaxed sealing requirements for brown bears in Unit 9E, so that sealing is now only required when a bear hide or skull is transported from Unit 9.

State Locking Tags

In addition to a hunting license, residents hunting brown bears under State regulations must possess a \$25 State locking tag in Units 1-10, 14, and 15 with a few exceptions, such as for State subsistence hunt RB502 in Unit 9 (see **Table 1**, for example). The locking tags help to ensure that only one bear is harvested per hunter and provides a source of revenue for the State. Use of locking tags is separate from the sealing process. **Table 1** shows that in Unit 9E, an area close to Unit 8, the Board has exempted FQSUs from the State locking tag requirement.

Table 1. For Unit 8 and adjacent subunits 9C and 9E, Table 1 shows whether a State locking tag is required under State or Federal regulations, as well as where Federal registration hunts occur. This table is intended to provide context for the current Unit 8 State locking tag requirements.

	Federal registration permit?	State locking tag required under State regulations?	State locking tag required under Federal regulations?
Unit 8	Yes	Yes	Yes
Unit 9C	Yes	<u>Not required</u> within five miles of the communities of King Salmon, Naknek, and South Naknek. (RB525). <u>Required</u> in residual portions of Unit 9C not listed above.	Yes
Unit 9E	Yes	For Alaska residents hunting with a State subsistence registration permit, the tag is <u>not required</u> in that portion of 9E including all drainages into the Pacific Ocean between Cape Kumliun and border of Unit 9D and 9E. (RB502 subsistence hunt). Also <u>not required</u> within five miles of the communities of Egegik, Pilot Point, Ugashik, Port Heiden, Port Moller, Chignik Lake, Chignik Lagoon, Chignik Bay, Perryville, and Ivanof Bay. (RB525). <u>Required</u> in residual portions of Unit 9E not listed above.	No – Federal exemption

Biological Background

In 2002, the Kodiak Archipelago Bear Conservation and Management Plan (ADF&G 2002) was developed by a Citizens Advisory Committee which consisted of representatives from 12 diverse groups, including the Alaska Department of Fish and Game (ADF&G) and Kodiak National Wildlife Refuge (Kodiak NWR). The three main themes from the 270 recommendations on Kodiak bear management and conservation were: (1) continued conservation of the bear population at their current levels; (2) increased outreach and education to teach people how to live with bears in Kodiak; and (3) protection of bear habitat with allowances for continued human use of the Kodiak Archipelago (Van Daele and Crye 2011).

State management objectives for brown bear management in Unit 8 are (Svoboda and Crye 2023):

- Maintain a stable brown bear population that will sustain an annual harvest of 150 bears composed of at least 60% males.
- Maintain diversity in the gender and age composition of the brown bear population, with adult bears of all ages represented in the population and in the harvest.
- Limit human-caused mortality of female brown bears to a level consistent with maintaining maximum productivity.

ADF&G, with the assistance of Kodiak NWR staff and the Alaska State Troopers conducted intensive aerial surveys in 9 study areas on Kodiak Island from 1987 to 2010 using methods developed by Barnes and Smith (1997). Seven of these areas were sampled more than once. The data was extrapolated to estimate the total brown bear population in 1995 and 2005 (Van Daele and Crye 2011). Population estimates from the survey in 1995 were 2,980 brown bears in Unit 8. By 2005, brown bear population estimates were 3,526 brown bears in Unit 8 (Van Daele and Crye 2011). Unit 8 is now divided into six regions for intensive aerial surveys. The latest surveys were conducted in 2017-2018 and indicated a brown bear population estimate of 2,724 to 4,292 in Unit 8 (**Table 2**) (Svoboda and Crye 2023). These surveys suggest stable brown bear populations across all survey areas and unit-wide.

In addition, aerial brown bear surveys have been conducted yearly since 2000 along selected streams in the southern portion of Kodiak Island to monitor trends in cub production (Van Daele and Crye 2011). To determine appropriate harvest strategies and guidelines the harvest and population data are analyzed using a population model (Van Daele and Crye 2011). Inter-annual variation in the composition of brown bears from these aerial surveys, which is considerable, may be due in part to the timing of the surveys with respect to peak periods of berry and salmon abundance. The percentage of adult females in the areas surveyed from 1985-2009 ranged from a high of 19.6% (1995-1999) to a low of 11.3% (2005, 2008-2009) (**Table 3**). Adult females are the most important segment of the population with respect to population growth (Miller 1990, Van Daele 2007).

Table 2. Estimated number of bears in each geographic unit surveyed within Unit 8 (Svoboda and Crye 2023 and Van Daele and Crye 2009).

Geographic Unit	1995 Total Bears	2005 Total bears	2017-2018 Total Bears
Afognak and Northern Islands	330	430	328-549
Northwestern Kodiak	808	908	681-1,134
Northwestern Kodiak (Road System)	90	101	78-129
Southeastern Kodiak	471	744	573-860
Southwestern Kodiak	1,019	1,094	920-1,381
Aliulik Peninsula	262	249	144-239
Unit 8 Total	2,980	3,526	2,724-4,292

Table 3. The percentage of adult females in the areas surveyed from 1985-2009 (Svoboda and Crye 2023).

Survey years	% Females
1985-1989	15.40%
1990-1994	16.80%
1995-1999	19.60%
2000-2004	18.20%
2005, 2008-2009	11.30%

Cultural Knowledge and Traditional Practices

The original inhabitants of Kodiak Island are the Alutiiq/Sugpiaq people, whose cultural ancestors were living in the area by approximately 7,500 years ago (Crowell et al. 2001). Historically, brown bears were one of the few large land mammals available for harvest on Kodiak Island. The archaeological record contains evidence of use of bears on the island, generally ranking below marine mammals in frequency of occurrence (Clark 1974).

Brown bears, known as *tarogaq* in Alutiiq, have historically been a source of food and raw materials. The traditional hunting seasons occurred in December and April to May, in line with the current Federal seasons (Mishler 2001). All parts of the bear were used for food except the hide, bones, claws, head, and entrails. Bear hunting is a special skill, and traditionally, bear harvests are shared, especially as they result in the harvest of a large animal with a great deal of meat and fat. Bears also had—and continue to have—symbolic importance to the Indigenous inhabitants of Kodiak Island. Some oral traditions suggest analogies and relationships between bears and humans.

The social and cultural process of learning to hunt for bears is just as vital as the actual harvest. According to Mishler:

Alutiiqs see bear hunting, however, as something just as important as bear meat. Learning and understanding bear behavior, facing the danger of bear attacks, and going out on the land are considered just as important as killing bears and eating their meat. Knowledge about bear is an integral part of the culture that is passed on from older men to young boys, and some important rituals were attached to bear hunting (2001).

Following Statehood in 1959, no subsistence brown bear hunt was permitted on Kodiak Island; opportunity existed through State drawing permits (Mishler 2001). Subsistence hunting for brown bears on Kodiak Island did not become legal again until the Federal Subsistence Board established a hunt on Federal public lands in Unit 8 in 1997 (FB0802). According to Mishler’s ethnography of Old Harbor, brown bear hunting traditions were interrupted both by lack of opportunity and by fear of violating regulations (2001). According to Sill et al., younger hunters today express the concern that the knowledge of “real bear men” and other elders who were trained to hunt bears is being lost. They say that if people are not knowledgeable about bears and bear hunting, they may become fearful and careless when they encounter one (2021).

The five communities with a customary and traditional use determination for brown bear in Unit 8 are Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions. These are small, predominantly Alutiiq/Sugpiag communities located on the coast of Kodiak Island. **Table 4** shows population estimates for each community as of 2022. Several of these communities have experienced population decline in recent decades. For example, the population of Larsen Bay has declined from about 150 in 1990 to 28 today, and the population of Ouzinkie has declined from more than 200 in 1990 to 116; Port Lions has also experienced some decline (DCRA 2023, ADLWD 2022).

Table 4. Estimated population of communities with a customary and traditional use determination for brown bear in Unit 8, as of 2022 (ADLWD 2022).

Community	Estimated Population
Akhiok	65
Karluk	28
Larsen Bay	28
Old Harbor	200
Ouzinkie	116
Port Lions	165

Subsistence surveys conducted periodically by ADF&G, Division of Subsistence between 1982 and 2018 indicate that brown bear hunting is a more common activity in some of the five Kodiak Island communities than others (CSIS 2023). Because bear hunting tends to be a specialized activity, conducted by a small number of households (and also limited by permit availability), it is possible that the individuals hunting bears may be missed by subsistence surveys. For small communities such as those with a customary and traditional use determination for brown bear in Unit 8, ADF&G Division

of Subsistence usually attempts to survey all households, but households may be left out if they are unavailable or choose to not participate (e.g. Sill et al. 2021).

Subsistence surveys indicate that of the five communities with a customary and traditional use determination for brown bears in Unit 8, the most bears are harvested by Old Harbor, which is also the largest of the five communities (CSIS 2023). Subsistence surveys do not distinguish between harvest conducted under State or Federal permits.

In the most recent survey year, 2018, four out of 30 surveyed Old Harbor households harvested brown bears, or approximately 13% of households (Sill et al. 2021; **Table 5**). This accounts only for those households surveyed; the study also estimated that a total of nine bears were harvested by the community as a whole that year (**Table 5**). In all survey years where data on sharing are available, the same number of Old Harbor households that reported harvesting brown bears also reported giving bear meat away, indicating that it is obtained for the wider community (CSIS 2023).

Table 5. Three measures of brown bear use in Old Harbor according to subsistence surveys between 1982 and 2018 (CSIS 2023).

Year	Number of Surveyed Households	Number of Surveyed Households Attempting to Harvest Brown Bears	Number of Surveyed Households Harvesting Brown Bears	Estimated Number of Brown Bears Harvested by Entire Community
1982	77	--	4	6
1986	44	2	2	5
1989	48	0	0	0
1991	42	0	0	0
1997	43	1	1	2
2003	52	2	0	0
2018	30	4	4	9

Surveyed households in Larsen Bay reported hunting and harvesting brown bears in three of ten survey years between 1982 and 2018, and the community as a whole is estimated to have harvested an average of 1.8 bears during the years with successful harvests (CSIS 2023). Surveyed households in Port Lions reported hunting brown bears in three of five survey years between 1982 and 2003, with successful harvests occurring in two of those years. During those two years, the community as a whole was estimated to have harvested an average of 2.5 bears (CSIS 2023).

Hunting and use of brown bears, while present in some survey years for Akhiok and Karluk, was far less common than in Old Harbor, Port Lions, and Larsen Bay. No attempted harvest or use of brown bears was reported for any survey year by residents of Ouzinkie (CSIS 2023).

Harvest History

Brown bear hunting in Unit 8 has been conducted with State registration (RB230 and RB260) and drawing permits since at least 1989. A Federal season was first established in 1997 (FB0802). **Table 6** shows all brown bear kills in Unit 8 between regulatory years 2000/01 and 2021/22. Brown bear harvests in Unit 8 increased in the early 2000s as the bear population grew, but harvest levels have stabilized since the early 2010s (Svoboda and Crye 2023). Between 1996 and 2018, the percent of males harvested annually has been greater than 68%, which exceeds the State management goal of 60% (Svoboda and Crye 2023).

Between regulatory years 2000/01 and 2021/22, an average of approximately four FB082 Federal Subsistence permits were issued per year for brown bears in Unit 8, with most of these permits going to just two communities, Larsen Bay and Old Harbor (OSM 2023). Since the establishment of a Federal season, Larsen Bay has been allotted up to three permits per regulatory year. Old Harbor was allotted up to two permits per regulatory year until 2014, when the Board increased this number to three.

Between regulatory years 2000/01 and 2021/22, FQSUs harvested an average of 1.14 brown bears per year under Federal registration permit FB0802 in Unit 8 (OSM 2023; **Table 7**). The community with the greatest number of Federal permit harvests over this period was Old Harbor, followed by Larsen Bay. Between 2000 and 2021, FQSUs using the FB0802 Federal registration permit accounted for about 0.5% of all brown bears taken in Unit 8 (Svoboda and Crye 2015, Svoboda 2023, pers. comm., OSM 2023).

Table 6. Unit 8 brown bear kills, regulatory year 2000/2001 to 2021/2022 (Svoboda and Crye 2015; Svoboda 2023, pers. comm.). Note that although legal harvest is responsible for the largest percentage of bears killed, this table includes all take, including that due to defense of life and property or bears killed by management agencies, etc.

Regulatory Year	Male	Female	Unknown	Total
2000	126	51	5	182
2001	149	43	10	202
2002	108	43	11	162
2003	133	46	13	192
2004	145	39	15	199
2005	169	57	5	231
2006	166	64	10	240
2007	137	59	13	209
2008	182	91	13	286
2009	158	60	14	232
2010	159	79	22	260
2011	146	66	12	224
2012	142	50	14	206
2013	129	43	8	180
2014	142	47	9	198
2015	153	50	14	217
2016	148	67	7	222
2017	136	69	15	220
2018	150	62	16	228
2019	69	25	5	99
2020	172	33	0	205
2021	157	58	0	215
Total	3176	1202	231	4609
Average	144.4	54.6	10.5	209.5

Table 7. The number of brown bears reported harvested under Federal subsistence permit FB0802 between regulatory years 2000/01 and 2021/22, by harvesters' community of residence (OSM 2023). Years with no FB0802 harvests are not included in the table. In years for which no harvests were made by a particular community, the corresponding cell has been left blank.

Regulatory Year	Akhiok	Karluk	Larsen Bay	Old Harbor	Port Lions	Grand Total
2000			1	2		3
2001			1	1		2
2003				1		1
2004	1		2			3
2005			2			2
2006			1	1		2
2009				1		1
2010	1					1
2011				2		2
2015			1			1
2016				1		2
2017				1		1
2018			1			1
2020				2		3
Total	2	0	9	12	0	25
Average	0.09	0	0.41	0.55	0	1.14

Alternatives Considered

One alternative considered would relax sealing requirements in addition to removing the locking tag requirement for FQSUs hunting under a Federal registration permit for brown bears in Unit 8 (see relevant Federal regulations section). Under this scenario, sealing would only be required when a bear hide or skull is transported outside of Unit 8. Taking this action would be consistent with the Board's previous action on locking tag and sealing requirements in Unit 9E in 2004 (WP04-41; see regulatory history) and would remove an additional burden associated with subsistence hunting for brown bears in Unit 8. However, this alternative was rejected because it exceeds the scope of the proponents' request. Koniag, Inc., one of the proponents of this proposal, has clarified that the request is to remove the locking tag fee only.

A second alternative considered would remove the locking tag requirement for all Federal registration brown bear hunts across the State. Given that the State does not require the locking tag for any of its subsistence brown/grizzly bear hunts, removing the requirement from Federal subsistence hunts would ensure that Federal subsistence requirements are not more onerous than State subsistence requirements. However, this alternative was rejected because it exceeds the scope of this proposal, and because the implications of such an action would require further analysis on a unit-by-unit basis.

Effects of the Proposal

This proposal would remove the current State locking tag requirement and fee for FQSUs hunting brown bears on Federal public lands in Unit 8 with a Federal registration permit, eliminating an obstacle to participation in this hunt and increasing subsistence opportunity. The State locking tag and associated fee would still be required for anyone hunting under State regulations, including FQSUs.

Of note, the State does not require the State locking tag fee for its subsistence brown bear hunts, such as in the RB502 subsistence registration hunt in Units 9B and 9E; however, there is no State subsistence brown bear hunt in Unit 8. This proposal would not change Federal sealing requirements, which require sealing of all brown bears taken in Unit 8, as the proponents have clarified that they are not requesting any changes to sealing requirements.

Given that the Federal subsistence share of brown bears taken in Unit 8 is only approximately 0.5%, elimination of the State locking tag and fee under Federal regulations is unlikely to have a significant impact on brown bear harvest and tracking, particularly as registration permit and sealing requirements would remain in place.

OSM CONCLUSION

Support Proposal WP24-10.

Justification

Removing the State locking tag requirement and fee for FQSUs hunting brown bears on Federal public lands in Unit 8 with a Federal registration permit would remove an obstacle to subsistence hunting for brown bears, increasing opportunity. Historically, regulatory obstacles have been one factor contributing to reduced participation by FQSUs in brown bear hunting on Kodiak Island, as demonstrated by ethnographic research. Given that the Federal subsistence share of all brown bears taken in Unit 8 is approximately 0.5%, elimination of the State locking tag requirement and fee is unlikely to have a significant impact on brown bear harvest and tracking, particularly as registration permit and sealing requirements would remain in place. The Board has already removed the locking tag requirement and fee for FQSUs hunting brown bears with a Federal registration permit in other units, including adjacent Unit 9E.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Kodiak/Aleutians Subsistence Regional Advisory Council

Support WP24-10. The Council supported this proposal in order to reduce the cost and bureaucratic burden associated with participating in subsistence brown bear hunts. The Council also noted that under Federal regulations, a State locking tag is not required in some adjacent units.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP24-10

This proposal would eliminate the requirement that a federally qualified user (FQU) be required to obtain a state locking tag hunting under a federal registration permit for brown bears in Game Management Unit (Unit) 8.

Position

The Alaska Department of Fish & Game (ADF&G) is **NEUTRAL** on this proposal as we can appreciate the concern that the locking tag fee may prevent participation in the hunt from some subsistence users.

Background

Kodiak bear hunts are considered one of the premier hunts in the world and are one of Kodiak's foremost trophy hunts. The Kodiak bear population has been managed to promote a healthy, stable population that produces trophy-quality males while providing sustained hunting opportunities for subsistence and non-subsistence users. On average, subsistence brown bear hunters on Kodiak Island make up a very small fraction of hunters (<1%) and account for about 0.5% of the total brown bear harvest. Up to 10 Kodiak brown bear subsistence permits are issued annually across the island. Of these, up to three permits are available for the Village of Old Harbor, up to two permits are available for the Village of Akiok, up to one permit available for Karluk, up to three permits available for Larsen Bay, up to two permits available for Ouzinkie, and up to two permits are available for the Village of Port Lions. However, it is very uncommon for all 10-subsidence bear permits to be issued in a given year. Both residents and non-residents are required to obtain a brown bear locking tag prior to the hunt.

The cost of a resident brown bear locking tag, including for subsistence hunters, is \$25 and the cost of a non-resident brown bear locking tag is \$1,000 (non-resident alien locking tags are \$1,300). Resident and non-resident locking tag fees are determined by the Alaska legislature and cannot be modified or adjusted by the Alaska Board of Game (BOG) or ADF&G. Over the last five years (RY18 – RY22) there have been seven bears harvested under Federal subsistence regulations.

Impact on Subsistence Users

If adopted this proposal would slightly reduce the financial commitment to bear hunting under federal regulations.

Impact on Other Users

If adopted this proposal is expected to have no impact on other users.

Opportunity Provided by State

State customary and traditional use findings: The Board of Game has made a negative customary and traditional use findings for brown bear in Unit 8.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

There is no predetermined ANS for brown bear in Unit 8. The federal subsistence season and bag limit for GMU 8 is:

<u>Unit/Area</u>	<u>Bag Limit</u>	<u>Open Season (Permit/Hunt #)</u>	
		<u>Resident^a</u>	<u>Nonresident</u>
Unit 8 (Federal lands)	1	Dec. 1 – Dec. 15 Apr. 1 – May 15 (Permit type)	N/A (Permit type)

^a Subsistence and General Hunts.

Conservation Issues

There are no conservation concerns regarding this proposal.

Enforcement Issues

Before exempting FQUs from the state’s locking tag it would be prudent for OSM and the FSB to make further inquiries with law enforcement so there are no unintentional consequences to those FQUs harvesting brown bears in Unit 8.

WRITTEN PUBLIC COMMENTS



Native Village of Afognak *To embrace, protect, develop,
and enhance Alutiiq culture, protect our traditional use areas and encourage unity among the
Alutiiq of the Kodiak Archipelago*

March 21, 2023

Jonana "JJ" Orloff
Native Village of Afognak
115 Mill Bay Road
Kodiak, AK 99615

RE: Support for the proposed changes to the Federal Subsistence Brown Bear State Locking tag requirement

Dear Federal Subsistence Management Board:

The Koniag region encompasses the Kodiak Island area and a portion of the Alaska Peninsula. Approximately 1800 Alutiiq/Sugpiaq live on Kodiak Island. Kodiak Island includes 10 Tribes throughout the archipelago. A customary and traditional lifestyle is a daily teaching in the Alutiiq Sugpiaq culture. For over 7,500 years the Alutiiq Sugpiaq have and will continue to be the primary stewards of air, land, and sea.

As a Tribe in the Koniag region, we reach out to you today in support of the proposed changes to the Federal Subsistence Wildlife Regulations general provisions Unit 8 brown bear requirements for the state locking tags. As mentioned in the proposal change, this is an added cost to the approved permitted hunter. Additional costs defeat the purpose of customary & traditional/subsistence hunting. Currently, the customary & traditional hunt permits are underutilized in our rural communities. Let's work together to keep cultural traditions alive in our rural communities. **[Please see attached proposal]**

We appreciate your time and attention to this matter and look forward to the proposed changes being approved.

Sincerely,

JJ Orloff
Tribal Administrator

115 Mill Bay * Kodiak, AK 99615 * phone 907-486-6357 * fax 907-486-6529



ALUTIIQ TRIBE OF OLD HARBOR

PO Box 62, Old Harbor AK 99643
 Phone: (907)286-2215 Fax (907)286-2350
 Website: Alutiiqtribeoh.org

March 21, 2023

Stella Krumrey, Tribal Chief/President
 PO Box 62
 Old Harbor, AK 99643

RE: Support for the proposed changes to the Federal Subsistence Brown Bear State Locking tag requirement

Dear Federal Subsistence Management Board:

The Koniag region encompasses the Kodiak Island area and a portion of the Alaska Peninsula. Approximately 1800 Alutiiq/Sugpiaq live on Kodiak Island. Kodiak Island includes 10 Tribes throughout the archipelago. A customary and traditional lifestyle is a daily teaching in the Alutiiq Sugpiaq culture. For over 7,500 years the Alutiiq Sugpiaq have and will continue to be the primary stewards of air, land, and sea.

As a Tribe in the Koniag region, we reach out to you today in support of the proposed changes to the Federal Subsistence Wildlife Regulations general provisions Unit 8 brown bear requirements for the state locking tags. As mentioned in the proposal change, this is an added cost to the approved permitted hunter. Additional costs defeat the purpose of customary & traditional/subsistence hunting. Currently, the customary & traditional hunt permits are underutilized in our rural communities. Let's work together to keep cultural traditions alive in our rural communities. **[Please see attached proposal]**

We appreciate your time and attention to this matter and look forward to the proposed changes being approved.

Sincerely,

Stella Krumrey
 Tribal Chief/President
 Alutiiq Tribe of Old Harbor

"Old Harbor is a community based in rich traditions that come together to celebrate its people, culture, and heritage. We demonstrate this through our language, arts, traditional dancers and spiritual history and our respect for the Elders and honoring of our children."



Traditional Tribal Council
P.O. Box 69, Port Lions, Alaska 99550
PORTLIONSTRIBE.NET

March 22, 2023

Nancy Nelson
Port Lions Traditional Tribal Council
PO Box 69
Port Lions, AK 99550

RE: Support for the proposed changes to the Federal Subsistence Brown Bear State Locking tag requirement

Dear Federal Subsistence Management Board:

The Koniag region encompasses the Kodiak Island area and a portion of the Alaska Peninsula. Approximately 1800 Alutiiq/Sugpiaq live on Kodiak Island. Kodiak Island includes 10 Tribes throughout the archipelago. A customary and traditional lifestyle is a daily teaching in the Alutiiq Sugpiaq culture. For over 7,500 years the Alutiiq Sugpiaq have and will continue to be the primary stewards of air, land, and sea.

As a Tribe in the Koniag region, we reach out to you today in support of the proposed changes to the Federal Subsistence Wildlife Regulations general provisions Unit 8 brown bear requirements for the state locking tags. As mentioned in the proposal change, this is an added cost to the approved permitted hunter. Additional costs defeat the purpose of customary & traditional/subsistence hunting. Currently, the customary & traditional hunt permits are underutilized in our rural communities. Let's work together to keep cultural traditions alive in our rural communities. **[Please see attached proposal]**

We appreciate your time and attention to this matter and look forward to the proposed changes being approved.

Sincerely,

Nancy Nelson
Port Lions Traditional Tribal Council President
Native Village of Port Lions





March 24, 2023

Alex Cleghorn, President
Tangirnaq Native Village
3449 East Rezanof Drive
Kodiak, AK 99615

RE: Support for the proposed changes to the Federal Subsistence Brown Bear State Locking tag requirement

Dear Federal Subsistence Management Board:

The Kodiak region encompasses the Kodiak Archipelago and a portion of the Alaska Peninsula. Approximately 1,800 Alutiiq/Sugpiaq reside in the Archipelago and include ten federally recognized Tribes. Throughout Sugpiaq history it is customary to share with the next generation the traditions that were followed by our ancestors. For over 7,500 years the Alutiiq/ Sugpiaq will continue to be the primary stewards of air, land, and sea.

The Tangirnaq Native Village, along with the Kodiak National Wildlife Refuge and the Kodiak Regional tribes, implore you to support the proposed changes to the Federal Subsistence Wildlife Regulations general provisions Unit 8 brown bear requirements for the state locking tags. As mentioned in the proposal change, this is an added cost burden to the approved permitted hunter. Additional, requiring a cost defeats the purpose of customary and traditional/subsistence hunting. Currently, the customary & traditional hunt permits in our rural communities are underutilized. Please help us to maintain our cultural traditions in a way that is not a cost burden to the hunters and that allows for these traditions to be passed down for generations to come. **[Please see attached proposal]**

We thank you in advance for this consideration and anticipate the proposed changes are approved.

Sincerely,

Alex Cleghorn, President

3449 East Rezanof Drive · Kodiak, AK 99615 · Phone (907) 486-9872 · info@woodyisland.com
www.woodyisland.com

WP24–16/17 Executive Summary	
General Description	<p>Proposal WP24-16 is a request to add the rural residents of Unit 9C, including the communities of King Salmon, Naknek, and South Naknek, to the group of communities who are eligible to harvest caribou in Unit 9E. <i>Submitted by: the Bristol Bay Subsistence Regional Advisory Council</i></p> <p>Proposal WP24-17 is a request to add the communities of King Salmon, Naknek, and South Naknek to the group of communities who are eligible to harvest caribou in Unit 9E. <i>Submitted by: Adam Grenda of King Salmon</i></p>
Proposed Regulation	<p><u>Proposal WP24-16</u></p> <p>Unit 9E—Caribou</p> <p><i>1 bull by Federal registration permit (FC0915) or State permit. May be announced</i></p> <p><i>Federal public lands are closed to the taking of caribou except by residents of Unit 9C, Unit 9E, Nelson Lagoon, and Sand Point.</i></p> <p><u>Proposal WP24-17</u></p> <p>Unit 9E—Caribou</p> <p><i>1 bull by Federal registration permit (FC0915) or State permit. May be announced</i></p> <p><i>Federal public lands are closed to the taking of caribou except by residents of Unit 9E, King Salmon, Naknek, Nelson Lagoon, Sand Point, and South Naknek.</i></p>
OSM Conclusion	<p>Support Proposal WP24-16.</p> <p>Take no action on Proposal WP24-17 based on action to support Proposal WP24-16.</p>
Bristol Bay Subsistence Regional Advisory Council Recommendation	<p>Support Proposal WP24-16.</p> <p>Take no action on Proposal WP24-17</p>
Kodiak/Aleutians Subsistence Regional Advisory Council Recommendation	<p>Support Proposal WP24-16.</p> <p>Take no action on Proposal WP24-17</p>

WP24–16/17 Executive Summary	
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.
ADF&G Comments	Neutral
Written Public Comments	1 support

STAFF ANALYSIS

WP24-16/17

ISSUES

Proposal WP24-16, submitted by the Bristol Bay Subsistence Regional Advisory Council, is a request to add the rural residents of Unit 9C, including the communities of King Salmon, Naknek, and South Naknek, to the group of communities who are eligible to harvest caribou in Unit 9E.

Proposal WP24-17, submitted by Adam Grenda of King Salmon, is a request to add the communities of King Salmon, Naknek, and South Naknek to the group of communities who are eligible to harvest caribou in Unit 9E.

DISCUSSION

Proposal WP24-16

The proponent of Proposal WP24-16, the Bristol Bay Council, states that residents of King Salmon, Naknek, and South Naknek have many generations of customary and traditional use of caribou in Unit 9E, and the alternative resource in Unit 9C is the Mulchatna caribou herd; however, the population of caribou in the Mulchatna herd has declined.

Proposal WP24-17

The proponent of Proposal WP24-16 wants to hunt caribou on Federal public lands in Unit 9E during the Federal caribou seasons of August 10–October 10 and November 1–April 30, but currently, he is not eligible. He said King Salmon, Naknek, and South Naknek residents hunted northern Alaska Peninsula caribou in Unit 9 when the herd was thriving from the 1970s to the 1990s. Currently, there is a State Tier II hunt for caribou on State-managed lands in Unit 9E (TC505); however, the proponent states the majority of caribou spend summer, fall, and winter on Federal public lands in Unit 9E. The proponent continues,

Early in the season caribou spend their time in higher elevations out of the bugs and where they have the advantage of being able to see long distances to watch for predators. Later as they start to migrate, they stay on Unit 9 Federal lands and will not enter State lands during the hunting season. Later into winter, most caribou get taken via snow machine. Usually, March is one of the best months for us to hunt on snow machine for caribou. This is because the days are longer, and we usually have a lot of snowfall during that timeframe. However, Unit 9C [State season] closes at the end of February, and we have to travel further south into Unit 9E to get to an open hunt area. This is completely feasible except for the fact that we are unable to hunt Unit 9E Federal lands, which really limits where we can take caribou in Unit 9E.

The proponent submitted information from Alaska Department of Fish and Game (ADF&G) studies in order to demonstrate the vital importance of caribou to the communities and show that caribou were the most important ungulate harvested for food. He said because of many factors, moose have not been and still are not the main sources of meat for families in these communities. He said in 2023, ADF&G increased the number of available Tier II permits (hunt TC505) for caribou in Units 9C and 9E from 300 to 600 to increase the caribou harvest; the Northern Alaska Peninsula caribou herd is growing and can sustain this harvest. In ending, the proponent said this is a simple yet effective rule change that will give the communities access to lands on the Alaska Peninsula to target caribou they have heavily relied on in the past as a food source.

Existing Federal Regulation

Unit 9E—Caribou

1 bull by Federal registration permit (FC0915) or State permit. May be announced

Federal public lands are closed to the taking of caribou except by residents of Unit 9E, Nelson Lagoon, and Sand Point.

Proposed Federal Regulation

Proposal WP24-16

Unit 9E—Caribou

1 bull by Federal registration permit (FC0915) or State permit. May be announced

*Federal public lands are closed to the taking of caribou except by residents of **Unit 9C**, Unit 9E, Nelson Lagoon, and Sand Point.*

Proposal WP24-17

Unit 9E—Caribou

1 bull by Federal registration permit (FC0915) or State permit. May be announced

*Federal public lands are closed to the taking of caribou except by residents of Unit 9E, **King Salmon, Naknek**, Nelson Lagoon, Sand Point, and **South Naknek***

Existing State Regulation

Unit 9E—Caribou

1 caribou by permit (TC505)

Aug. 10–Oct. 10

Nov. 1–April 30

Extent of Federal Public Lands and Waters

Unit 9E is comprised of approximately 49% Federal public lands and consists of 44% U.S. Fish and Wildlife Service (USFWS) lands, 5% National Park Service lands, and less than 0.1 % Bureau of Land Management lands. These Federal public lands are primarily within the boundaries of Becharof and Alaska Peninsula National Wildlife Refuges and Aniakchak National Monument and Preserve (see **Unit 9 Map**).

Customary and Traditional Use Determination

Rural residents of Units 9B, 9C, 9E, 17, and the communities of Nelson Lagoon and Sand Point have a customary and traditional use determination for caribou in Unit 9E (see **Unit 9 Map**).

However, currently Federal public lands in Unit 9E are closed to the taking of caribou except by rural residents of Unit 9E and the communities of Nelson Lagoon, and Sand Point, based on the three criteria in Alaska National Interest Lands Conservation Act (ANILCA) section 804.

Additionally, concerning Aniakchak National Monument in Unit 9E, under the guidelines of ANILCA, National Park Service regulations identify qualified local rural subsistence users in National Parks and National Monuments by: (1) identifying Resident Zone Communities that include a significant concentration of people who have customarily and traditionally used subsistence resources on park lands; and (2) identifying and issuing subsistence use (13.440) permits to individuals residing outside of the Resident Zone Communities who have a personal or family history of subsistence use within the park or monument. Resident Zone Communities for Aniakchak National Monument are Chignik, Chignik Lagoon, Chignik Lake, Meshik, and Port Heiden (*36 CFR 13.602 Subsistence resident zone*).

Current Events Involving the Species

At its meeting in winter 2023, the Bristol Bay Council was presented with a preliminary analysis for Wildlife Closure Review WCR24-06 to consider and to submit a wildlife proposal if they wanted to modify the closure to the harvest of caribou in Unit 9E. The Council submitted this proposal, WP24-16, a request to revise the ANILCA section 804 Subsistence User Prioritization in order to include residents of Unit 9C to those eligible to harvest caribou in Unit 9E (BBSRAC 2023a:65–81).

At their meetings in fall 2023, the Bristol Bay Council and the Kodiak/Aleutians Council considered Wildlife Closure Review WCR24-06. The Bristol Bay Council recommended retaining status quo on

the closure to the harvest of caribou in Unit 9E by non-federally qualified users and some federally qualified users (BBSRAC 2023b:181–192). The Kodiak/Aleutians Council opposed rescinding the closure (KASRAC 2023:182–223). The Federal Subsistence Board will consider Wildlife Closure Review WCR24-06 at its April 2024 meeting.

Regulatory History

In 1999, the Federal Subsistence Board adopted the recommendation of the Bristol Bay Regional Advisory Council and closed Federal public lands that are south of the Naknek River drainage in Units 9C and 9E to the harvest of caribou except by residents of Units 9C and 9E (Proposal WP99-32/33/34). This was due to the declining population of the northern Alaska Peninsula caribou herd and local residents' dependence upon this subsistence resource. Adoption of the proposals changed the harvest limit in Units 9C and 9E from 4 caribou annually to one bull by Federal permit (64 Fed. Reg. 126; 35777, 35800 [July 1, 1999]).

In 2005 the Board approved Emergency Special Action WSA05-02, submitted by OSM, and temporarily closed Federal public lands in Units 9C remainder and 9E to the harvest of caribou for 60 days. Subsequently, Temporary Special Action WSA05-11 was submitted, a necessary step to extend the closure beyond the 60-day period approved through WSA05-02. With support of the Bristol Bay Council, the Board adopted this special action, resulting in closure of the caribou season for the entirety of the 2005 regulatory year (BBSRAC 2005:124, OSM 2023a).

In 2006 the Board agreed with the Bristol Bay Council and adopted Proposal WP06-22, which closed Federal public lands in Units 9C remainder and 9E to the harvest of caribou by all user groups. The Board took this action due to conservation concerns based on the continued decline of the Northern Alaska Peninsula caribou herd. The State Tier II hunt was closed in 2005 as well (OSM 2006; 71 Fed. Reg. 126, 37645, 37668 [June 30, 2006]).

In 2010 the Bristol Bay Council was briefed on Wildlife Closure Review WCR10-04/06, which discussed the closure for caribou in Units 9C remainder and 9E. The Council recommended retaining the closure based on conservation concerns for the caribou herd (OSM 2011, 2023b).

In 2014, the Council considered Wildlife Closure Review WCR14-04/06 and submitted Proposal WP16-21. Specifically, the Council requested that the closure be modified to allow caribou harvests by residents of 9C and 9E. The Council also requested that a may-be-announced caribou season be established in Units 9C remainder and 9E, noting that the State was considering opening a Tier II subsistence hunt. The Council believed that it would be useful for Federal managers to have the flexibility to open a hunt on Federal lands as well, particularly considering the extent of Federal lands in Unit 9.

In 2016, the Board agreed with the Bristol Bay Council and adopted Proposal WP16-21 with modification to reduce the pool of eligible subsistence users on Federal public lands in Unit 9C remainder to residents of Unit 9C and Egegik, and on Federal public lands in Unit 9E to residents of 9E, Nelson Lagoon and Sand Point, based on the three criteria in ANILCA section 804. It was noted

that residents of Unit 9E are not in the customary and traditional use determination for caribou in Unit 9C (BBRAC 2016; 81 Fed. Reg. 152, 52553 [August 8, 2016]).

Biological Background

See Wildlife Closure Review WCR24-04/06 analysis.

Community Background

Residents of only 11 communities are currently eligible to harvest caribou in Unit 9E. Eight are situated within Unit 9E (Chignik, Chignik Lagoon, Chignik Lake, Egegik, Ivanof Bay, Perryville, Pilot Point, and Port Heiden) and two are situated south of Unit 9E in Unit 9D (Nelson Lagoon and Sand Point), based on the three criteria in ANILCA section 804: (1) customary and direct dependence upon the populations as the mainstay of livelihood, (2) local residency, and (3) the availability of alternative resources. These communities share some characteristics. Almost all are small with populations of less than 100 people, and populations have been trending downward since the 2000 U.S. Census (**Table 1**, ADCCED 2023). These communities are not connected by roads and are accessed by boats or planes. The proposal is a request to add three communities, which are King Salmon, Naknek, and South Naknek, to the pool of those eligible to harvest caribou in Unit 9E (**Table 2**). The boundaries of these three communities encompass the entire area of Unit 9C. King Salmon and Naknek are connected by a State-maintained 15-mile paved road (Source).

Table 1. Human population of the communities currently eligible (source: ADCCED 2023).

Community	1980	1990	2000	2010	2020
Chignik	178	188	79	91	97
Chignik Lagoon	48	53	103	78	72
Chignik Lake	138	133	145	73	61
Egegik	75	122	116	109	39
Ivanof Bay	40	35	22	7	1
Nelson Lagoon	59	83	83	52	41
Perryville	111	108	112	113	88
Pilot Point	66	53	100	68	70
Port Heiden	92	119	119	102	100
Sand Point	625	878	952	976	578
Ugashik	13	7	11	12	4
TOTAL	1,445	1,779	1,842	1,681	1,151

Table 2. Human population of the communities in the request (source: ADCCED 2023).

Community	1980	1990	2000	2010	2020
King Salmon	545	696	442	374	307
Naknek	318	575	678	544	470
South Naknek	145	136	137	79	67
TOTAL	1,008	1,407	1,257	997	844

Customary Knowledge and Traditional Practices

Caribou were among the most important subsistence resources for these Alaska Peninsula communities (Fall 1993). The Northern Alaska Peninsula caribou herd last peaked in about 1984, and harvest seasons were closed from 2005 through 2015. Residents of eligible communities have reported their harvests on household surveys since 1983. Communities' overall harvest of caribou and per person harvest in pounds of edible weight have generally decreased since the 1990s (see **Appendix 1**; ADF&G 2023).

In the 1980s and 1990s, Pacific drainage communities in Unit 9E harvested caribou at generally lower rates than communities on the Bristol Bay side because of less access to caribou on the Pacific side (Fall 1993). The Bristol Bay coastal plain on the Bering Sea side of Unit 9E consists of flat to rolling tundra, lakes, shrub habitat, and poorly drained meadows. The Pacific side consists of mountainous terrain with steep faces and cliffs, sandy beaches, shrub habitat and sedge meadows. The Aleutian Mountain Range separates these areas.

The most recent household harvest surveys were conducted in 2014, 2016, and 2018. Residents of Egegik, Pilot Point, and Ugashik participated in harvest surveys in 2014 before the hunting season reopened in 2016 (Sill et al. 2022). Residents commented on their preference for caribou, “Many respondents, particularly elders, commented that though salmon was a very important food source, caribou remained their preferred wild resource even though many had not had any in longer than two decades. There were residents who longed for caribou to return to their region so they could once again acquire them to feed their families” (Sill et al. 2022:247).

Some expressed fear that people would lose the ability to hunt and process caribou with legal hunts being closed for so long. For example, an Ugashik resident made this comment during the survey, “I worry that the younger generation will not have anyone to teach them how to hunt if caribou return.” Others spoke of how much they missed eating caribou, for example from Pilot Point, “I have not had one piece of caribou in so long I can’t remember, but I can still taste it” (Sill et al. 2022:247).

Some harvesting opportunity in Unit 9E has been available since 2015. The results of harvest surveys conducted since 2015 are described in **Table 3**.

Table 3. The estimated harvest of caribou for one year study periods by communities eligible to harvest caribou in Unit 9E since reopening in 2016, based on households harvest surveys (CI 95%, lower harvest estimate is the lower bound of the estimate or the reported harvest, whichever is larger; source: ADF&G 2023).

Community	Study year	Number of households interviewed	Percentage of households using caribou	Estimated harvest of caribou	Lower estimate	Upper estimate	Per person harvest (in pounds of edible weight)
Chignik City	2016	24	46%	6	5	8	11
Chignik Lagoon	2016	20	30%	0	0	0	0

Community	Study year	Number of households interviewed	Percentage of households using caribou	Estimated harvest of caribou	Lower estimate	Upper estimate	Per person harvest (in pounds of edible weight)
Chignik Lake	2016	28	61%	6	5	8	9
Egegik	2016	20	10%	0	0	0	0
Perryville	2016	26	50%	6	4	9	8
Port Heiden	2016	27	79%	31	23	39	44
Sand Point	2016	101	15%	4	2	7	1
Port Heiden	2018	27	93%	44	37	51	64

In 2018, Port Heiden community members commented on their experiences hunting caribou since 2015 after the long closure and reduced herd size. Jones and Cunningham (2020) described these comments,

Reestablishing caribou hunting also regenerated important learning, sharing, and trading networks within the community and with other communities. Port Heiden residents explained that enough people are still around and available to help bestow their caribou hunting and processing wisdom upon the younger generation whose members had yet to experience caribou hunting due to the regulatory closure. Regarding the transmission of caribou hunting knowledge, one key respondent explained: “. . . Tier II caribou hunts closed, and hunting was a lost art. They [Port Heiden youth] didn’t know how to hunt, where to go, how to process. We’re lucky that hunt came back, and we were able to get the young people involved” (Jones and Cunningham 2020:100).

Jones and Cunningham (2020) described changes in hunting patterns in 2018 compared to the 1980s and 1990s, “According to elders and expert caribou hunters from Port Heiden, in the past, frozen rivers provided access to caribou hunting areas throughout the Alaska Peninsula. However, since the Tier II permit hunt opened in 2016, many of the rivers that hunters traditionally used for winter travel have not frozen adequately enough for safe passage to caribou hunting grounds. Many commented on this change in access to caribou hunting” (Jones and Cunningham 2020:98).

Harvest History

See Wildlife Closure Review WCR24-04/06 analysis.

ANILCA Section 804 Subsistence User Prioritization

Section 804 of ANILCA mandates that the taking on Federal public lands of fish and wildlife for nonwasteful subsistence uses shall be accorded priority over the taking on such lands of fish and wildlife for other purposes. Section 804 further requires that whenever it is necessary to restrict the taking of populations of fish and wildlife on such lands for subsistence uses in order to protect the continued viability of such populations, or to continue subsistence uses, such a priority shall be implemented through appropriate limitations based on the application of three criteria. The three

criteria are: (1) customary and direct dependence upon the populations as the mainstay of livelihood, (2) local residency, and (3) the availability of alternative resources. In other words, an analysis based on Section 804 of ANILCA identifies which residents of communities or areas have a priority for the take of the resource.

In this case, the Board has been asked to increase the pool of federally qualified subsistence users, who are eligible to hunt for caribou in Unit 9E, to rural residents of Units 9C (the communities of King Salmon, Naknek, and South Naknek), 9E, and the communities of Nelson Lagoon and Sand Point. Currently, Unit 9C communities are excluded and have been since 2016 when the hunting season in Unit 9E re-opened after a long closure, and the ANILCA section 804 in current regulations was implemented by the Board. Without the ANILCA section 804 currently in place, roughly 8,400 people in 33 widely dispersed communities would be eligible based on the customary and traditional use determination for caribou in Unit 9E (ADLWD 2023).

1. Customary and Direct Dependence upon the Populations as a Mainstay of Livelihood

Table 4 demonstrates that Unit 9C communities are highly dependent on caribou, based on household harvest surveys conducted periodically between 1983 and 2007. Additionally, between 33% and 93% of surveyed households in each community reported using caribou during each study year. In 1983, when surveys of the harvest of all wild resources were conducted, caribou were 35% of total harvest of all wild resources in pounds of edible weight in King Salmon, 29% in Naknek, and 55% in South Naknek (ADF&G 2023).

Table 4. The estimated harvest of caribou for one year study periods by communities in the proposal, based on household harvest surveys (CI 95%, lower harvest estimate is the lower bound of the estimate or the reported harvest, whichever is larger) (source: ADF&G 2023).

Community	Study year	Number of households interviewed	Percentage of households using caribou	Estimated harvest of caribou	Lower estimate	Upper estimate	Per person harvest (in pounds of edible weight)
King Salmon	2007	49	33%	16	14	18	10
	1996	32	76%	114	58	169	46
	1995	26	87%	183	121	245	66
	1994	37	86%	226	155	297	92
	1983	43	74%	182	122	242	74
Naknek	2007	75	49%	74	66	83	21
	1996	43	67%	279	201	357	82
	1995	41	57%	252	167	336	70
	1994	59	85%	432	332	532	118
	1983	52	73%	140	92	188	55
South Naknek	2007	21	62%	2	2	3	7
	1996	35	89%	138	128	175	157
	1995	31	87%	128	110	149	133
	1994	25	96%	103	77	129	119
	1992	35	86%	82	68	100	91
	1983	21	91%	135	75	195	148

In 2016 the Board implemented the ANILCA section 804 in effect today (Proposal WP16-21). Harvest records used when making that decision indicated residents of Unit 9C were harvesting caribou from the Mulchatna herd in areas that are north of the Naknek River. These areas are now closed to caribou harvest due to the decline in the Mulchatna Caribou Herd's population. Currently Unit 9C communities do not currently have alternative populations of caribou to harvest. They have only northern Alaska Peninsula caribou in Units 9C remainder and 9E (OSM 2016).

Subsistence studies also indicate that the three communities were dependent on Unit 9E caribou in the past, as described by the proponents of these Proposals WP24-16 and 17 (Fall 1993).

2. Local Residency

Naknek and South Naknek are situated in Unit 9C immediately adjacent to the boundary with Unit 9E. The boundary is not a geographic feature visible on the landscape and is defined by the southern extent of the Naknek River drainage (see **Figure 1**). The boundary begins just south of the mouth of the Naknek River in an area where Naknek and South Naknek are situated. King Salmon is connected to Naknek by a 15-mile paved road and is otherwise about 20 miles due north of the boundary of Unit 9E. Hunt areas in Unit 9E are accessed by boats during the fall hunt and by snowmachines and all-terrain vehicles during the winter hunt.

3. Availability of Alternative Resources

King Salmon, Naknek, and South Naknek are all highly dependent upon the annual cycle of subsistence harvests of resources (ADF&G 2023). The harvest of wild resources is a critical component of the economies in these communities, and the communities rely on the harvest of a wide diversity of resources, including salmon, nonsalmon fish, land mammals (caribou, moose), marine mammals (seals, sea lions), migratory waterfowl (ducks, geese), other birds (ptarmigan, grouse), furbearers, berries, greens, and wood. It is typical for harvests to be dominated by fish and large land mammals, including caribou and moose (Morris 1985, Jones and Cunningham 2020, ADF&G 2023).

The Mulchatna Caribou Herd is located in Units 9B, 9C, 17A, 17B, 17C, 18, 19A and 19B. Population estimates show an increase from 18,599 in 1981 to 200,000 in 1996. Subsequently, the herd began a period of substantial decline (ADF&G 2019a, Barten 2017). The most recent estimates, obtained in July 2020, 2021, and 2022, were approximately 13,500, 12,850, and 12,112 caribou, respectively. These estimates are less than half of the State's minimum population objective of 30,000 caribou (ADF&G 2020, 2021; BBRAC 2023). The decline in the Mulchatna caribou population may be due to a combination of factors including predation, weather, nutrition, survival rates, and disease. In the 1990s the Mulchatna Caribou Herd was expanding its range and may have overgrazed resources needed for survival, while at the same time hunters reported seeing more wolves and bears in the areas where they hunted caribou (Woolington 2013). The portion of the Mulchatna herd's range in Unit 9C north of the Naknek River is currently closed under State regulations. While an open season exists in codified Federal regulations, Federal hunts have been closed in conjunction with State hunts since 2020 through in-season management actions.

Declining caribou populations in Unit 9 led to increased tensions between user groups wanting to harvest more moose as caribou numbers dropped (Riley 2011). Overall, according to ADF&G, “[Moose] harvests in Unit 9 have remained relatively stable for the past 30 years, despite major changes to moose regulations. Recent declines in moose harvest have been associated with a decrease in the number of people hunting moose in Unit 9” (Riley 2011:112). All communities opportunistically harvest caribou or moose, depending on what is available and the regulations in place. Restricting the harvest of caribou in a given area will presumably have an impact on moose populations and vice versa, because many hunters are opportunistic and will harvest whatever large land mammals are available.

Effects of the Proposal

If Proposal WP24-16/17 is adopted, then residents of Unit 9C will be eligible to harvest caribou on Federal public lands in Unit 9E under Federal regulations. These Federal public lands are primarily within the boundaries of Becharof and Alaska Peninsula National Wildlife Refuges and Aniakchak National Monument and Preserve. No effects on nonsubsistence uses or caribou populations are anticipated. If Proposal WP24-16/17 is not adopted, then residents of Unit 9C will not be eligible to harvest caribou on the Federal public lands in Unit 9E.

OSM CONCLUSION

Support Proposal WP24-16.

Take no action on Proposal WP24-17 based on action to support Proposal WP24-16.

Justification

King Salmon, Naknek, and South Naknek have demonstrated increased dependence on caribou in Unit 9E over time since 2016 when this area was closed to hunting by them. Harvest records used when making that decision indicated residents of Unit 9C were still harvesting caribou from the Mulchatna herd in areas that are north of the Naknek River. These areas are now closed to caribou hunting due to the decline in the Mulchatna Caribou Herd population. Currently, Unit 9C communities do not have alternative populations of caribou to harvest. They have only Northern Alaska Peninsula caribou in Units 9C remainder and 9E. Additionally, King Salmon, Naknek, and South Naknek are situated adjacent to and nearby the Unit 9E boundary. Subsistence studies indicate that the three communities were dependent on Unit 9E caribou in the past. Supporting Proposal WP24-16 over Proposal WP24-17 is to clarify that the boundaries of these three communities encompass the entire area of Unit 9C.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATION

Bristol Bay Subsistence Regional Advisory Council

Support the OSM conclusion. Support Proposal WP24-16 and take no action on Proposal WP24-17 based on support for WP24-16. The Council supported Proposal WP24-16 to include rural residents of King Salmon, Naknek, and South Naknek to the group of communities who can harvest caribou in Unit 9E. These three communities have traditionally hunted in this area when the herd was at a level that could sustain harvest. The Council does not have any concerns over the potential increase in hunting pressure as the caribou population has been slowly growing and the bull:cow ratio is high. Allowing rural residents of the three communities in Unit 9C to harvest caribou in Unit 9E will provide for additional hunting opportunities, as other caribou harvest options are limited.

Kodiak/Aleutians Subsistence Regional Advisory Council

Support the OSM conclusion. Support Proposal WP24-16 and take no action on Proposal WP24-17 based on support for WP24-16. The Council expressed some concerns about how expanding the pool of eligible harvesters for the still relatively small Northern Alaska Peninsula Caribou Herd might impact harvest opportunities of residents living in their region at Nelson Lagoon and Sand Point. However, the Council ultimately supported the proposal based on the strong evidence that residents of Unit 9C (King Salmon, Naknek, and South Naknek) had historically harvested caribou in Unit 9E, the herd in Unit 9E currently represented the only option available for these residents to harvest caribou under Federal Regulations, and the home region (Bristol Bay) had submitted this proposal. The Council also heard information from ADF&G staff suggesting that there was not a strong north to south migration of the caribou herds in this area, and minimal additional harvest was expected to occur as a result of the proposed change.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

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Alaska Department of Fish and Game Comments

Wildlife Proposal WP24-16/17

This proposal would add the rural residents of Game Management Unit (Unit) 9C, including the communities of King Salmon, Naknek, and South Naknek, to the group of communities who are eligible to harvest North Alaska Peninsula herd caribou (NAP) on federal public lands in Unit 9E.

Position

The Alaska Department of Fish & Game (ADF&G) is **NEUTRAL** on eligibility requirements for participation in the subsistence program provided under the Alaska National Interest Lands Conservation Act (ANILCA).

Background

Caribou have historically been an important subsistence resource for rural residents of the Alaska Peninsula. The Alaska Board of Game (BOG) established a positive customary and traditional use determination for the Northern Alaska Peninsula caribou herd (NAP Units 9C and 9E) in March 1988. The Federal Subsistence Board found that caribou in Unit 9E were customarily and traditionally used by rural residents of Units 9B, 9C, 9E, 17, and Nelson Lagoon and Sand Point in Unit 9D. That federal action was based on historical harvest information. In the past, residents of the three communities located in Unit 9C (King Salmon, Naknek, and South Naknek) harvested caribou on federal public lands in Unit 9E. In 1983 residents from King Salmon, Naknek, and South Naknek traveled to Unit 9E to harvest caribou from the NAP caribou herd (Morris 1985). Figure 1 depicts areas used by residents of King Salmon, Naknek, and South Naknek to hunt caribou from 1963-1983. According to Morris (1985:72), residents of these communities primarily sought caribou down the Alaska Peninsula, using locations such as Shosky Creek, Whale Mountain, and other areas mostly within the Becharof and Alaska Peninsula Wildlife Refuges. Aircraft provided a primary means of transportation, with hunters beginning their hunt from Jensen's Strip.



Figure 1. Caribou search and harvest areas for residents of King Salmon, Naknek, and South Naknek, 1963–1983 (Morris 1985).

In the 1980s, estimates of the annual subsistence harvest of Northern Alaska Peninsula caribou by local communities (those in Unit 9C and 9E) ranged from about 900 to about 1,250 animals (Fall 1993). Annual per capita harvests of caribou in the 1980s ranged from 15 lb. in Chignik and Chignik Lagoon, to 245 lb. in Port Heiden, to 439 lb. in Pilot Point/Ugashik. For communities in Unit 9C, caribou harvests were: 74 lb. per capita in King Salmon, 55 lb. per capita in Naknek, and 148 lb. per capita in South Naknek (Fall 1993).

From the late 1980s through 2010, the NAP caribou herd experienced a population decline, decreasing from a high of 20,000 in 1984 to a low of approximately 2,000 caribou in 2010 (Harper 2011:33). In response, the FSB adopted a proposal in 1999 to close Federal public lands south of the Naknek River drainage in Unit 9C and Unit 9E to the harvest of caribou except by residents of Units 9C and 9E. In that same year, the Board of Game implemented a Tier II hunt for units 9C and 9E, which was closed in 2005 because of continuing conservation concerns. In 2006, the FSB adopted a proposal which closed Federal public lands in Units 9C remainder and 9E to the harvest of caribou by all user groups. During the 2007 study year, Holen et al. (2011) documented no caribou harvests in Unit 9E by Bristol Bay Borough communities; instead, caribou hunting occurred in Unit 9C and Unit 17C, units where caribou hunting was allowed that year. The federal land closure lasted for 10 years until 2016 when the FSB adopted a proposal to allow for the harvest of caribou in Unit 9E, but only for residents of Unit 9E, and Nelson Lagoon and Sand Point in Unit 9D, based on the three criteria in ANILCA section 804. Also in 2016, the Tier II hunt was reinstated on state-managed lands in Units 9C and 9E; the harvest averaged 53

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caribou each year between 2020 and 2022 with approximately 30% of the harvest occurring in Unit 9C. Residents of King Salmon, Naknek, and South Naknek are eligible to apply for the Tier II hunt and have participated in the hunt since 2016 (Table 1). Today, the NAP caribou herd population estimate is approximately 4,000 caribou, which is below the population objective of 6,000–15,000 (erroneously listed as 12,000–15,000 in the OSM Staff Analysis for WCR 24-04).

Table 1. Tier II hunt information for residents of King Salmon, Naknek, and South Naknek, 2016–2022.

King Salmon, Naknek, and South Naknek Tier II Permits Combined			
Year	Number of permits received	Number of permits hunted	Number of successful harvests
2016	86	55	34
2017	86	42	20
2018	95	41	26
2019	141	63	38
2020	107	52	27
2021	148	59	27
2022	144	53	25

Source: WinfoNet.

Impact on Subsistence Users

If adopted this proposal would increase the pool of federally qualified users (FQU) eligible to participate in North Alaska Peninsula caribou harvesting opportunities provided under ANILCA in Unit 9E. This could limit opportunities for current FQUs by increasing the number of people hunting under federal regulations, thus increasing competition. If this proposal fails, FQUs currently eligible to hunt for caribou in Unit 9E would remain eligible; residents of Unit 9C would continue to be unable to hunt in Unit 9E under federal regulations but could continue applying to hunt for caribou on state-managed lands in Units 9C and 9E under the state Tier II permit (TC505).

Impact on Other Users

If adopted, the impact on other users would depend on future actions taken by the FSB.

Opportunity Provided by State

State customary and traditional use findings: The Alaska Board of Game (BOG) made positive customary and traditional use findings for North Alaska Peninsula caribou herd in Units 9C and 9E (5 AAC 99.025).

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

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ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. The ANS for North Alaska Peninsula caribou herd in Units 9C and 9E is 1,200–1,900 animals.

Hunting regulations may be re-examined if harvests for customary and traditional uses consistently fall below ANS. Low harvests may occur for many reasons: hunting regulations, changes in animal abundance or distribution, and changes in human use patterns, among others.

Conservation Issues

Overharvest could occur for this caribou population while it is below objective, however, ADF&G offers a limited number of Tier II permits and can adjust permit numbers annually to mitigate this potential. This Tier hunt is currently under-subscribed, and the herd does show signs of growth. ADF&G barely issues 300 permits out of 600 and reported harvest is in the double digits annually. So, even though there are means available to limit harvest, they are not doing so currently due to a lack of demand for these opportunities.

Enforcement Issues

There are no known enforcement issues directly related to this proposal.

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WRITTEN PUBLIC COMMENTS



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June 23, 2023

Federal Subsistence Board
 Office of Subsistence Management – Attn: Theo Matuskowitz
 1011 East Tudor Road, MS-121
 Anchorage, Alaska 99503-6199

Via Email: subsistence@fws.gov

Re: 2024-2026 Wildlife Proposals: WP24-12 through WP24-18

Dear Federal Subsistence Board,

Bristol Bay Native Corporation (BBNC) is the for-profit Alaska Native regional corporation created by Congress pursuant to the Alaska Native Claims Settlement Act (ANCSA) to represent the economic, social, and cultural interests of Alaska Native people with either present day or ancestral ties to the Bristol Bay region. Our mission is to "Enrich our Native Way of Life." BBNC is committed to protecting the Native culture and subsistence way of life of our 11,800+ shareholders.

BBNC submits this letter to the Federal Subsistence Board (FSB) related to seven Wildlife Proposals related to Bristol Bay, namely WP24-12 through WP24-18.

- BBNC supports Wildlife Proposal 24-12, 24-13 & 24-14 which all ask that the federal subsistence season for bull moose in unit 9B be extended five additional days to September 25th to align with the state's open season. This is a sensible recommendation to avoid confusion between the federal and state hunting seasons.
- BBNC conditionally supports Wildlife Proposal 24-15 which seeks to create a caribou hunt in unit 9C within a portion of the Katmai National Preserve near Kukaklek Lake that is specifically for the residents of Igiugig. BBNC supports this proposal but asks the Federal Subsistence Board to also include the residents of Kokhanok as soon as it is practical to do so. The residents of both communities have traditionally harvested caribou in the Preserve and the herd occupying this area is growing and can withstand additional hunting pressure.
- BBNC supports Wildlife Proposals 24-16 and 24-17 which would add Naknek, South Naknek and King Salmon to those communities eligible to harvest

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caribou in Unit 9E. The population numbers in Unit 9E can support the additional hunt pressure and residents of these additional communities no longer have access to caribou in the Mulchatna herd.

- BBNC supports Wildlife Proposal 24-18 which would expand the caribou hunt FC1702 to include new areas to the northwest of the existing hunt area where much of the Nushagak Peninsula Caribou Herd tends to winter. This change would increase harvest rates and increase the likelihood for the hunt to achieve its harvest objectives.

BBNC asks the FSB to add these comments to the meeting materials for the Bristol Bay Subsistence Regional Advisory Council to consider at its fall meeting and for the FSB to consider at its spring 2024 meeting.

Thank you for this opportunity to provide comments.

Sincerely,

Daniel Cheyette

Daniel Cheyette
VP, Lands and Natural Resources

Cc: Leigh Honig, Bristol Bay Region Coordinator, leigh_honig@fws.gov

Appendix 1

The estimated harvest of caribou for one year study periods by communities currently eligible to harvest caribou in Units 9C remainder and/or 9E, based on household harvest surveys (CI 95%, lower harvest estimate is the lower bound of the estimate or the reported harvest, whichever is larger; source: ADF&G 2023).

Community	Study year	Number of households interviewed	Percentage of households using caribou	Estimated harvest caribou	Lower estimate	Upper estimate	Per person harvest (in pounds of edible weight)
Chignik Bay	1984	19	68%	6	4	9	7
	1989	35	77%	12	11	15	15
	1991	30	87%	13	9	20	16
	1994	24	71%	1	1	2	2
	1995	20	71%	3	3	5	6
	1996	17	63%	5	5	6	9
	2003	17	55%	1	1	3	2
	2016	24	46%	6	5	8	11
Chignik Lagoon	1984	17	77%	5	4	8	11
	1989	15	73%	4	4	4	15
	1994	27	93%	21	20	24	33
	1995	20	83%	15	9	26	25
	1996	18	93%	5	3	9	10
	2003	14	63%	8	6	13	17
	2016	20	30%	0	0	0	0
Chignik Lake	1984	23	100%	82	66	98	79
	1989	21	95%	129	97	180	173
	1991	24	100%	105	79	131	120
	1994	32	94%	111	91	134	105
	1995	19	100%	67	49	86	88
	1996	26	100%	55	36	77	76
	2003	21	95%	19	13	33	25
	2016	28	61%	6	5	8	9
Egegik	1984	25	96%	151	112	190	233
	1994	22	86%	147	90	204	186
	1995	26	94%	128	109	146	144
	1996	19	83%	77	56	98	86
	2014	20	0%	0	0	0	0
	2016	20	10%	0	0	0	0
Ivanof Bay	1984	6	100%	20	12	31	82
	1989	7	100%	23	23	23	108
	1994	8	88%	5	4	6	21
	1995	6	100%	14	9	29	52
	1996	7	100%	13	13	13	78
King Salmon	1983	43	74%	182	122	242	74
	1994	37	86%	226	155	297	92
	1995	26	87%	183	121	245	66
	1996	32	76%	114	58	169	46
	2007	48	33%	16	14	18	10
Naknek	1983	52	73%	140	92	188	55

Community	Study year	Number of households interviewed	Percentage of households using caribou	Estimated harvest caribou	Lower estimate	Upper estimate	Per person harvest (in pounds of edible weight)
	1994	59	85%	432	332	532	118
	1995	41	57%	252	167	336	70
	1996	43	67%	279	201	357	82
	2007	75	49%	74	66	83	21
Nelson Lagoon	1987	13	92%	53	38	81	119
Perryville	1984	20	100%	30	22	41	39
	1989	27	67%	22	19	29	28
	1994	20	75%	12	8	22	18
	1995	21	82%	24	15	49	27
	1996	25	86%	23	16	42	29
	2003	27	70%	12	10	17	15
	2016	26	50%	6	4	9	8
Pilot Point	1987	17	94%	98	93	109	229
	1994	27	100%	127	118	144	182
	1995	30	100%	51	44	61	65
	1996	28	100%	129	113	160	170
	2014	17	0%	0	0	0	0
Pilot Point / Ugashik	1991	18	100%	135	135	135	261
Port Heiden	1987	37	100%	168	168	168	245
	1991	28	100%	174	174	174	227
	1994	32	100%	139	114	178	197
	1995	26	100%	240	167	312	275
	1996	22	91%	175	120	241	228
	2016	29	79%	31	23	39	44
	2018	27	93%	44	37	51	64
Sand Point	1992	104	51%	39	22	56	10
	2016	101	15%	4	2	7	1
South Naknek	1983	21	91%	135	75	195	147
	1992	35	86%	82	68	100	91
	1994	25	96%	103	77	129	119
	1995	31	87%	128	110	149	133
	1996	35	89%	138	128	175	157
	2007	21	62%	2	2	3	7
Ugashik	1987	5	80%	20	20	20	300
	1994	2	100%	21	16	26	350
	1995	4	100%	21	13	29	300
	1996	6	100%	34	31	37	435
	2014	4	0%	0	0	0	0

WP24–18 Executive Summary	
General Description	Wildlife proposal, WP24-18, proposes to expand the hunt area for the Nushagak Peninsula Caribou Herd. <i>Submitted by: Togiak National Wildlife Refuge</i>
Proposed Regulation	<p>Unit 17–Caribou</p> <p><i>Units 17A and 17C, that portion of 17C south of and including the Tuklung River drainage, 17C south of the Igushik River, and 17A east of the Kanik River and Kulukak Bay—up to 5 caribou by Federal registration permit (FC1702). Aug. 1-Mar. 31</i></p> <p><i>Public lands are closed to the taking of caribou except by federally qualified users unless the population estimate exceeds 900 caribou.</i></p>
OSM Conclusion	Support Proposal WP24-18
Bristol Bay Subsistence Regional Advisory Council Recommendation	Support OSM modification (see note in OSM justification section)
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	Support
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.
ADF&G Position	Neutral
Written Public Comments	1 support

STAFF ANALYSIS WP24-18

ISSUES

Proposal WP24-18, submitted by Togiak National Wildlife Refuge (NWR), requests expanding the hunt area for the Nushagak Peninsula Caribou Herd (FC1702).

DISCUSSION

The proponent for Proposal WP24-18 states that over the past three winters, most of the Nushagak Peninsula Caribou Herd (NPCH) has wintered in the area immediately north and west of Tvativak Bay, which is closed under the current regulations. This has resulted in lower harvest rates due to the caribou staying in the closed area from late December to late March. Harvest objectives were not met in the past three seasons.

The proponent proposes to expand the FC1702 hunt as depicted by the solid red line, on a map below (**Figure 1**). Specifically, the proposed extension is “that portion of 17C south of and including the Tuklung River drainage, 17C south of the Igushik River, and 17A east of the Kanik River and Kulukak Bay.” This exact language was not included in Proposal WP24-18 as submitted, but provided later by the proponent.

Note: The Western Interior Subsistence Regional Advisory Council (Western Interior Council) supported this proposal as written because the new boundary descriptor was not yet available. The OSM modification was to include the new boundary descriptor, so the Western Interior Council is essentially supporting the OSM modification.

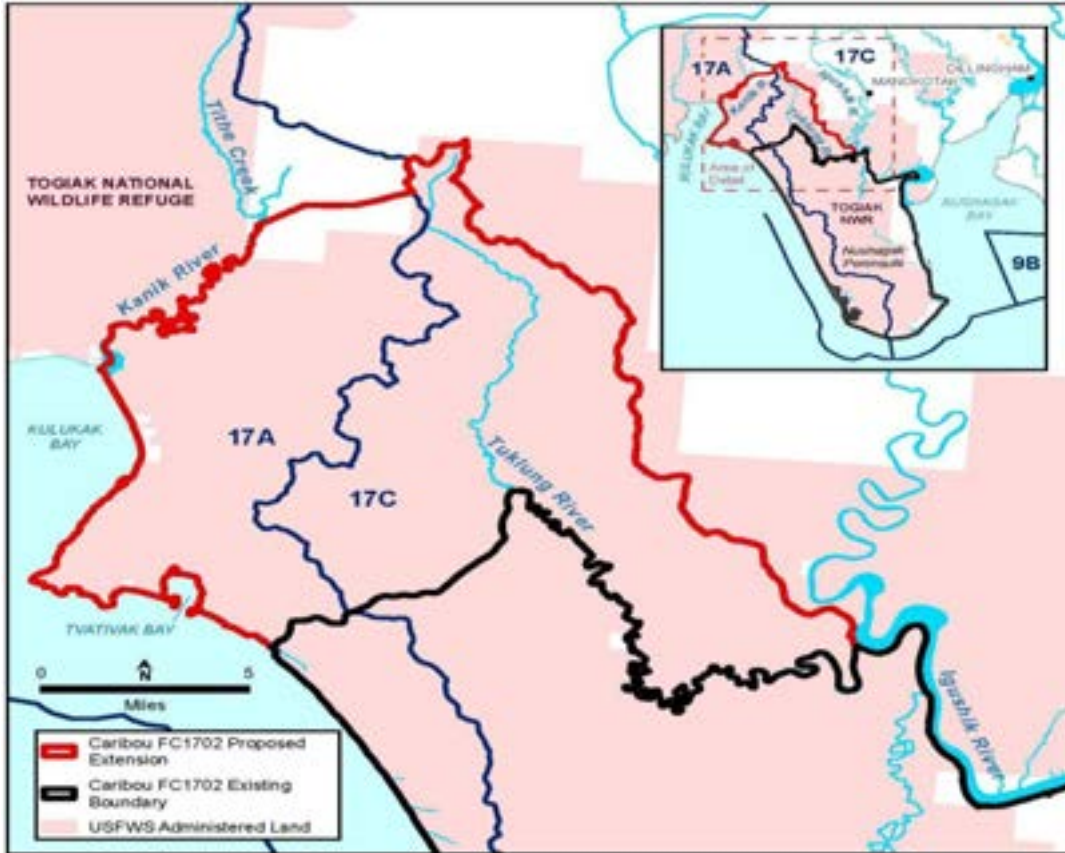


Figure 1. Map of new proposed boundary (red) and current boundary (black).

Existing Federal Regulation

Unit 17–Caribou

Units 17A and 17C, that portion of 17A and 17C consisting of the Nushagak Peninsula south of the Igushik River, Tuktung River and Tuktung Hills, west to Tvativak Bay—up to 5 caribou by Federal registration permit (FC1702). Aug. 1-Mar. 31

Public lands are closed to the taking of caribou except by federally qualified users unless the population estimate exceeds 900 caribou.

Units 17A, remainder and 17C, remainder—selected drainages; a harvest limit of up to 2 caribou by State registration permit will be determined at the time the season is announced

Season may be announced between Aug. 1 and Mar. 31.

Proposed Federal Regulation

Unit 17–Caribou

Units 17A and 17C, that portion of 17C south of and including the Tuklung River drainage, 17C south of the Igushik River, and 17A east of the Kanik River and Kulukak Bay—up to 5 caribou by Federal registration permit (FC1702). Aug. 1-Mar. 31

Public lands are closed to the taking of caribou except by federally qualified users unless the population estimate exceeds 900 caribou.

Units 17A, remainder and 17C, remainder—selected drainages; a harvest limit of up to 2 caribou by State registration permit will be determined at the time the season is announced Season may be announced between Aug. 1 and Mar. 31.

Existing State Regulation

Unit 17— Caribou

Residents: Unit 17A, all drainages that terminate east of Right Hand Point— two caribou by permit available online at <http://hunt.alaska.gov> and in person in Anchorage, Bethel, Dillingham, Fairbanks, Homer, King Salmon, Palmer, Soldotna, and at local license vendors beginning July 14 RC501 may be announced

Nonresidents: No open season

Residents: Unit 17C remainder— two caribou by permit available online at <http://hunt.alaska.gov> and in person in Anchorage, Bethel, Dillingham, Fairbanks, Homer, King Salmon, Palmer, Soldotna, and at local license vendors beginning July 14 RC501 may be announced

Nonresidents: No open season

Extent of Federal Public Lands/Waters

The Nushagak Peninsula is comprised of 85% Federal public lands and consists of 85% U.S. Fish and Wildlife Service (USFWS) managed lands.

Customary and Traditional Use Determinations

Residents of Units 9B, 9C, 9E, 17, Lime Village, and Stony River have a customary and traditional use determination for caribou in Unit 17 remainder.

Regulatory History

Caribou were reintroduced to the Nushagak Peninsula in 1988, with the intention of providing a subsistence resource to area residents (USFWS et. al. 1994). In 1994, the Federal Subsistence Board (Board) adopted Proposal P94-42, which established a Jan. 1–Mar. 31 harvest season for the NPCH in portions of Units 17A and 17C and instituted a closure to all users except residents of Togiak, Dillingham, Manokotak, Twin Hills, Aleknagik, Clark’s Point, and Ekuk (FSB 1994). The newly established season began on January 1, 1995, with a harvest limit of 1 caribou.

In 1995, the Board approved Temporary Special Action S95-06 and extended the season from Jan. 1–Mar. 31 to Dec. 1–Mar. 31 for the 1995/96 regulatory year. In 1996, the Board adopted Proposal P96-34, which changed the caribou season from Jan. 1–Mar. 31 to Dec. 1–Mar. 31 and established an Aug. 1–30 fall season (FSB 1996). In 1997, the Board adopted Proposal P97-47, which increased the harvest limit from 1 caribou to 2 caribou on the Nushagak Peninsula, as there was a harvestable surplus of caribou and the previous year’s harvest had been well below the management objective (FSB 1997). In 1998, the Board approved Special Action S97-10, which extended the fall season from Aug. 1-30 to Aug. 1-Sep. 30. This extension became regulation when the Board adopted Proposal P99-39 in 1999 (FSB 1999).

In 2001, the Board adopted Proposal WP01-18, authorizing the use of a designated hunter permit (FSB 2001). In 2002, the Board approved Temporary Wildlife Special Action WSA02-13, which reduced the harvest limit from 2 caribou to 1 caribou for the NPCH hunt, and delegated authority to the Togiak NWR manager to close the season when harvest objectives were met. This action was intended to prevent overharvest of the declining NPCH. In 2003, Board action on WP03-22 changed the harvest limit from two caribou to “up to 2 caribou” and delegated authority to the Togiak NWR manager to set harvest objectives and limits, determine the number of permits to be issued, and to close the season. The new regulation also required that hunters report their harvest within 24 hours after returning from the field (FSB 2003). These changes provided management flexibility and reduced the need for special actions and follow-up proposals.

Emergency Wildlife Special Action WSA15-02, submitted by the Village of Manokotak in April 2015, requested that the season be extended to May 31, due to poor winter travel conditions and subsequent low caribou harvest. The Board rejected this WSA15-02 because immobilization drugs used during a recent capture and collaring project could have posed a human health risk prior to May 10, and because any season extension beyond May 10 would have overlapped with the calving season (OSM 2016a).

The Nushagak Peninsula Caribou Planning Committee submitted four special action requests for the 2015/16 regulatory year. Temporary Wildlife Special Action WSA15-14 requested increasing the harvest limit to 3 caribou through March 31, 2016. Temporary Wildlife Special Action WSA15-15

requested opening Federal public lands to caribou harvest by all residents of Alaska through March 31, 2016. Emergency Wildlife Special Action WSA15-16 requested extending the winter season from Dec. 1–Mar. 31 to Dec. 1–Apr. 15. Temporary Wildlife Special Action WSA15-17 requested that subsistence harvest of Nushagak caribou be exempted from the prohibition on same-day airborne harvest Jan. 1–Apr. 15. These requests sought to increase harvest and slow population growth of the NPCH. All four special actions were approved by the Board, with a modification of WSA15-14 that retained the three caribou limit through April 15, 2015 (OSM 2016a).

In early 2016, the Alaska Department of Fish and Game (ADF&G) announced a State season by Emergency Order (EO 04-03-16), targeting caribou migrating off the Nushagak Peninsula in portions of Units 17A and 17C. This season opened on March 4, 2016. Approval of WSA15-15 provided an opportunity for ADF&G to expand the hunt to include Federal public lands on the Nushagak Peninsula. The State season was open through March 31, 2016, had a limit of two caribou of either sex, and required the use of a State registration permit (RC501).

After the Federal and State seasons closed in spring 2016, the Manokotak Village Council submitted Emergency Wildlife Special Action Request WSA15-18, requesting that the Federal caribou season on the Nushagak Peninsula be extended through the end of May or until females begin calving. WSA15-18 was approved with the modification to: 1) reopen the season through May 10, a date that provided reasonable assurance that the season would not overlap with calving and 2) raise the harvest limit to three caribou, consistent with recent action on WSA15-14 and WSA15-16. As a result, the season was reopened May 3–10, 2016.

Several proposals related to Nushagak caribou were submitted for consideration for the 2016–2018 regulatory years. Proposal WP16-25/26, submitted by the Togiak and Nushagak Fish and Game Advisory Committees (AC), requested increasing the harvest limit from two caribou to three caribou and modifying the existing split season to a single Aug. 1–Mar. 31 season. Proposal WP16-31/32, also submitted by the Togiak AC and the Nushagak AC, requested that same day airborne harvest of Nushagak Peninsula caribou be allowed during the winter season, Jan. 1–Mar. 31. The Board adopted WP16-25 with modification, raising the harvest limit to “up to 5 caribou” and creating a single season, as proposed. It also adopted WP16-31. The Board took no action on WP16-26 and WP16-32, based on action taken on WP16-25 and WP16-31 (FSB 2016).

In spring 2016, Togiak NWR and ADF&G submitted Temporary Wildlife Special Action WSA16-02, which requested that the closure be lifted for the 2016/17 regulatory year, as long as the population did not fall below 900 animals, the upper population objective. Members of the public and Tribal representatives acknowledged the need for population reduction but offered limited support due to concerns about maintaining subsistence priority, particularly during the winter season, concerns about the limitations imposed by current customary and traditional use determinations, and concerns that the 900 caribou threshold for opening Federal public lands might persist beyond regulatory year 2016/17 and become a permanent management parameter. The Board acknowledged these concerns and encouraged revision of the Nushagak Peninsula Caribou Management Plan to accommodate a wider range of situations, but approved WSA16-02 with modification to delegate authority to the manager of

Togiak NWR to reinstate the closure if the population falls below 900 animals, given the biological necessity for population reduction.

In fall 2016, ADF&G announced a State season in portions of Units 17A and 17C by Emergency Order (EO 04-50-16). The season was limited to Alaska residents, required a registration permit (RC501), and had a harvest limit of two caribou. Although the season was open Aug. 1, 2016–Mar. 31, 2017, on State lands, harvest of caribou within the Federal hunt area on the Nushagak Peninsula was allowed only through September 30, 2016. This effectively limited opportunity for winter harvest within the core range of the herd to federally qualified subsistence users.

Review of the 1994 closure was addressed in Wildlife Closure Review WCR15-07, which the Bristol Bay Subsistence Regional Advisory Council (Council) considered at its February 2017 meeting. The Council voted to rescind the closure, due to concerns about long-term sustainability of the herd (BBSRAC 2017) and consistent with the Board’s Closure Policy, which specifies that closures “should be removed as soon as practicable when conditions that originally justified the closure have changed to such an extent that the closure is no longer necessary.”

As a result, the Council submitted Proposal WP18-22, which requested eliminating the Federal caribou closure on the Nushagak Peninsula. In April 2018, the Board adopted Proposal WP18-22 with modification to close caribou hunting on the Nushagak Peninsula except by federally qualified subsistence users unless the population estimate exceeds 900 caribou. The Board stated this modification addressed the Council’s concerns over both over-grazing and overharvest, as well as provides management flexibility and certainty, reducing the need for additional special action requests (FSB 2018).

In July 2020, under authority delegated by the Board, the Togiak NWR manager announced a daily harvest limit of one bull caribou, an annual quota of five bulls, and that five Federal permits total would be issued for the NPCH hunt. Additionally, the 2020 season opened August 1 and closed on September 20. The limited quota and season were to promote herd growth because the summer 2020 population estimate of the NPCH was only 226 caribou, which is near the lower end of the population objective. The State NPCH hunt (RC501) was closed for the 2020/21 regulatory year.

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.

In April 2022, the Board voted to maintain the status quo on wildlife closure WCR22-07. Maintaining the closure to non-federally qualified users when the NPCH population estimate is below 900 caribou provides a subsistence priority, while opening the hunt to all users when the NPCH exceeds 900 caribou helps keep the herd within carrying capacity of its habitat and prevents unnecessary restrictions on non-subsistence users.

Current Events Involving the Species

A proposal was submitted to make changes to the delegation of authority letter (**Appendix 1**) for the regulatory cycle. This proposal was determined to be an administrative change, as no regulation changes would happen. The BBSRAC and WISRAC were advised of the change at their fall 2023 meeting. The change will then be presented to the Board in April 2024.

Biological Background

The NPCH was established in 1988 when 146 caribou were reintroduced to the Nushagak Peninsula where caribou had been an important subsistence resource for area residents (NPCH Management Plan 1994). The herd is cooperatively managed by the Nushagak Peninsula Caribou Planning Committee (Committee), which consists of Federal, State, tribal, and local representatives. In 2020, the Committee revised the population objective from 400-900 caribou, optimum 750 caribou to the objective stated below due to concerns about overgrazing (Aderman 2020b, pers. comm.).

Management objectives for the NPCH agreed upon by the Committee include (Aderman 2020a):

- Population: 200-600 caribou, optimum 400 caribou
- Bull:cow ratio: 35-45 bulls:100 cows (if ratio is < 25 bulls:100 cows, manage for viability; if ratio is > 55 bulls:100 cows, manage for increased bull harvest).
- Harvest objective: 10-30 caribou

Within the first 10 years following reintroduction, the NPCH grew from 146 animals in 1988 to over 1,200 caribou by 1997. Subsequently, calf recruitment and adult female survival decreased, and the population fell below 500 caribou by 2006. By 2015, the population had increased to an estimated size of over 1,400 caribou and remained above population objectives through 2019. However, the population declined to a minimum count of 209 caribou in 2020, which is the lowest count since 1989, the year following reintroduction (Aderman 2020a, pers. comm.). Since 2020, the population increased to a minimum count of 359 caribou in 2022 (Aderman 2023, pers. comm.) (**Table 1**).

The causes of the decline between 1999 and 2007 are not clearly understood and are almost certainly multi-factored (Aderman and Lowe 2012). The most likely explanation for the decline is that the exceptionally high growth through 1998 produced large annual cohorts of females that survived until a relative old age, at which time they declined in productivity. This high proportion of unproductive females, combined with high harvest years in 2001 and 2002, changed the population trajectory from an increasing trend to a decreasing trend, which persisted until the replacement of old, unproductive females with younger, more productive females. Changing nutritional conditions (both short-term, such as those associated with drought or winter icing, as well as longer-term changes, such as lower overall carrying capacity due to continuous grazing on the Nushagak Peninsula since 1988) underlaid and exacerbated this decline. Predation on the population has not been shown to be a significant factor. A study of wolf predation from 2007–2011 found that wolf predation was not a primary driver of Nushagak Peninsula caribou population dynamics (Walsh and Woolington 2008). Brown bears are common on the Nushagak Peninsula and likely have learned to exploit the caribou population, but their impact on the NPCH is not known (Aderman and Lowe 2012).

Between 2007 and 2015, the population increased due to improved fall calf recruitment and adult female survival (Aderman 2015). Between 2015 and 2020, the population decreased due to increased caribou harvest (Aderman 2017, pers. comm.; 2020b). Specifically, the substantial population decline in 2020 is attributed to hunting related mortality (reported and unreported harvest, wounding loss) as 799 caribou were reported harvested between 2016/17 and 2019/20 (**Table 2**). This changed in 2020/21 and 2021/22, when there was a combined harvest of only four caribou reported. This drastic decrease in harvest is a primary factor in the population increase during these two years (**Table 2**) (Alderman 2023 pers. Comm.). Predation by bears and wolves accounted for an unknown amount of mortality (NPCPC 2020).

Since reintroduction in 1988, bull:cow ratios have ranged from 12-71 bulls:100 cows, averaging 43 bulls:100 cows. The 2022 surveys estimated 41 bulls:100 cows, which is within management objectives. Over the same time period, calf:cow ratios have ranged from 10-72 calves:100 cows, averaging 44 calves:100 cows. 2022 surveys estimated 63 calves:100 cows (**Table 1**) (Aderman 2020b, pers. comm.; Alderman 2023 pers. comm).

The Nushagak Peninsula Caribou Planning Committee (Committee) is concerned over the potential for the NPCH to overgraze its habitat. Between 2002 and 2017, lichen cover on the Nushagak Peninsula declined from 48% to 30% (NPCPC 2020). Assuming the current rate of change continues, lichen cover is projected to be zero by 2026 (Aderman 2020a). If overgrazing occurs, the Committee believes Nushagak Peninsula caribou would likely leave the peninsula before starving to death. However, it is unknown whether the emigration would be temporary, seasonal, or long term (NPCPC 2020). Current management efforts are aimed at preventing overgrazing, while recovering the population and providing for subsistence harvest opportunity.

Table 1. Sex and age composition, minimum counts and population estimates for the NPCH, 1988-2022 (Aderman 2015, Aderman 2020b pers. comm., 2023 pers. comm.).

Year	Bulls: 100 Cows	Calves: 100 Cows	Minimum Count ¹	Population Estimate ²
1988	12	10	146	---
1989	---	---	202	---
1990	---	---	268	---
1991	---	---	383	---
1992	60	72	561	---
1993	---	---	734	---
1994	71	65	1,007	---
1995	---	---	1,156	---
1996	---	---	1,112	---
1997	64	62	1,255	---
1998	57	63	1,237	---
1999	48	53	972	---
2000	52	38	1,024	---
2001	46	35	930	---
2002	43	36	678	---
2003	47	44	757	---
2004	43	34	588	---
2005	38	32	594	---
2006	31	36	477	---
2007	49	40	462	---
2008	44	60	579	683 ± 108
2009	37	35	679	861 ± 160
2010	42	45	706	758 ± 83
2011	29	39	859	847 ± 64
2012	52	50	902	925 ± 63
2013	32	40	926	1,033 ± 135
2014	44	53	1,014	1,056 ± 103
2015	65	46	1,313	1,424 ± 172
2016	51	40	1,230	1,294 ± 68
2017	30	42	786	968 ± 218
2018	25	34	709	787 ± 114
2019	33	26	710	822 ± 164
2020	33	49	209	226 ± 47
2021	39	48	258	287 ± 48
2022	41	63	359	442 ± 118

¹Reported minimum counts were obtained pre-calving (January – March) in 1988 – 1994, 1997, 2000 and post-calving (June – July) in all other years.

²Population estimates are based on Rivest et al. (1998) caribou abundance estimator.

Harvest History

In 2011, the Nushagak Peninsula Caribou Management Plan's harvest strategy was revised to make it more responsive to a dynamic caribou population. The strategy established an annual harvest goal based on population size and trend, allowing harvest when the population exceeds 200 caribou and is stable or increasing. It calls for a liberal harvest when the population is 800 caribou or greater and recommends harvesting all animals over a minimum count of 750 caribou (Aderman 2015). In 2022, the Committee set a harvest objective of 48 caribou for the 2022/23 season (Aderman 2020a, 2020b, pers. comm.).

Hunting effort is influenced by travel conditions, availability of and opportunity to harvest other resources, including Mulchatna caribou and moose, as well as economic factors (Aderman and Lowe 2012). Historically, most of the reported harvest has occurred in February and March (**Table 2**), due to improved hunter access to the herd via snowmachine (Aderman and Lowe 2012). Between 1994/95 and 2021/22, 18% and 68% of the NPCH harvest occurred in February and March, respectively. Total reported harvest has sometimes been lower than expected, given the NPCH size (Alderman 2023, pers. comm.). Winter harvest was low for several years due to poor travel conditions resulting from low snowfall and warm temperatures. This low winter harvest has continued in recent years as the NPCH has been spending the winter outside the hunt area.

Between 1994/95 and 2021/22, reported Nushagak caribou harvest ranged from 0-378 caribou per year (**Table 2**). The highest harvests occurred in 2016/17 and 2019/20 (Aderman 2020b, pers. comm.). These years of high harvest likely contributed to the recent population decline.

Local subsistence hunters from Aleknagik, Dillingham, Manokotak, Togiak, Twin Hills and Clark's Point account for the vast majority of caribou harvested under Federal and State regulations, and most Nushagak caribou are harvested under Federal regulations. Between 2015/16 and 2019/20, nine percent of the total reported harvest occurred under State regulations (Aderman 2020a). The State hunt RC501 has not occurred since 2019/20 due to conservation concerns.

Table 2. Reported harvest of the NPCH, by month, for regulatory years 1994/1995 – 2016/2022 (Aderman 2015; OSM 2015; Aderman 2017, pers. comm., 2020b pers. comm., 2023 pers. comm.; ADF&G 2017).

Year	Month								Unknown	Total
	Aug.	Sep.	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.		
1994/1995	NS ^a	NS	NS	NS	3	1	25	NS	6	35
1995/1996	NS	NS	NS	3	0	5	43	NS	1	52
1996/1997	5	NS	NS	0	0	2	13	NS	0	20
1997/1998	5	NS	NS	0	2	25	35	NS	0	67
1998/1999	0	2	NS	0	0	0	50	NS	3	55
1999/2000	0	0	NS	0	2	7	54	NS	0	63
2000/2001	0	6	NS	0	0	22	98	NS	0	126
2001/2002	0	3	NS	0	0	9	115	NS	0	127
2002/2003	3	0	NS	0	0	0	0	NS	0	3
2003/2004	2	3	NS	0	0	0	29	NS	0	34
2004/2005	1	0	NS	0	0	0	8	NS	0	9
2005/2006	1	1	NS	0	0	0	9	NS	0	11
2006/2007	NS	NS	NS	NS	NS	0	NS	NS	0	0
2007/2008	NS	NS	NS	NS	NS	0	0	NS	0	0
2008/2009	NS	NS	NS	NS	NS	5	2	NS	1	8
2009/2010	NS	NS	NS	NS	NS	3	14	NS	1	18
2010/2011	NS	NS	NS	NS	NS	18	27	NS	0	45
2011/2012	0	2	NS	NS	NS	20	64	NS	0	86
2012/2013	6	3	NS	0	5	6	89	NS	0	109
2013/2014	3	1	NS	0	0	0	98	NS	0	102
2014/2015	8	7	NS	0	0	1	0	NS	0	16
2015/2016 ^b	28	14	NS	0	0	0	15	7	0	64
2016/2017 ^c	29	15	1	2	38	113	180	0	0	378
2017/2018 ^d	8	3	0	1	2	19	67	NS	0	100
2018/2019 ^e	6	3	2	0	0	1	2	NS	0	14
2019/2020 ^f	11	3	0	0	9	69	215	NS	0	307
2020/2021	0	0	NS	NS	NS	NS	NS	NS	0	0
2021/2022	0	0	0	0	0	0	4	0	0	4

^a NS = No season

^b Includes 10 caribou harvested under State regulation

^c Includes 28 caribou harvested under State regulation

^d Includes 5 caribou harvested under State regulation

^e Includes 2 caribou harvested under State regulation

^f Includes 12 caribou harvested under State regulation and 7 harvested illegally

Effects of the Proposal

If this proposal is adopted, the hunt area for the NPCH will be expanded to the northwest of its current extent. This will provide more harvest opportunity to federally qualified subsistence users to harvest Nushagak caribou since the adjacent hunt area, which is managed for the Mulchatna Caribou Herd (MCH), has been closed for several years. This will also facilitate NPCH management by helping to meet annual harvest objectives and maintaining the herd within sustainable levels. Potential harvest is not anticipated from MCH, as they have not been in this area since 1996-1997 (Aderman 2023 pers. comm.). However, Togiak NWR manager has the delegated authority for management for in-season management of the MCH, as well as the NPCH. Should caribou from the MCH move into this area, the in-season manager could close the hunt.

This herd has been strictly managed through harvest, after over grazing between 2002-2017. Since 2021, the population of the NPCH has been increasing and harvest numbers are decreasing. The decrease in reported harvest numbers is largely due to the herd wintering outside the boundary for the hunt (FC1702). Between 1994-2022, 86% of the harvest has taken place in February and March (**Table 2**), when a majority of the herd is no longer within the hunt boundary (Aderman 2023 pers. comm.).

OSM CONCLUSION

Support Proposal WP24-18

Justification

Adopting WP24-18 would increase subsistence opportunity for the NPCH by allowing harvest in new areas where the herd has expanded its range. The NPCH is managed strictly by population numbers and harvest objectives. The herd changing its range has impacted the ability to meet the harvest objective sin RY 2019/20 (**Table 2**). The Togiak NWR manager, as the in-season manager, can close the season if needed to address conservation concerns for the NPCH.

Note: OSM had initially supported this proposal with modification to better describe the hunt area in regulation because the exact hunt descriptor language was not included in the original proposal. However, the proponent later provided the exact regulatory language, which is now reflected in the ‘Proposed Federal Regulation’ section. Therefore, the OSM modification no longer applies, so the OSM recommendation is straight support.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Bristol Bay Subsistence Regional Advisory Council

Support OSM modification. The Council supported the OSM modification as the new hunt area boundaries as defined are clear and identifiable which is important in this geographic area that can be featureless. The expansion of the hunt area aligns with the changes in migration patterns as the herd has been moving west instead of south. Additionally, the Council was in support of the proposal after hearing public comments during the Council meeting that expressed support for the expansion of the hunt area; the expansion of the hunt area would allow for increased harvest opportunities and the ability to maintain traditional hunting practices.

Western Interior Subsistence Regional Advisory Council

Support WP24-18. The Council found this proposal would provide more Federal subsistence opportunity for a resource that has been more difficult to access in recent years. They voiced concern over accidental harvest of Mulchatna caribou because as the two herds may intermix occasionally, but recognize the in-season Federal manager has the ability to take action to protect the Mulchatna herd if needed. Additionally, if this proposal is passed this would allow for greater management flexibility to meet harvest objectives and maintain the Nushagak herd within sustainable levels.

The Western Interior Subsistence Regional Advisory Council (Western Interior Council) supported this proposal as written because the new boundary descriptor was not yet available. The OSM modification was to include the new boundary descriptor, so the Western Interior Council is essentially supporting the OSM modification.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENT

Wildlife Proposal WP24-18

This proposal would expand the hunt boundary for the Nushagak Peninsula Caribou Herd (NPCH) further onto federal public lands for federally qualified users (FQU). The NPCH has wintered outside of the federal hunt boundary in recent years resulting in a reduced harvest and not meeting federal harvest objectives.



Figure 1. Red line indicates the proposed expanded area for WP24-18.

Position

The Alaska Department of Fish & Game (ADF&G) is **NEUTRAL** on this proposal. The 2011 Nushagak Peninsula Caribou Management Plan prohibits state opportunity on federal public lands unless the population is above 900 caribou, and this hunt has been managed to ensure that the population does not reach that threshold. Due to the annual seasonal range of NPCH expanding off the peninsula, revisiting the management plan is appropriate as the herd expands its range beyond the traditional and limiting Nushagak Peninsula. Concerns over a lack of, or late, reporting could put NPCH at risk of overharvest.

Background

NPCH was established in 1988 when 146 caribou were introduced to the Nushagak Peninsula. The Nushagak Peninsula is primarily federal public lands (85% National Wildlife Refuge) and is primarily managed under federal regulation. State management of NPCH is hampered by the limited state lands where the NPCH had currently ranged and consists of a single registration

permit, RC501, which was open from RY2015 through RY2019. During that time a total of 57 caribou were harvested. A working group consisting of federal, state, and tribal partners was formed in 2011 to address the cooperative management of NPCH. This committee formed a Nushagak Peninsula Caribou Management Plan summarizing permit allocations based on population estimates as well as population trajectory. Although this management plan was not endorsed/ratified by the Alaska Board of Game (BOG), ADF&G has continued to manage in line with the plan. Committee meetings take place in July of each year after photo surveys of the NPCH are concluded and permit allocation recommendations are presented to all parties based on the Nushagak Caribou Herd Management Plan. Permits are issued to tribal councils of Dillingham, Togiak, Manokotak, Clark's Point, Twin Hills, and Ekuk and distributed through lottery to residents of each community. Where tribal authorities are unable to distribute permits, Togiak National Wildlife Refuge has offered lottery drawings for Dillingham residents.

Impact on Subsistence Users

If adopted, this proposal will allow federally qualified users to take advantage of an expanded hunt area to attempt to meet harvest objectives of the Nushagak Peninsula Caribou Management Plan agreed upon by the Committee in 2011.

Impact on Other Users

If adopted federal harvest objectives are more likely to be met and given the current management strategy to keep the herd's population down, decreasing the potential for an irruption and thus the lack of state hunt RC501 to open. If caribou continue to expand outside of the hunt area and allow for a higher population objective the management plan should be reevaluated and RC501 should be considered as the appropriate management action.

Opportunity Provided by State

State customary and traditional use findings: The Alaska Board of Game has made negative customary and traditional use findings for NPCH in Unit 17A and 17C.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

There is no ANS for the NPCH. The season and bag limits for Unit 17A and 17C are:

<u>Unit/Area</u>	<u>Bag Limit</u>	<u>Open Season (Permit/Hunt #)</u>	
		<u>Resident^a</u>	<u>Nonresident</u>
<i>17A</i>	<i>One Caribou by permit</i>	<i>RC501</i> (Registration Permit)	<i>No open season</i>
all drainages that terminate east of Right Hand Point			
<i>17C</i>	<i>One caribou by permit</i>	<i>RC501</i>	<i>No open season.</i>
Remainder			

^a Subsistence and General Hunts.

Conservation Issues

Overharvesting NPCH may result in the complete closure of the hunt, or severely decreased opportunity.

Enforcement Issues

There are already concerns regarding the lack of timely reporting of harvest.

WRITTEN PUBLIC COMMENTS



111 WEST 16TH AVENUE • SUITE 400
ANCHORAGE, AK 99501
P 907.278.3602 • F 907.276.3924

June 23, 2023

Federal Subsistence Board
Office of Subsistence Management – Attn: Theo Matuskowitz
1011 East Tudor Road, MS-121
Anchorage, Alaska 99503-6199

Via Email: subsistence@fws.gov

Re: 2024-2026 Wildlife Proposals: WP24-12 through WP24-18

Dear Federal Subsistence Board,

Bristol Bay Native Corporation (BBNC) is the for-profit Alaska Native regional corporation created by Congress pursuant to the Alaska Native Claims Settlement Act (ANCSA) to represent the economic, social, and cultural interests of Alaska Native people with either present day or ancestral ties to the Bristol Bay region. Our mission is to "Enrich our Native Way of Life." BBNC is committed to protecting the Native culture and subsistence way of life of our 11,800+ shareholders.

BBNC submits this letter to the Federal Subsistence Board (FSB) related to seven Wildlife Proposals related to Bristol Bay, namely WP24-12 through WP24-18.

- BBNC supports Wildlife Proposal 24-12, 24-13 & 24-14 which all ask that the federal subsistence season for bull moose in unit 9B be extended five additional days to September 25th to align with the state's open season. This is a sensible recommendation to avoid confusion between the federal and state hunting seasons.
- BBNC conditionally supports Wildlife Proposal 24-15 which seeks to create a caribou hunt in unit 9C within a portion of the Katmai National Preserve near Kukadek Lake that is specifically for the residents of Igiugig. BBNC supports this proposal but asks the Federal Subsistence Board to also include the residents of Kokhanok as soon as it is practical to do so. The residents of both communities have traditionally harvested caribou in the Preserve and the herd occupying this area is growing and can withstand additional hunting pressure.
- BBNC supports Wildlife Proposals 24-16 and 24-17 which would add Naknek, South Naknek and King Salmon to those communities eligible to harvest

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caribou in Unit 9E. The population numbers in Unit 9E can support the additional hunt pressure and residents of these additional communities no longer have access to caribou in the Mulchatna herd.

- BBNC supports Wildlife Proposal 24-18 which would expand the caribou hunt FC1702 to include new areas to the northwest of the existing hunt area where much of the Nushagak Peninsula Caribou Herd tends to winter. This change would increase harvest rates and increase the likelihood for the hunt to achieve its harvest objectives.

BBNC asks the FSB to add these comments to the meeting materials for the Bristol Bay Subsistence Regional Advisory Council to consider at its fall meeting and for the FSB to consider at its spring 2024 meeting.

Thank you for this opportunity to provide comments.

Sincerely,

Daniel Cheyette

Daniel Cheyette
VP, Lands and Natural Resources

Cc: Leigh Honig, Bristol Bay Region Coordinator, leigh_honig@fws.gov

APPENDIX 1



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

Federal Subsistence Board

1011 East Tudor Road, MS121
Anchorage, Alaska 99503-6199



FOREST SERVICE

OCT 26 2018

OSM 180108.CM

Refuge Manager
Togiak National Wildlife Refuge
P.O. Box 270 MS 569
Dillingham, Alaska 99576

Dear Refuge Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the manager of the Togiak National Wildlife Refuge 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 Units 17A and 17C consisting of the Nushagak Peninsula south of the Igushik River, Tuklung River and Tuklung Hills, west to Tvativak Bay, for the management of caribou on these lands.

It is the intent of the Board that actions related to management of caribou 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, the Nushagak Peninsula Planning Committee 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. Delegation: The Togiak National Wildlife Refuge manager is hereby delegated authority to issue emergency or temporary special actions affecting caribou 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. Authority: 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. Scope of Delegation: 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 determine the harvest quota and set the harvest limit, close the season, and determine the number of permits to be issued, for caribou on Federal public lands in Unit 17A and 17C— that portion consisting of the Nushagak Peninsula south of the Igushik River, Tuklung River and Tuklung Hills, west to Tvativak Bay.

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 caribou 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 17A and 17C— that portion consisting of the Nushagak Peninsula south of the Igushik River, Tuklung River and Tuklung Hills, west to Tvativak Bay.

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

5. Guidelines for Delegation: 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

Refuge Manager

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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, the Nushagak Peninsula Planning Committee, 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

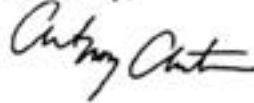
Refuge Manager

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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. Support Services: 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, Bristol Bay Subsistence Regional Advisory Council
Commissioner, Alaska Department of Fish and Game
Special Assistant to the Commissioner, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

WP24-20 Executive Summary	
General Description	<p>Proposal WP24-20 requests modifying the harvest limit, permit requirements, and delegation of authority letter (DAL) for moose in the Kuskokwim River hunt area of Unit 18 during the winter Federal subsistence hunting season. The modification to the DAL includes delegating authority to the Yukon Delta NWR manager to announce sex and antler restrictions, determine the permit allocation system, and set any needed permit conditions for the may-be-announced winter season.</p> <p><i>Submitted by: the Yukon Delta National Wildlife Refuge.</i></p>
Proposed Regulation	<p>See Scope of Delegation section in the attached Delegation of Authority letter.</p> <p>Unit 18 – Moose</p> <p><i>Unit 18, that portion east of a line running from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W162°22.14" Longitude), continuing upriver along a line 1/2 mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage - 1 antlered bull by State registration permit during the fall season</i></p> <p><i>Or</i></p> <p>1 antlered bull Up to one moose by <i>May be announced</i> <i>Federal registration permit during a may-be-announced winter season</i> <i>between Dec. 1-</i> <i>Jan. 31.</i></p> <p><i>Federal public lands are closed to the taking of moose except by residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautlauk,</i></p>

	<i>Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag.</i>
OSM Conclusion	Support
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council	Support
Western Interior Alaska Subsistence Regional Advisory Council	Support
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Position	Neutral
Written Public Comments	None

STAFF ANALYSIS

WP24-20

ISSUES

Wildlife Proposal WP24-20, submitted by the Yukon Delta National Wildlife Refuge (NWR), requests modifying the harvest limit, permit requirements, and delegation of authority letter (DAL) for moose in the Kuskokwim River hunt area of Unit 18 during the winter Federal subsistence hunting season. The modification to the DAL includes delegating authority to the Yukon Delta NWR manager to announce sex and antler restrictions, determine the permit allocation system, and set any needed permit conditions for the may-be-announced winter season. (**Appendix 1**).

DISCUSSION

The proponent notes that the moose population in Zone 2 has increased over the years and so has the harvest quota. In recent years, the quota has not been met for the fall hunt, likely due to the difficulty and expense to travel to the hunt area by boat. The may-be-announced winter hunt was implemented in 2022 to help allow for harvest of the remaining moose quota.

The proponent is asking for the ability to set the number of permits and permit conditions to encourage timely reporting. The proponent also requests flexibility in using either a first-come-first-serve registration permit system or a random draw permit system to fairly allocate a limited number of permits to subsistence users in multiple villages with limited staff to manage the winter hunt. Additionally, the proponent requests flexibility in setting the harvest limit so that they can protect cows when needed but can allow cow harvest in the future as the population continues to grow. The ability to set sex and antler restrictions also addresses hunter behavior and their ability to identify bulls without antlers.

Existing Federal Regulation

Unit 18 – Moose

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

Sep. 1-Oct. 15.

Or

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

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

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

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

Proposed Federal Regulation

*See **Scope of Delegation** section in the attached Delegation of Authority letter (**Appendix 1**).

Unit 18 – Moose

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

Sep. 1-Oct. 15.

Or

~~1 antlered bull~~ **Up to one moose** by Federal registration permit during a may-be-announced winter season

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

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

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

Existing State Regulation

Unit 18 – Moose

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

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

Non-residents: Unit 18 no open season

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

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

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

Extent of Federal Public Lands/Waters

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

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

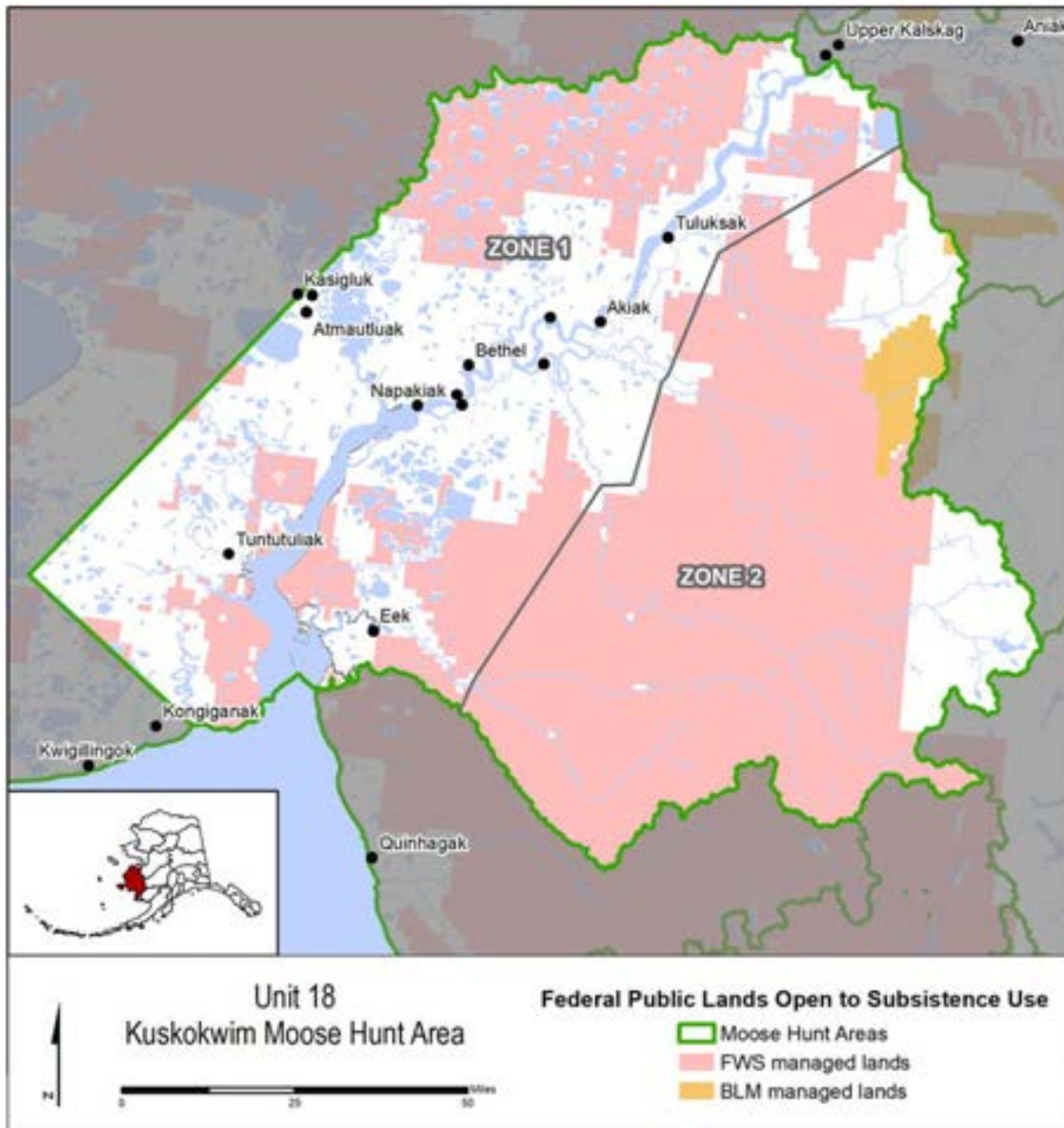


Figure 1. Land status and hunting zones in the Unit 18 Kuskokwim moose hunt area.

Customary and Traditional Use Determinations

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

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

Regulatory History

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

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

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

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

In May 2010, the Board adopted Proposals WP10-58 and WP10-62, with modification to make boundary changes similar to the BOG actions. Adoption of these proposals helped to clarify the boundary for moose hunters and law enforcement. At the same meeting in May 2010, the Board adopted Proposal WP10-54 with modification to reduce the pool of federally qualified subsistence users eligible to hunt moose on Federal public lands within the lower Kuskokwim. This was necessary because of the small number of moose available to harvest relative to the large number of subsistence users with a customary and traditional use determination for moose (42 communities including Bethel).

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

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

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

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

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

winter season could dramatically increase harvest pressure in the area, including accidental harvest of cows, further hampering recovery of the population.

In July 2020, the Board approved Wildlife Special Action WSA20-05, which requested extending the fall moose season in Zone 2 of the Unit 18, Kuskokwim hunt area from Sep. 1 – 30 to Sep. 1 – Oct. 7 for the 2020/21 regulatory year. Yukon Delta NWR submitted, and the Board approved Wildlife Special Action WSA20-05 to provide more subsistence hunting opportunity since moose harvest quotas were not being met.

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

In 2021, the Board adopted the Council's recommendation on Wildlife Special Action WSA21-03, extending the fall moose season in Zone 2 of the Unit 18, Kuskokwim hunt area from Sep. 1–30 to Sep. 1–Oct. 15 for the 2021/22 regulatory year. The Board adopted this special action to provide additional subsistence opportunity and to reduce regulatory complexity by aligning with State regulations.

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

In November 2022, the Board adopted Wildlife Special Action WSA22-04 as modified by OSM to delegate additional authority to the Yukon Delta NWR to limit the number of permits issued and set permit conditions for the winter moose hunt in Zone 2 for the 2022/23 regulatory year. The OSM modifications were to clarify the effective period of the additional authority and to specify that permit conditions must comply with the Office of Management and Budget (OMB) information collection. The Board stated that limiting permit numbers and setting any needed permit conditions ensures the in-season manager can effectively manage the winter may-be-announced moose hunt in Zone 2 of the

Kuskokwim hunt area of Unit 18. The Board also noted that these tools could help provide federally qualified subsistence users with more harvest opportunity while preventing overharvest.

In December 2023, the Board delegated additional authority to the Yukon Delta NWR manager to once again limit the number of registration permits issued for the Zone 2 winter moose hunt. Yukon Delta NWR requested this additional authority to provide subsistence harvest opportunity while safeguarding against overharvest. As delegating authority is administrative and not regulatory in nature, a special action request was not necessary.

Current Events

The Yukon-Kuskokwim Delta Subsistence Council submitted Wildlife Proposal WP24-21, requesting to add the communities of Kongiganak, Kwigillingok, and Quinhagak to the group of communities who are eligible to harvest moose in the Kuskokwim River drainage hunt area in Unit 18.

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

State Proposal 10, submitted by ADF&G, requests liberalizing the moose harvest limit within the Kuskokwim hunt area of Unit 18 under State regulations. Specifically, it requests establishing a draw permit hunt for antlerless moose during the fall season. This hunt would target Zone 1, which has low bull:cow ratios but may be reaching carrying capacity based on browse removal rates. It also requests establishing a draw permit hunt for one antlered bull during a winter season (Dec. 1-Jan. 31). This hunt would target Zone 2 and would only be announced if the Zone 2 harvest quota was not met during the fall hunt.

Biological Background

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

Prior to 2020, the most recent population survey of the lower Kuskokwim survey area, which includes the main stem riparian corridor between Kalskag and Kwethluk, occurred in 2015. At that time, the population in Zone 1 was estimated to be 1,378 moose, or 1.6 moose/mile² (**Figure 2**). This represents an annual growth rate of 20% between 2011 and 2015. The 2015 population estimate for Zone 2 was

508 moose (YKDRAC 2019a). At that time, the Kuskokwim hunt area moose population remained below the State's population objective of at least 2,000 moose in this area (Perry 2014).

Lack of snow cover in recent years precluded additional population surveys between 2015 and 2020. The survey completed in 2020 shows an increase of the moose populations in both zones. The estimated mid-point population in Zone 1 was 3,220 moose, and the minimum count in Zone 2 was 789 moose, which exceeds State population objectives (**Figure 2**) (Jones 2021, pers. comm., YKDRAC 2019b). Browse surveys indicate that the moose population in Zone 1 is potentially reaching a point that will limit or stop growth, while the Zone 2 population is about one-half of what it could be (Jones 2021, pers. comm.).

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

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

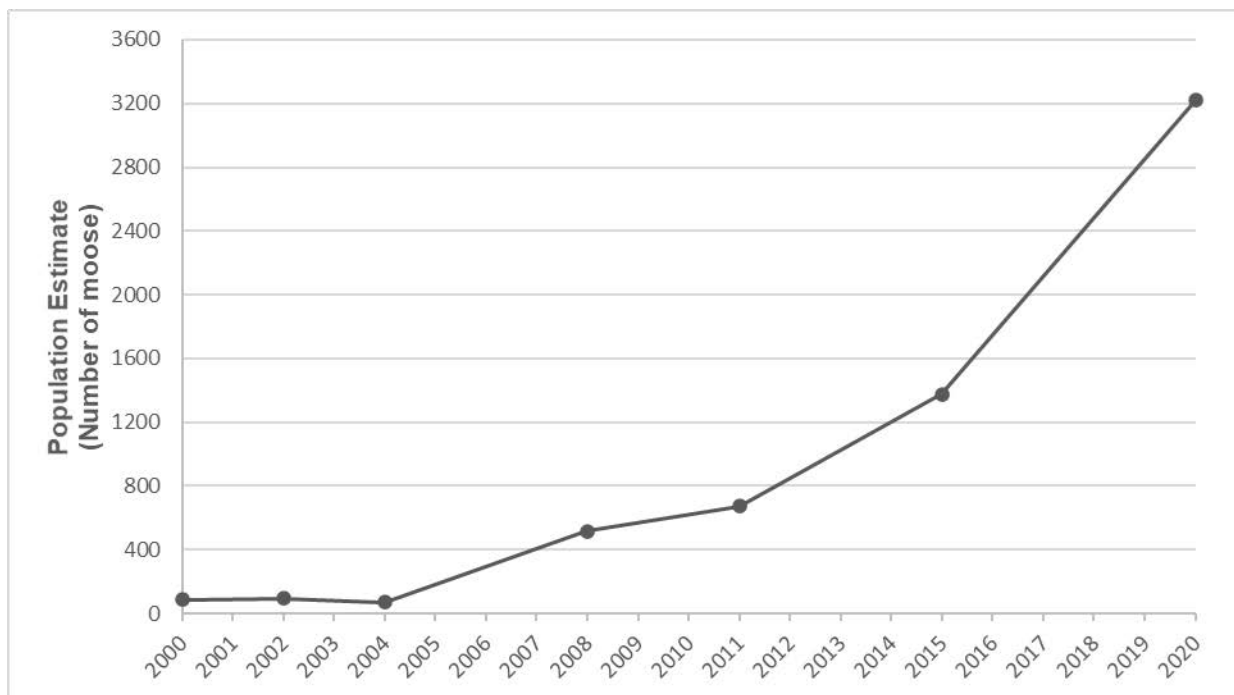


Figure 2. Estimated moose population size along the main stem of the Kuskokwim River, 2000 – 2020 (Perry 2014; Jones 2018, pers. comm.; Jones 2021, pers. comm.).

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

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

Cultural Knowledge and Traditional Practices

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

Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautluak, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag.

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

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

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

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

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

Several means are used to access harvest areas. Moose are typically hunted from boats in the fall. Motors are shut off and boats are allowed to drift downstream, guided by oars. Most moose hunting takes place within one mile of either side of the waterway that is being hunted. Snow machines also are used to travel to areas where moose are likely to be found. Fresh tracks are followed on snow machine

or foot. Moose are sometimes tracked with snowshoes to beds where they are resting for the day. Aircraft is seldom used in moose hunting (Charnley 1983).

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

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

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

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

Harvest and Use of Moose

Moose harvest and use data are lacking or incomplete for Unit 18 communities. One cause of this data gap is that while moose hunters have been required to obtain harvest tickets to hunt in some areas of Unit 18, returning harvest reports has not always been mandatory. Information concerning the harvest and use of moose in Unit 18 was obtained primarily through household harvest surveys. A registration permit has been required to hunt for moose in the Kuskokwim hunt area since it re-opened in 2009 after a five-year moratorium on hunting moose, and harvest reporting is now mandatory when hunting in this area.

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

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

Table 2. The estimated harvest of moose in communities eligible to harvest moose in the Unit 18 Kuskokwim hunt area, organized by community and based on household surveys (blank=question not asked, ADF&G 2022b).

Community	Study year	Estimated harvest of moose	Lower estimate	Upper estimate	Per person harvest (in pounds of edible weight)
Akiachak	1998	106	93	119	145
Akiak	2010	27	20	33	38
Bethel	2011	279	220	338	25
Bethel	2012	357	294	419	34
Eek	2013	14	14	14	22
Kalskag	2003	21	12	32	46
Kalskag	2004	9	9	10	26
Kalskag	2005	12	6	21	24
Kalskag	2009	15	12	18	40
Kwethluk	1986	33	33	33	45
Kwethluk	2010	33	25	42	25
Lower Kalskag	2003	30	14	52	53
Lower Kalskag	2004	12	10	15	25
Lower Kalskag	2005	2	1	10	5
Lower Kalskag	2009	18	15	21	32
Napakiaak	2011	13	13	13	29
Napaskiak	2011	29	29	29	43
Nunapitchuk	1983	12	3	22	19
Oscarville	2010	2	2	4	20
Tuluksak	2010	20	16	24	24
Tuntutuliak	2013	17	17	17	22

Table 3. The percentage of households reporting using, attempting to harvest, or harvesting moose in communities eligible to harvest moose in the Unit 18 Kuskokwim hunt area, organized by community and based on household surveys (blank=question not asked; ADF&G 2022b).

Community	Study year	Number of households interviewed	Percentage of households using moose	Percentage of households attempting to harvest moose	Percentage of households harvesting moose
Akiachak	1998	81	95%	84%	68%
Akiak	2010	63	94%	62%	27%
Bethel	2011	473	61%	28%	13%
Bethel	2012	466	75%	34%	19%
Eek	2013	64	77%	59%	16%
Kalskag	2003	34	74%	59%	29%
Kalskag	2004	50	72%	76%	16%
Kalskag	2005	34	59%	50%	18%
Kalskag	2009	48	92%	92%	25%
Kwethluk	1986	36		63%	29%
Kwethluk	2010	93	84%	51%	22%
Lower Kalskag	2003	34	74%	62%	24%
Lower Kalskag	2004	53	36%	41%	17%
Lower Kalskag	2005	30	40%	30%	3%
Lower Kalskag	2009	63	81%	81%	24%
Napakiak	2011	56	71%	46%	14%
Napaskiak	2011	56	89%	64%	29%
Nunapitchuk	1983	17			24%
Oscarville	2010	12	75%	33%	17%
Tuluksak	2010	68	71%	65%	24%
Tuntutuliak	2013	67	87%	64%	15%

Harvest History

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

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

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

Despite increases in quotas and harvest, demand still outweighs moose availability. From 2009 to 2019, an average of approximately 1,450 hunters have obtained permits to harvest moose in the Kuskokwim hunt area each year, but only 10% of permit holders successfully harvested moose (ADF&G 2019a). The disparity between demand and the relatively small quotas has routinely resulted in emergency closure of the State season within days of its opening (**Table 4**). This has resulted in some frustration among locals, who note that short unpredictable seasons make planning difficult. In response to this, ADF&G no longer uses quotas or closes Zone 1 with emergency closures. Fixed dates determined by estimated time needed to reach the set harvest objective are released prior to the start of each season (Jones 2021, pers. comm.). Local residents have also commented on the challenges of hunting in early September in recent years, given warm conditions that make proper meat care difficult (YKDRAC 2017b).

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

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

In 2022, the Board established a may-be-announced winter moose season under Federal regulations to provide additional opportunity for subsistence users to harvest moose and achieve the Zone 2 quota. Under delegated authority, the Yukon Delta NWR announced a month-long season from January 1-31, 2023, for antlered bulls only by Federal registration permit FM1803. For the 2023/24 regulatory year, the Yukon Delta NWR announced a winter season from December 20, 2023-January 31, 2024.

The Kuskokwim moose population has been managed for continued growth with harvest limited to bulls-only and by quotas. However, the moose population in Zone 1 may be approaching carrying capacity as indicated by browse removal surveys (YKDRAC 2019a). ADF&G submitted Proposal 10 to the BOG to establish an antlerless hunt in Zone 1 (see Current Events section).

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

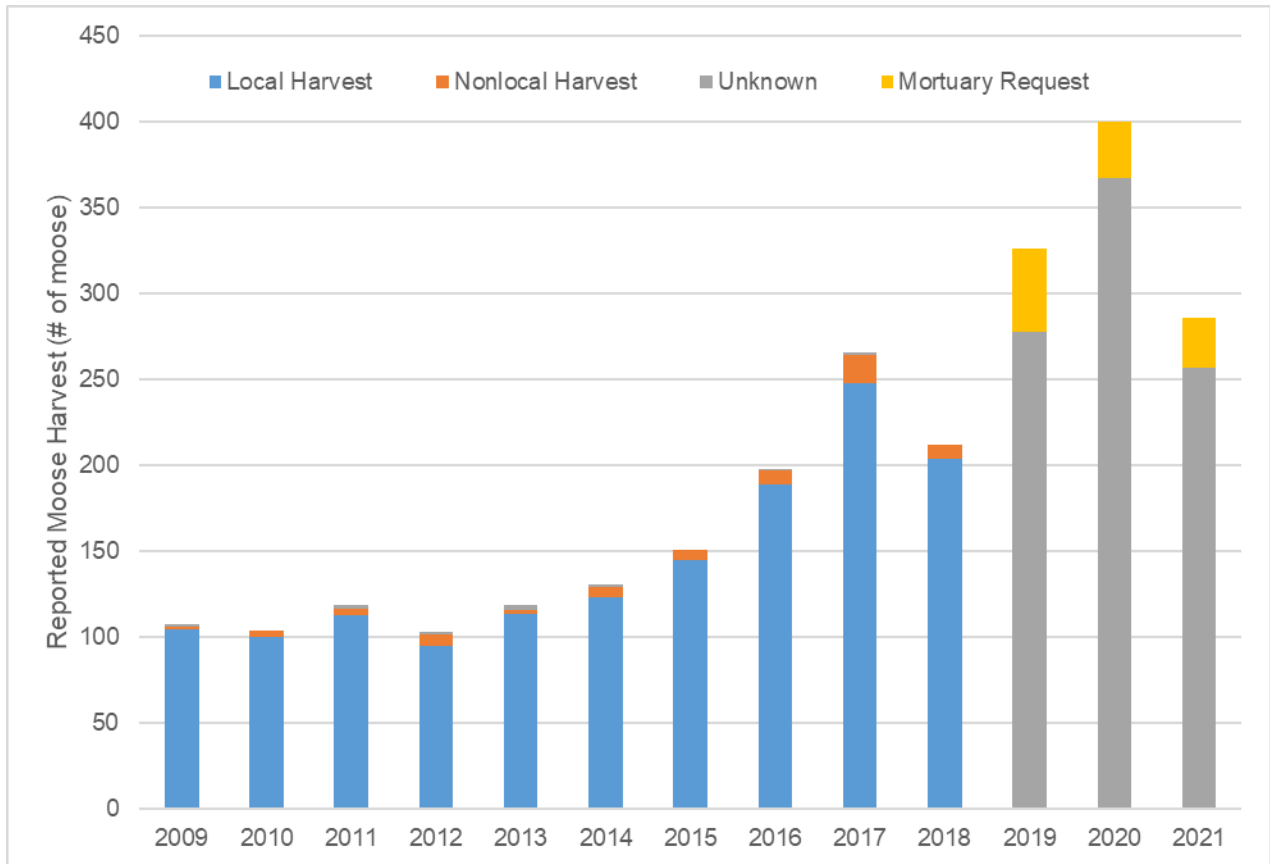


Figure 3. Reported moose harvest by RM615 in the Kuskokwim hunt area, 2009 – 2021 (ADF&G 2019a; Oster 2020, Jones 2021, pers. comm.; Moses 2020, pers. comm.). Note: 2019-2021 data does not distinguish between local and nonlocal harvest.

Table 4. State and Federal moose quotas and harvest, 2011 – 2022 (Jones 2022, pers. comm.; Moses 2020, pers. comm.).

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

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

^b Reported harvest as of October 24, 2022.

^c State uses fixed season dates instead of quota.

Effects of the Proposal

If the Board adopts this proposal, the harvest limit would be liberalized to ‘up to one moose’ and the in-season manager would be delegated authority to determine the permit allocation system (i.e. limited registration or random drawing permit hunt), set any needed permit conditions, and determine antler and sex restrictions for the may-be-announced winter moose season in Zone 2 of the Kuskokwim hunt area in Unit 18 via delegation of authority letter (**Appendix 1**).

Although boat access to Zone 2 is difficult in the fall due to fluctuating water levels, snowmachine access during the winter can be very efficient, creating concerns that the remaining harvest quota may be met and exceeded very quickly. Allowing the flexibility of using either a first-come-first-serve registration permit system or a random draw permit system to allocate permits would allow the in-season manager to utilize the system that is best to fairly allocate a limited number of permits to subsistence users in multiple villages with limited staff. This would also reduce the chance of over-harvest, while providing increased, equitable harvest opportunity for federally qualified subsistence users. Limiting the number of permits issued mitigates conservation concerns, and could allow for a longer season, which is beneficial as travel and snow conditions vary.

Setting permit conditions allows the in-season manager to set harvest reporting requirements to track in-season harvest, ensuring the harvest quota is not exceeded and closing the season if or when the quota is met. Additionally, if the Board adopts this proposal, the harvest limit during the winter season would be liberalized, and the in-season manager would have the flexibility to set sex and antler restrictions. This further provides for flexible hunt management and the ability to adapt to changing moose population trends, hunter behavior and their ability to identify bulls without antlers.

If the Board rejects this proposal, and a winter season is announced, the number of permits issued will be unlimited. This could create a conservation concern as the Zone 2 harvest quota could be quickly exceeded leading to overharvest. Alternatively, if a winter season is not announced due to conservation concerns, potential harvest opportunity for federally qualified subsistence users is lost.

OSM CONCLUSION

Support Proposal WP24-20.

Justification

The delegated authority given to the Yukon Delta NWR Manager in 2022 was intended to give federally qualified subsistence users additional opportunity to harvest moose in Zone 2 when the quota is not met during the fall season. The harvestable surplus of moose targeted for the may-be-announced winter season is only for the remaining quota not met during the fall season. Liberalizing the harvest limit during the winter season and delegating additional authority to manage the winter hunt allows for flexible, adaptable hunt management that optimizes subsistence harvest opportunity and conservation. This proposal mitigates the chances of overharvest and allows for additional harvest opportunity by federally qualified subsistence users during the may-be-announced winter moose season in Zone 2.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Yukon-Kuskokwim Delta Subsistence Regional Advisory Council

The Council **supported** WP24-20. The Council favored providing the Yukon Delta National Wildlife Refuge Manager with additional management tools and greater flexibility for providing subsistence moose hunting opportunities.

Western Interior Alaska Subsistence Regional Advisory Council

The Council **supported** WP24-20. The Council is in support as a delegation of authority would best benefit the subsistence users. The innovative distribution of the permits by the Yukon Delta National Wildlife Refuge staff appears to be working well. This would meet the harvest objectives to maintain this population within its harvestable carrying capacity.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Alaska Department of Fish and Game Comments

Wildlife Proposal WP24-20

This proposal would establish a winter moose season on federal public land in Zone 2 of the RM 615 hunt area in Game Management Unit (Unit) 18.

Position

The Alaska Department of Fish & Game (ADF&G) is **NETURAL** on this proposal. There is a harvestable surplus available for harvest in Zone 2 of the RM 615 moose hunt. Since the beginning of the hunt season dates have been extended and now close October 15th. Adding an additional winter season is one possible way of achieving more harvest in this area. Historically December and January can be tough months for winter travel with lack of snow or thin ice. It is also a time of year when moose are dropping antlers. In a previous study in the unit, we found that 50% of bulls had dropped their antlers by December 15th. It is not unheard of to see moose with at least one antler in late January, but this is uncommon and possibly becomes a disingenuous opportunity for hunters to harvest a bull with at least one antler as winter progresses. Based on the most recent browse survey in Zone 2 we believe there's still room for population growth and that cow harvest is not warranted at this time. Keeping harvest limited to bulls is highly recommended. Another possibility for achieving additional harvest would be to recognize there is no need to restrict nonfederally-qualified users (NFQU) from hunting in this area which would open it up to all Alaskan residents. Currently only federally qualified users (FQU) may harvest moose on federal public lands in the RM 615 moose hunt. Historically this is because there have been very few moose in this part of the unit. There are currently more moose than at any other time in history. The federal closure of this moose hunt is no longer warranted. If the Federal Subsistence Board (FSB) keeps this hunt area restricted to only FQUs, then the winter hunt with a state-federal joint permit is the best solution.

Background

From 2004 through 2008 all the communities within the RM 615 moose hunt area agreed to a five-year moratorium on moose hunting. An additional one-year moratorium was added on federal lands in 2009. This effort was to allow moose to establish a population in this area. And it worked between 2004 and 2021 the moose population grew from about 60 animals within the entire hunt area to 3,220 in Zone 1 and an additional 789 animals found in Zone 2. Typically, a little over 1300 registration permits are issued for this hunt and approximately 1000 people will hunt at least one day during the season. Zone 1, which has easy access and 14 communities, typically meets, or exceeds harvest objectives in seven to nine days. Zone 2, which is historically harder to access and may require jet units under low water level conditions, harvest quota is typically never reached leaving an additional harvestable surplus of approximately 15 to 20 available for winter harvest. The purpose of this proposal is to provide an additional opportunity so that these animals might be harvested by federally qualified individuals.

Impact on Subsistence Users

If adopted, this proposal may provide additional opportunity for FQUs to harvest moose in Zone 2.

Impact on Other Users

If this proposal is adopted without rescinding the closure, then NFQUs will still be unable to hunt in this hunt area which runs contradictory to the provisions found under the Alaska National Interest Lands Conservation Act. The current moose population is plentiful and allowing Alaska residents to hunt moose would not have an adverse impact on FQUs.

Opportunity Provided by State

State customary and traditional use findings: The Alaska Board of Game (BOG) has made positive customary and traditional use findings for moose in Unit 18.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for moose in Unit 18 is 200-400 animals for all of unit 18.

The season and bag limit for Unit 18 is:

<u>Unit/Area</u>	<u>Bag Limit</u>	<u>Open Season (Permit/Hunt #)</u>	
		<u>Resident^a</u>	<u>Nonresident</u>
18 by registration permit only	1 bull, excluding male calves	Sept. 1-Oct. 15	no open season

^a Subsistence and General Hunts.

Special instructions: Federal public land is restricted to FQUs that live within the hunt area.

Conservation Issues

There are no conservation issues with this proposal provided that the hunt remains focused on bulls within Zone 2.

Enforcement Issues

If this hunt is approved, the presence of any federal law enforcement would help ensure people are truly hunting in Zone 2 and not Zone 1. Zone 1 meets or exceeds its harvest goals in seven to nine days most years and additional harvest in Zone 1 is not warranted.

APPENDIX 1

Refuge Manager
 Yukon Delta National Wildlife Refuge
 P.O. Box 346
 Bethel, Alaska 99559

Dear Refuge Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the manager of the Yukon Delta National Wildlife Refuge 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 18, that portion east of a line running from the mouth of the Ishkowiik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60° 59.412 Latitude; W 162° 22.142 Longitude), continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet of Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage for the management of moose on these lands.

It is the intent of the Board that actions related to management of moose 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), 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. Delegation: The manager of the Yukon Delta National Wildlife Refuge is hereby delegated authority to issue emergency or temporary special actions affecting moose 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. Authority: 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. Scope of Delegation: 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 close the fall season
- Open and close a season between December 1 and January 31
- Determine annual harvest quotas
- **Announce sex and antler restrictions for the winter hunt**
- **Determine the permit allocation system on an annual basis (i.e. set the number of permits to be issued through a limited registration or random drawing hunt)**
- **Set any needed permit conditions for moose on Federal public lands. Permit conditions must be approved by OSM and in accordance with the current OMB information collection.**

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 moose 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 18 that portion east of a line running from the mouth of the Ishkowiik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60° 59.412 Latitude; W 162° 22.142 Longitude), continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet of Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage.

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

5. Guidelines for Delegation: 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. Support Services: 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, Yukon-Kuskokwim Delta Subsistence Regional Advisory Council
Commissioner, Alaska Department of Fish and Game
Special Assistant to the Commissioner, Alaska Department of Fish and Game
Interagency Staff Committee

Administrative Record

WP24–22 Executive Summary	
General Description	Proposal WP24-22 is a request for the Federal Subsistence Board to recognize customary and traditional uses of muskoxen in the mainland area of Unit 18 by residents of Unit 18. <i>Submitted by: Yukon-Kuskokwim Delta Subsistence Regional Advisory Council</i>
Proposed Regulation	<p>Customary and Traditional Use Determination—Muskoxen</p> <p><i>Unit 18, Nelson Island and Nunivak Island</i> <i>No Federal subsistence priority</i></p> <p><i>Unit 18, remainder</i> <i>Rural residents of Unit 18</i></p>
OSM Conclusion	Support
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	Support
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.
ADF&G Position	Neutral
Written Public Comments	None

STAFF ANALYSIS

WP24-22

ISSUES

Proposal WP24-22, submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council, is a request for the Federal Subsistence Board (Board) to recognize customary and traditional uses of muskoxen in the mainland area of Unit 18 by residents of Unit 18.

The “mainland” area of Unit 18 refers to areas not on Nunivak or Nelson islands. In regulation, the mainland area of Unit 18 is called the “remainder” area of Unit 18.

A companion proposal will follow, WP24-23, requesting the Board to establish a Federal hunt for muskoxen in the mainland area of Unit 18, if this proposal, WP24-22, is adopted by the Board.

DISCUSSION

The proponent states that muskoxen were re-introduced to Alaska with the intention that one day the population would grow enough that they could be hunted and provide food for subsistence. Muskoxen have migrated from Nelson Island over the past 50 years to various parts of the Unit 18 mainland area and have been observed by local residents across various parts of the region to be increasing in numbers and expanding their range. Much of their current habitat is on Federal public lands of the Yukon Delta National Wildlife Refuge. The proponent continues, recognizing the customary and traditional uses of muskoxen by residents of Unit 18 is the first step to allow these animals to be potentially hunted by Federally qualified subsistence users in the region. The proponent ends by stating that residents of Unit 18 desire the opportunity to harvest muskoxen for subsistence whenever a harvestable surplus is identified and believe the additional opportunity could help alleviate food security concerns.

Only Unit 18 residents’ customary and traditional uses of muskoxen are described below. When a proposal requests to add communities, or to add residents of an area, to an existing customary and traditional use determination, then the analysis focuses on rural residents identified in the proposal, in this case rural residents of Unit 18.

Currently, there is a customary and traditional use determination for muskoxen in Unit 18 that indicates there is no Federal subsistence priority, which was adopted by the Board in 1992 (72 Fed. Reg. 22961, [May 29, 1992]).

Existing Federal Regulation

Customary and Traditional Use Determination—Muskoxen

Unit 18

No Federal subsistence priority

Proposed Federal Regulation

Customary and Traditional Use Determination—Muskoxen

Unit 18, Nelson Island and Nunivak Island *No Federal subsistence priority*

Unit 18, remainder *Rural residents of Unit 18*

Extent of Federal Public Lands/Waters

The mainland area of Unit 18 is 67% Federal public lands. Of this land, the U.S. Fish and Wildlife Service manages 64%, and the Bureau of Land Management manages 3%.

Background

Muskoxen were indigenous to Alaska until the 1860s (Lent 1995). In an effort to re-establish muskoxen in Alaska, the U.S. Biological Survey brought 31 muskoxen to Nunivak Island in 1935 and 1936 (Perry 2017, pers. comm.). Nunivak Islanders found muskoxen to be frightening and as such mainly avoided the animals until 1964 when Nunivak men were employed to catch young muskoxen for an experimental farm program at the University of Alaska Fairbanks. Women began knitting *qiviut*, fine soft wool from the undercoat of muskoxen, by 1973 (Lantis 1984). Hunting was not permitted until fall 1975 when ADF&G established fall and winter hunting seasons (Jones 2015). In 1975 a few Nunivak Islanders started to commercially guide muskox hunts. Before 1972, they also guided people on walrus hunts. Guiding sport hunters has been a source of income and jobs to local residents (Perry 2017, pers. comm.). On Nunivak Island in winter, muskoxen are distributed throughout the island but are concentrated along the south and west sides of the island. In summer, muskoxen disperse throughout the interior of the island (Jones 2015).

In 1967 and 1968, 31 muskoxen were moved from Nunivak Island to Nelson Island. The first hunting season opened in 1981 (Jones 2015). The most recent survey in 2019 resulted in 174 muskoxen observed on the Unit 18 mainland (Jones 2023, pers. comm.). “These muskoxen are scattered in small groups from the Kilbuck Mountains south of the Kuskokwok River to the Andreafsky Mountains north of the Yukon River. They are most consistently observed in the area around the mud volcanoes, Askinak and Kusivak mountains, in the area south and east of Baird Inlet, and more recently near Bethel” (Jones 2015: I-3).

Regulatory History

At the beginning of the Federal Subsistence Management Program in Alaska in 1992, the Federal Subsistence Board adopted most existing State customary and traditional use determinations into Federal subsistence regulations. The State did not recognize customary and traditional uses of muskoxen in Unit 18 and as a consequence the Federal Subsistence Board adopted a determination of “no subsistence priority” (72 Fed. Reg. 22961. [May 29, 1992]).

In January 2014, the Alaska Board of Game considered but did not adopt a customary and traditional use determination for muskoxen in Units 18 and 19 (Proposal 5). The proposal, submitted by the Association of Village Council Presidents, requested muskoxen “subsistence” hunts in Units 18 and 19. The Board of Game took no action. It determined that it would consider separate customary and traditional use determination proposals for each of three areas of Unit 18: Nunivak Island, Nelson Island, and the remainder, or mainland, area (ADF&G 2014).

In 2018, the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council submitted Proposal WP18-27 requesting the Federal Subsistence Board recognize customary and traditional uses of muskoxen on Nunivak Island by residents of Nunivak Island. The Board followed the Council’s recommendation and rejected the proposal. The Council said,

This proposal was submitted by the Council at the request of [a Council member] on behalf of his community of Mekoryuk. However, upon further consideration residents of Mekoryuk relayed that the current management of muskox was working fine for local subsistence hunters and expressed concern that establishing C&T for musk ox may lead to complications down the road that could have a negative impact on the local economy and Nunivak Island residents that work as hunting guides and transporters during the State sport hunt. Mekoryuk residents further relayed that while this proposal was only requesting customary and traditional use determination for musk ox subsequent proposals or actions in the future requesting federal subsistence seasons and bag limits could possibly interfere with this local economy that benefits residents of Mekoryuk with seasonal income. Due to these concerns and uncertainties expressed by residents of Mekoryuk and their subsequent request to not advance this proposal, the Council voted to oppose the proposal (OSM 2018:312).

At its meeting January 26–19, 2023, in Kotzebue, the Alaska Board of Game did not adopt either of two proposals requesting a muskox hunt in the remainder (mainland) area of Unit 18 (Proposals 14 and 15) (ADF&G 2024).

There has never been an open hunting season for muskoxen in the mainland area of Unit 18, the area that is the focus of this analysis. The State has established sport seasons and harvest limits for muskoxen in the Nunivak Island and Nelson Island areas of Unit 18 (Ikuta and Parks 2013).

Community Characteristics

There are 38 widely dispersed communities, about 25,000 people, residing in Unit 18 according to the 2020 U.S. Census. The population has tripled over the past 60 years (ADLWFD 2023). The majority of people reside in long-established, primarily Yup’ik villages, or Cup’ig/Cup’ik on Nunivak Island and at Hooper Bay and Chevak. People in this region self-identify as belonging to a number of confederations of villages: *Kuigpagmiut* along the lower Yukon River, *Marayarmiut* along the coastal area south of the mouth of the Yukon river, *Qaluyarmiut* on Nelson Island, *Nunivavaarmiut* on Nunivak Island, *Canineqmiut* along the coastal area from the mouth of the Kuskokwim River to Nelson

Island, *Kusquqvagmiut* along the lower Kuskokwim River drainage, and *Akulmiut* in the tundra area between the lower Yukon and lower Kuskokwim rivers (Fienup-Riordan 1984).

Unit 18 communities share some characteristics. Most are small with populations in the hundreds. The exception is the community of Bethel, with a population over 6,000 people, that is the center of healthcare, trade, transportation, and government, providing services to outlying areas (Runfola et al. 2017). Most of these communities are not connected by roads and are accessible by boats or planes and snow machines, all-terrain vehicles, or highway vehicles on frozen trails and waterways during winter months.

Eight Factors for Determining Customary and Traditional Use

A community or area's customary and traditional use is generally exemplified through these eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to the community or area.

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

Patterns of Use

Although muskoxen are an introduced species in Unit 18, people utilize and incorporate them into the seasonal round of hunting activities and distribution and exchange networks. Ikuta and Park (2013) while working for the State Division of Subsistence conducted ethnographic interviews with residents of Nunivak Island in 2013, which were incorporated into a customary and traditional use determination worksheet for muskoxen. Documentation of Nunivak Islanders' harvests and uses of muskoxen is sparse, and the following is an annotated representation of Ikuta and Park's (2013) worksheet.

Most harvests by Nunivak Island residents occur during the winter hunting season (in February and March). During the fall hunting season (in September) most hunters use a boat, all-terrain vehicle, or small aircraft to access hunting areas, while most winter season access is by snow machines and all-terrain vehicles. Many hunters prefer winter over fall for muskox hunting due to the quality of the meat and easier access to animals. A hunter on Nunivak Island said: “[I prefer] spring hunt. That’s the best time to hunt. . . . The meat is less fatty. More lean than fall hunt meat. They are pretty rich in the fall time, the meat. Easier to hunt. We hunt on snowmachine. Easier than packing it from distance all the way to the boat. A lot easier trip in the spring by snowmachine” (Ikuta and Park 2013:6). In addition, muskoxen harvested in early spring provide local diets a taste of fresh meat, which is a break from the dried or frozen stored food used within the household. Key respondents have stated that muskoxen are a valuable addition to the local diet.

Nunivak Island residents harvest muskoxen with high-powered rifles. A hunter on Nunivak Island explained: “I learned to hunt [muskoxen] in the way I learn . . . how to kill an animal. I don’t shoot them on the body. I shoot them on the head or neck, so I don’t spoil the meat” (Ikuta and Park 2013:6).

In spring, local women and children harvest *qiviut*, the inner wool of muskoxen. Every spring, a muskox sheds from four to six pounds of *qiviut* (Oomingmak Musk Ox Producers’ Co-operative 2013). The word “*qiviut*” is a word in the Inupiaq language that means “down” or “muskox wool.” Muskoxen have a two-layered coat, and *qiviut* refers specifically to the soft underwool beneath the longer outer wool. A man from Mekoryuk explained: “Some older folks start[ed] gathering wool that’s been dropped off of the animals [muskoxen] on the sand dunes. . . . I believe it was before the hunts started [in 1975]” (Ikuta and Park 2013:6). While some women spin *qiviut* into yarn at home, others send it to a “co-op,” the Oomingmak Musk Ox Producers’ Co-operative owned by approximately 250 Alaska Native women. The co-op processes and furnishes the yarn to co-op members, primarily in Nelson and Nunivak island communities, to be knitted into hats, scarves, and other products. Hides are used as rugs or sitting pads when jigging for saffron cod through the ice. Long guard hairs and *qiviut* are used in various arts and crafts, such as hair for handmade dolls or masks.

A man from Nunivak Island described the nutritional and economic value in customary trade of muskoxen in the region: “It [muskoxen] provides protein for people. . . . His skin can be used as means for providing economic opportunities for the people here . . . you can comb the wool out of the muskox, you can make crafts into it . . . have it woven, have it knitted into garments and provide some income for the family It’s very, very costly to go out here, from Bethel to Anchorage. It costs \$536 round-trip. And one pelt of muskox could possibly even cover that” (Ikuta and Park 2013:9). Another man from Mekoryuk agreed and said: “They start making that [*qiviut*] into whatever they can make or sell it Anchorage muskox farm, *qiviut* cooperative Some have made it into dolls, they sew the skin Some guy used to sell [the horn] for \$60 or something like that, but it’s got to be separated from the skull Some harvest and use the horns for carving” (Ikuta and Park 2013:9).

Muskox meat is primarily used as food for human consumption. It is eaten fresh, dried, or frozen for later use. A man from Nunivak Island said: “Dried. Dry the [muskox] meat. And freeze it sometimes, most of the time. It’s real good when it’s dried too. Like jerky . . . just slice it and wind dry it. Sun and wind,

that’s all. Sun and wind, that’s how we dry it. When the weather stays dry, it is perfect when the meat is drying” (Ikuta and Park 2013:7).

Traditionally, young boys in western Alaska learned how to hunt by living with older men of the community in the ceremonial men’s house (*qasgiq*). Today, the institution of *qasgiq* is no longer part of daily life. Yet, hunting knowledge is passed down from grandfather, father, or uncle to children. A man from Nunivak Island explained: “They learned how to butcher the muskox, what’s edible, what you need to take, and they brought it back. So, in terms of the knowledge being passed down, my generation, we have learned it from our fathers or uncles or grandfathers, on how to do that” (Ikuta and Park 2013:7). As the respondents describes above, learning cannot be separated from physical involvement, and knowledge undergoes continual regeneration in the process of learning. If it is not possible for young children to participate immediately in hunting, they are expected to learn by observing experienced hunters, such as parents and grandparents, who know hunting equipment and techniques, the animal’s behavior and anatomy, the geography, and the weather. Then youth are expected to participate in the actual tasks with their teachers.

Sharing

Extensive sharing and distribution of wild resources is a large part of the subsistence economy in Western Alaska (Brown, Magdanz, and Koster 2012; Brown, Ikuta et al. 2013; Ikuta et al. 2014; and Runfola et al. 2017). An elder from Mekoryuk explained: “Because there are people that are no longer able to go out hunting on their own. They rely on the younger generation of people to provide the protein for them. And that’s how we’ve survived on Nunivak Island for over 2,000 years because we shared what we caught with the elderly, with the people that aren’t capable of going hunting on their own. So sharing is very important in our culture” (Ikuta and Park 2013:8). Muskox meat and organs are shared widely throughout the community particularly if only a few members of the community obtained permits to hunt muskoxen. A 42-year-old man on Nunivak Island said: “I learned how to share. I mean if I caught a big game for the first time . . . I remember catching my first muskox, I gave parts of that meat away. So still today, whether it’d be seal, reindeer, muskox, bird, fish, I gave a portion away, so that’s ingrained in me that I need to share because that’s our tradition. We share what we catch. So that muskox falls into that same area” (Ikuta and Park 2013:8).

Harvests of a Wide Diversity of Resources

A number of comprehensive subsistence and large land mammal surveys in Western Alaska communities show local residents take, use, and rely upon a wide diversity of fish and game resources for subsistence (Brown, Magdanz, and Koster 2012; Fall et al. 2012; Brown, Ikuta et al. 2013; Ikuta et al. 2014; Runfola et al. 2017). Documented harvests range from 300 to 500 pounds per capita in lower Yukon and Kuskokwim river drainages communities (ADF&G 2023a). The typical community harvests approximately 50 different species of plants, fish, and wildlife each year. The mix of species depends upon species availability. For some coastal communities, as much as 80% of total harvests by weight may come from marine mammals. For other communities, terrestrial mammals, fish, and marine mammals compose approximately equal proportions of the total community harvest.

The harvesting of wild foods continues a long cultural tradition for many Yukon-Kuskokwim Delta residents, a tradition which continues to evolve in many ways as social, economic, and environmental conditions change. As conditions and resource availability changes, what remains consistent is the pattern of using what is available locally. If hunting opportunity is provided for mainland Unit 18 muskoxen, local residents will incorporate muskoxen into their seasonal pattern of harvesting and use of wild resources as residents of Nunivak and Nelson islands have already done.

Harvest and Use of Muskoxen

The reported harvest of muskoxen from Nunivak and Nelson islands in Unit 18 was not readily available. Based on incomplete information available in the ADF&G online database, 20 communities in Unit 18 have reported harvesting muskoxen in Unit 18 since 1982: Bethel, Cheforak, Chevak, Eek, Emmonak, Hooper Bay Kasigluk, Kongiganak, Mekoryuk, Napakiak, Newtok, Napaskiak, Nightmute, Nunapitchuk, Pilot Station, Quinhagak, Scammon Bay, Saint Marys, Toksook Bay, and Tununak (ADF&G 2023b).

The estimated harvest of muskoxen is also documented in the results of periodic household surveys. During periodic harvest surveys in multiple communities over 40 years, no muskoxen harvest was recorded in most communities. Harvest that was reported is displayed in **Table 1**. The high estimate was 16 muskoxen harvested by Tununak residents in 1986. **Table 1** demonstrates sharing of muskoxen within and between communities as more households reported using muskoxen than harvesting muskoxen.

Table 1. The estimated harvest and use of muskoxen by residents of Unit 18 based on periodic household surveys, Alaska Department of Fish and Game, Division of Subsistence (blank=0, source: ADF&G 2023a).

Community	Study year	Number of Households interviewed	Households using muskoxen	Households harvesting muskoxen	Estimated harvest of muskoxen	Lower estimate	Upper estimate
Bethel	2011	473	4.7%	0.4%	8	2	18
Bethel	2012	466	4.7%	0.2%	4	1	9
Napakiak	2011	56	1.8%	1.8%	2	2	2
Quinhagak	2013	109	0.9%				
Tununak	1986	33	93.9%	24.2%	16	9	23

A potential reason for no harvests or low harvest levels in some communities is that muskoxen, or the opportunity to harvest muskoxen, has not existed in areas nearby those communities, while hunting opportunity has existed on Nunivak and Nelson islands for decades. Therefore, muskox harvest levels at Mekoryuk on Nunivak Island and for Newtok, Nightmute, Toksook Bay, and Tununak on Nelson Island are likely much higher compared to other communities.

Information regarding the use of muskoxen by communities that are not situated on Nunivak or Nelson islands is scarce. In 2012 a Bethel resident reported that he hunted for muskoxen when the moose population was low: “That’s some good eatin’ stuff, but now that the moose population is back up, I

haven't gone and done that" (Runfola et al. 2017:37). In 2011, Napakiak residents harvested an estimated two muskoxen. The location of harvest was not reported (Ikuta et al 2014). In 2013, because there was no reported harvest of muskoxen in Quinhagak, and the reported use of muskoxen was likely from meat received through gift giving or sharing with people from other communities or from unsurveyed households within Quinhagak (**Table 1**, Ikuta et al. 2016).

Effects of the Proposal

If adopted, Proposal WP24-23 would recognize customary and tradition uses of muskoxen in the mainland area of Unit 18 by the residents of Unit 18. Adopting the customary and traditional use determination would have no immediate effect on people's ability to harvest muskoxen until a season and harvest limit are established.

If this proposal, WP24-23, is adopted, then the Board will consider Proposal WP24-23, which is a proposal to establish a season and a harvest limit for muskoxen on Federal public lands in the mainland area of Unit 18.

If not adopted, there will be no effects to subsistence users, and the Board cannot consider Proposal WP24-23 to establish a muskox hunt in the Unit 18 mainland area.

OSM CONCLUSION

Support Proposal WP24-22.

Justification

Residents of Unit 18 exemplify customary and traditional uses of muskoxen. Documented evidence in harvest reporting databases, community surveys, and ethnographic accounts demonstrate this. Residents of Unit 18 have demonstrated consistent patterns of use of muskoxen over several decades since ADF&G established fall and spring hunting seasons on the Nunivak and Nelson islands (Jones 2015). Ethnographic accounts from Nunivak Islanders further describe a heavy reliance on muskox meat and qiviut used for the manufacture of personal items and for customary trade. The use of muskoxen is patterned. Most local hunters prefer to take muskoxen during the winter hunting season due to the quality of the meat and easier access over snow on the ground. Fresh meat is a welcome respite from frozen and store-bought food. Residents of Unit 18 rely on a wide variety of wild foods, and when hunting opportunity is provided incorporate muskoxen into their seasonal pattern of harvesting and use of wild resources (Ikuta and Park 2013).

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATION

Yukon-Kuskokwim Delta Subsistence Regional Advisory Council

Support. The Council submitted the proposal and the reasons for submission were outlined in the analysis. The Council feels a customary and traditional use determination is needed so that in the future when there is a harvestable surplus of mainland Unit 18 muskoxen, a hunt can be opened for federally qualified subsistence users in Unit 18 and provide some additional subsistence opportunity.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

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Alaska Department of Fish and Game Comments

Wildlife Proposal WP24-22

This proposal would establish a positive customary and traditional use finding for muskoxen in the mainland portion of Game Management Unit (Unit) 18.

Position

The Alaska Department of Fish & Game (ADF&G) is **NETURAL** on the nature of this particular proposal and stresses the need for the Federal Subsistence Board (FSB) to carefully review the data on the harvest and use patterns of muskoxen in the mainland portion of Unit 18 relevant to the eight customary and traditional use criteria described in 36 CFR § 242.16.

Background

Muskoxen were reintroduced to Alaska in 1930. Between 1935 and 1936, 31 muskoxen were transplanted to Nunivak Island. In 1967-1968, muskoxen were also released on Nelson Island. From Nelson Island, a small number of muskoxen have since dispersed to mainland Alaska in Unit 18. For management purposes ADF&G considers these to be three separate populations.

There are currently no harvest opportunities under state and federal regulations in the mainland portion of Unit 18. Further, no customary and traditional use finding has been made for muskoxen anywhere in Unit 18. A proposal was submitted to the Alaska Board of Game (BOG) in 2014 to make a customary and traditional use finding for muskoxen on Nunivak and Nelson islands in Unit 18, but the BOG took no action on the proposal at the request of the proponent.

On Nunivak Island, the following hunt structures are in place for muskoxen: 1) bull-only draw hunts (DX001 and DX003), and 2) registration hunts for cows (RX060 and RX061). Historically, drawing permits have been used mostly by Alaska residents residing outside of Unit 18 and nonresidents. Residents of Bethel have made up the majority of registration RX060 permit holders. The majority of RX061 permits have been used by Mekoryuk residents and some other Alaska residents.

On Nelson Island, there are registration cow (RX071) and bull (RX070) hunts for which permits are distributed on a first-come, first-served basis in Nightmute, Tooksook Bay, Tununak, Newtok, and Chefornak. Permits are available in three of the five communities per year on a rotating basis. Permits were available online and in Bethel first come first serve in six different years in addition to permits being available in the villages.

There are very limited data on harvest and use patterns by communities within mainland Unit 18. Incidental reports of muskoxen use were documented by Runfola et al. 2017, but there has been no directed study of muskoxen use by communities in mainland Unit 18. From hunt report data, ADF&G has documented that residents of mainland Unit 18 communities participate in the Nunivak Island and Nelson Island hunts to a significant degree; 31% of all muskoxen harvested

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by Unit 18 residents between 1982 and 2021 were harvested by residents of mainland communities.

Impact on Subsistence Users

If adopted, residents of communities in the mainland portion of Unit 18 would be eligible to participate in federal subsistence hunts for muskoxen in mainland Unit 18.

Impact on Other Users

If adopted, this proposal would not immediately impact non-federally qualified users (NFQU). The impact would be contingent on the passage of WSA24-23 and how the management of a Unit 18 mainland hunt is enacted. If done poorly then it could prevent NFQUs from ever having the opportunity to hunt muskox in this area.

Opportunity Provided by State

State customary and traditional use findings: The Alaska Board of Game has not made a customary and traditional use finding for muskoxen in Unit 18.

The seasons and bag limits for Unit 18 are:

<u>Unit/Area</u>	<u>Bag Limit</u>	<u>Open Season</u>	
		<u>Resident</u>	<u>Nonresident</u>
<i>Unit 18, Nunivak Island</i>	<i>1 bull by drawing permit only; up to 110 permits may be issued; or 1 musk ox by registration permit only</i>	<i>Aug. 1—Sept. 30 (General hunt only) Jan. 15—Mar. 31 (General hunt only)</i>	<i>Aug. 1—Sept. 30 Jan. 15—Mar. 31</i>
<i>Unit 18, Nelson Island</i>	<i>1 musk ox by registration permit only</i>	<i>Feb. 1—Mar. 31 (General hunt only)</i>	<i>Feb. 1—Mar. 31</i>
<i>Remainder of Unit 18</i>	<i>No open season</i>	<i>None</i>	<i>None</i>

Conservation Issues

The adoption of this specific proposal is not expected to result in any conservation issues. Conservation concerns may arise depending on the outcome of the deliberations on WP24-23.

Enforcement Issues

The adoption of this proposal is not expected to result in any new enforcement issues.

W24–23 Executive Summary	
General Description	Proposal WP24-23 requests to establish a muskox hunt in the mainland portion of Unit 18. <i>Submitted by: Yukon-Kuskokwim Delta Subsistence Regionals Advisory Council</i>
Proposed Regulation	<p>Unit 18—Muskox</p> <p><i>Unit 18, Nelson and Nunivak Islands</i> <i>No established Federal hunt</i></p> <p><i>Unit 18 Mainland (excluding Nelson and Nunivak Islands) – Harvest limit to be determined by permit.</i> <i>Season to be determined</i></p>
OSM Conclusion	<p>Support Proposal WP24-23 with modification to establish a “may be announced” season, clarify regulatory language and delegate authority to Yukon Delta NWR manager to manage the hunt via delegation of authority letter (DAL) (Appendix 1).</p> <p>The modified regulation should read:</p> <p>Unit 18—Muskox</p> <p><i>Unit 18, Nelson and Nunivak Islands</i> <i>No established Federal hunt</i></p> <p><i>Unit 18, remainder – 1 muskox by Federal registration permit</i> <i>May be announced.</i></p>
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	Oppose
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.
ADF&G Position	Oppose

W24-23 Executive Summary	
Written Public Comments	None

STAFF ANALYSIS WP24-23

ISSUES

Proposal WP24-23, submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council (Council), requests establishing a Federal subsistence hunt for muskox in the mainland portion of Unit 18.

The “mainland” portion of Unit 18 refers to the areas not on Nunivak or Nelson islands. In current State muskox regulations, the mainland area of Unit 18 is called the “remainder” area of Unit 18.

DISCUSSION

The proponent states that they would like to see mainland muskox hunting opportunities for federally qualified subsistence users residing in Unit 18. Muskoxen have migrated from the Nelson Island and Nunivak Island herds over the past twenty years to various parts of “mainland” Unit 18. Muskoxen have been observed by local residents across various parts of the region to be increasing in numbers and expanding their range. Muskoxen were re-introduced to Alaska with the intention that one day the population would grow enough that they could be hunted and provide food for subsistence uses.

The proponent suggests that harvest limits and seasons be based on the harvestable surpluses of the various mainland herd populations. Updated population assessments may need to be completed to determine these amounts. Even if the harvestable surplus number are low, any new subsistence hunt opportunity could help alleviate on-going food security concerns in the region. The proponent wants to ensure that any permits are made easily accessible and available to hunters in the rural communities near the herds. Although there is not a current customary and traditional use determination for muskox in Unit 18, the proponent has submitted a companion proposal seeking to recognize a customary and traditional uses of for muskoxen in Unit 18 (Proposal WP24-22).

Existing Federal Regulation

Unit 18—Muskox

*No established
Federal hunt.*

Proposed Federal Regulation

Unit 18—Muskox

Unit 18, Nelson and Nunivak Islands *No established Federal hunt.*

Unit 18, Mainland (excluding Nelson and Nunivak Islands) – Harvest limit to be determined by permit. *Season to be determined*

Existing State Regulation

Unit 18—Muskox

Both residents and nonresidents: Unit 18, Nunivak Islands – 1 bull by drawing permits only *Aug. 1 – Sep. 30*
Jan. 15 – Mar. 31

OR

1 cow by registration permit only *Aug. 1 – Sep. 30*
Jan. 15 – Mar. 31

Both residents and nonresidents: Unit 18, Nelson Island – 1 bull by registration permit *Feb. 1 – Mar. 31*

OR

1 cow by registration permit *Feb. 1 – Mar. 31*

Both residents and nonresidents: Unit 18, remainder *No open season.*

Extent of Federal Public Lands/Waters

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

Customary and Traditional Use Determinations

Currently, there is no Federal subsistence priority for muskoxen in Unit 18.

Proposal WP24-22, requests to recognize the customary and traditional use of muskox by residents of Unit 18 for the mainland area the Unit.

Regulatory History

A muskox hunt has never occurred in Unit 18, outside of Nunivak Island or Nelson Island under Federal or State regulations.

Current Events

The Council also submitted Proposal WP24-22, requesting the recognition of the customary and traditional use of muskoxen by residents of Unit 18 for the mainland area of the unit.

State Proposal 14 requested that the State open a muskox on the mainland portion of Unit 18, with permits available to residents only, made available in communities closest to the herd. State Proposal 15 requested to allow subsistence take of muskox in the mainland portion of Unit 18. These proposals were considered by the BOG at their meeting in Kotzebue, January 26-29, 2024. The BOG rejected Proposal 14 and took no action on Proposal 15 (ADF&G 2024).

Biological Background

Muskoxen were extirpated in Alaska by the late 1800s and perhaps hundreds of years earlier on the Seward Peninsula (Gorn and Dunker 2015). In the 1930s, ADF&G introduced the first group of muskoxen to Nunivak Island. In the 1960s, 31 muskoxen were moved from Nunivak Island to Nelson Island (Harper and McCarthy 2015).

Muskoxen on Nelson Island have been documented moving back and forth between the island and the mainland (Harper and McCarthy 2015). Muskoxen have been tracked on the mainland of Unit 18 for up to two years before they returned to Nelson Island (Harper and McCarthy 2015). In 1989, five animals were collared between Bethel and Pilot Station. One of these five collared individuals was harvested legally by a hunter in 1990 on Nelson Island (Harper and McCarthy 2015).

As early as 2010, muskoxen have been incidentally counted by the State as having a minimum population of 100 in Unit 18, mainland. By 2015, the minimum count was up to 200 animals in the Unit 18, mainland (Harper and McCarthy 2015). This apparent increase may be largely explained by muskoxen moving off Nelson Island (where there is a current State hunt) to the mainland and not necessarily a population increase. Often, these movements are believed to be temporary, and muskoxen moved back to Nelson Island. The most recent survey in 2019 resulted in 174 muskoxen observed on the Unit 18 mainland (Jones 2023, pers. comm.).

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 live in small groups, and mature bulls are important for predator defense, foraging, and group cohesion in addition to breeding (Schmidt and Gorn 2013). For example, mature bulls may protect groups of females with calves against predators, effectively increasing calf survival and recruitment. Therefore, muskoxen may be more sensitive to selective harvest of mature males than other species (Schmidt and Gorn 2013).

Cultural Knowledge and Traditional Practices

See analysis for Wildlife proposal WP24-22, which requests to establish a customary and traditional use determination of muskoxen for the Unit 18 mainland.

Harvest History

No legal muskox harvest has ever occurred in Unit 18, outside of Nunivak or Nelson islands under Federal or State regulations. However, poaching has occurred from the Unit 18 mainland population (Jones 2015).

Resident and non-resident muskox hunts occur under State regulations on Nunivak and Nelson Islands. Regulatory year 1975/76 was when the first muskox hunt by the State on Nunivak Island took place and it continues to take place annually. A muskox management plan was established in 1992 (Harper and McCarthy 2015).

Alternatives Considered

One alternative considered is delegating authority to manage the muskox hunt to the Yukon Delta National Wildlife Refuge (NWR) manager. This would provide the most flexibility and the greatest subsistence hunting opportunity. Specifically, delegating authority to the Yukon Delta NWR manager to announce the season, the number of permits issued, a harvest quota, and to set sex restrictions, and permit conditions would allow for flexible, adaptive hunt management. This alternative also mitigates conservation concerns as season length, harvest quotas, and permit numbers can be adjusted annually in response to herd and hunt conditions.

The proposal as submitted did not specify seasons, harvest limits, or permit type. Currently there is limited knowledge regarding this population of muskoxen. As more information is gathered, flexibility will be necessary to address potential conservation concerns while optimizing subsistence hunting opportunity.

Effects of the Proposal

If this proposal is adopted, a Federal muskox hunt will be established for the mainland portion of Unit 18. This will provide greater subsistence opportunity to residents of Unit 18 (if Proposal WP24-22 is also adopted) and could help alleviate food insecurity given the concerns with other species (caribou and salmon) in the region. However, effects on the muskox population are unknown as little biological and harvest information is currently available. Due to the lack of data, it is unknown if a hunt is sustainable at this time—it should not be assumed that mainland Unit 18 muskox hunting will occur in the near future. Extensive aerial surveys over a vast area will need to occur to determine population numbers. In addition, strategies will need to be developed to manage the Nelson Island population separately from the Unit 18 mainland population with the understanding that muskox move on and off Nelson Island.

OSM CONCLUSION

Support Proposal WP24-23 **with modification** to establish a “may be announced” season, clarify regulatory language and delegate authority to the Yukon Delta NWR manager to manage the hunt via delegation of authority letter (DAL) (**Appendix 1**).

The modified regulation should read:

Unit 18—Muskox

Unit 18, Nelson Island and Nunivak Island

*No established
Federal hunt.*

Unit 18, remainder – 1 muskox by Federal registration permit

May be announced.

Justification

This proposal provides for greater subsistence opportunity for the residents of Unit 18. The DAL to the Yukon Delta NWR manager provides the management flexibility needed to mitigate potential conservation concerns through adaptive management, while maximizing subsistence opportunity. As more information becomes available about the muskox in the mainland portion of Unit 18, hunting opportunity can be adjusted accordingly through in-season management.

OSM does not expect a muskox season to be announced immediately, but establishing a hunt in codified regulations and delegating authority to a Federal in-season manager allows a hunt to be announced as soon as practicable and sustainable.

Adoption of the proposal also provides a meaningful Federal subsistence priority.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Yukon-Kuskokwim Delta Subsistence Regional Advisory Council

Oppose WP24-23. The Council ultimately decided that it is not the right time to put a muskox hunt in regulation because the population cannot yet sustain a hunt. The Council would rather wait and submit another proposal in the future when the muskoxen population has increased enough to have a harvestable surplus and warrant hunting. They also noted that more research and surveys need to be done so managers and subsistence users have a better understanding of the locations, movements, and numbers of muskox throughout Unit 18 prior to establishing a hunt in regulation.

INTERAGENCY STAFF COMMITTEE COMMENT

The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.

ALASKA DEPARTEMENT OF FISH AND GAME COMMENT**Wildlife Proposal WP24-23**

This proposal would establish a hunt for mainland muskoxen in Game Management Unit (Unit) 18.

Position

The Alaska Department of Fish & Game (ADF&G) **OPPOSES** this proposal. Public pressure has been mounting in recent years to open a muskox (*Ovibos moschatus*) hunt on the Yukon-Kuskokwim Delta (Y-K Delta) portion of Unit 18. Recent minimum count surveys conducted in 2017 and 2019 yielded counts of 175 and 174 muskox, respectively, indicating a small but stable population exists within the portion of Unit 18 on the Y-K Delta. Despite the recent counts, very little is known about this population: geographic borders are currently difficult, if not impossible, to define due to the mobility exhibited by the reported sightings. Timing and specific causes of mortality of the Y-K Delta population are unknown, although it is believed the population experiences more predation than other Unit 18 muskox populations (i.e., Nunivak and Nelson islands) that are known to be predator-free, and illegal take is also believed to occur and, in some years, quite clearly surpasses the harvestable surplus. Furthermore, no information is available about disease or parasites within the population that may be limiting their overall population growth. The Alaska Board of Game (BOG) took up this same request and recognized that this population hasn't reached a size at which any harvest opportunity could be provided and voted it down unanimously.

If this proposal is passed, ADF&G stresses that no harvest be allowed until the population reaches at least 300 muskoxen. Even then, to ensure proper management for the long-term health of this population that it is limited to one or two percent of the total population per regulatory year. With the objective of growing the herd larger, we would also recommend that any harvest be limited to bulls.

Background

Muskoxen were reintroduced on Nelson Island via translocations in 1967 and 1968. Shortly thereafter in 1972, muskox sightings began occurring on the mainland. This mainland muskox population has not been regularly monitored through surveys, although an observation log of reported sightings has been maintained at the Bethel ADF&G office, and in more recent years, in the McGrath office as well. Early reported sightings were in proximity of Nelson Island and expanded concentrically from Nelson Island beginning in the 1980s. From 2005 – 2008, the first muskox sightings were reported in the western portions of Units 21E, 19A, and 19B. In 2017, funding levels allowed ADF&G staff to conduct the first aerial minimum count of the population (256 total: 175 in Unit 18 and 81 in Unit 19 and 21E). In 2019, two separate minimum count surveys were flown; when counts from the two surveys were combined, the population was estimated at 245 muskoxen (174 in Unit 18, and 70 in Units 19 and 21E).

Reported sightings and locations obtained during ADF&G aerial surveys indicate there are two primary concentrations of muskox: one in the Portage Mountains near Kalskag and one in the area south and east of Baird Inlet. These concentrations currently contain roughly 100 muskox each and ADF&G would like the population to stabilize or increase to 250 – 300 muskox per area before considering opening a hunt. However, further information is still needed to assist managers in defining movements, population boundaries, and understanding mortality of muskox within this new population(s). We know there is some connectivity between Nelson Island and the mainland from collared muskox data collected in the 1980s. We also have evidence to suggest that there is some connectivity between the concentration of muskoxen near Dal Lake and the concentration of muskoxen near Kalskag; it is unclear however if these are one population or two separate populations.

Currently, ADF&G is seeking funding for a study to collar muskoxen on the Unit 18 mainland. It is unclear whether we have one functional population or if we are sharing a population with the animals found in Units 19 A and 21 E. Other basic information like reproduction and survival are also unknown. This population is growing extremely slowly and there are ongoing issues with the illegal take of muskox in the region.

Impact on Subsistence Users

If adopted, a federal subsistence hunt for muskoxen would be enacted based on the customary and traditional use finding made in WP24-22 which would include 38 different villages and communities. At this point in time, it is unclear how hunting opportunities would be allocated between the 38 communities. Illegal take is another major issue that is routinely having to be addressed. There are many years where the number of animals illegally taken exceeds 2% of the population; thus, if this hunt were adopted, there are many years where it would then have to be closed by emergency order because the harvestable surplus has already been reached. Muskoxen in Unit 18 have been found not to be a subsistence animal on several different occasions by both the Alaska Board of Game (BOG) and the Federal Subsistence Board (FSB), due largely to the fact they were never historically found in the southern portion of the state prior to their extirpation.

Impact on Other Users

If adopted, this would delay the opportunity for the hunting of muskox under state regulations.

Opportunity Provided by State

State customary and traditional use findings: The Alaska Board of Game (BOG) has made negative customary and traditional use findings for muskox in Unit 18.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for muskox in Unit 18 is a negative finding. There currently is no season and bag limit for muskox on the mainland portion of Unit 18.

Conservation Issues

There is only a small population of muskoxen on the Y-K Delta portion of Unit 18, and currently it is unclear whether there is one population of muskox or two on the mainland. The proposed hunt area in Unit 18 is surrounded by 38 villages and if not managed correctly overharvest could easily occur causing a conservation concern. Funding for research on this population was recently requested with the idea of collaring adults to determine use areas and the connectivity of animals between Units 18, 19, 21, and Nelson Island. Currently ADF&G does not have a good idea of survival rates for animals on the mainland or their reproductive rates.

Enforcement Issues

Currently there is an ongoing issue with the illegal taking of muskox on the mainland portion of Unit 18.

Appendix 1

Refuge manager
 Yukon Delta National Wildlife Refuge
 P.O. Box 346
 Bethel, Alaska 99559

Dear manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the manager of the Yukon Delta National Wildlife Refuge 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 18 remainder (mainland portion of Unit 18) 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), 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. Delegation: The manager of the Yukon Delta National Wildlife Refuge 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. Authority: 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. Scope of Delegation: 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 announce the annual harvest quota**
- **To determine the permit type**
- **To announce and open/close a season**
- **To determine the number of permits issued annually**
- **To set sex restrictions**
- **To set permit conditions. Permit conditions must be approved by OSM and in accordance with the current OMB information collection.**

This delegation also permits you to close and reopen Federal public lands to nonsubsistence hunting, but does not permit you to specify 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, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those within Unit 18 remainder.

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

5. Guidelines for Delegation: 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. Support Services: 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, Yukon Delta 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

WP24-24 Executive Summary	
General Description	WP24-24 requests dividing Unit 19A into two subunits. <i>Submitted by the Western Interior Alaska Subsistence Regional Advisory Council.</i>
Proposed Regulation	<p>50 CFR 100.26(n)(19)(i)</p> <p><i>(A) Unit 19A consists of the Kuskokwim River drainage downstream from and including the Moose Creek George River drainage and downstream from and excluding the Downey Creek drainage; on the north bank and downstream from and including the Stony River drainage on the south bank, excluding Unit 19B;</i></p> <p><i>(D) Unit 19D consists of the remainder of Unit 19.</i></p> <p><i>(E) Unit 19E consists of the Kuskokwim River drainage upstream from and excluding the George River drainage and upstream from and including the Downey Creek drainage</i></p>
OSM Conclusion	<p>Support Proposal WP24-24 with modification to clarify the regulatory language.</p> <p>The modified language should read:</p> <p><i>(A) Unit 19A consists of the Kuskokwim River drainage downstream from and including the Moose Creek George River drainage and downstream from and excluding the Downey Creek drainage; on the north bank and downstream from and including the Stony River drainage on the south bank, excluding Unit 19B;</i></p> <p><i>(D) Unit 19D consists of the remainder of Unit 19 that portion drained by the Kuskokwim River drainage upstream from and including the Swift River drainage, excluding Unit 19C;</i></p> <p><i>(E) Unit 19E consists of the remainder of Unit 19.</i></p>
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	Support with OSM modification.

WP24-24 Executive Summary	
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.
ADF&G Position	No position
Written Public Comments	None

STAFF ANALYSIS WP24-24

ISSUES

WP24-24, submitted by the Western Interior Alaska Subsistence Regional Advisory Council (Council), requests dividing Unit 19A into two subunits.

DISCUSSION

The proponent requests to divide Unit 19A into two separate subunits: Unit 19A and Unit 19E (**Figure 1**). The Alaska Board of Game (BOG) divided Unit 19A into two subunits during their March 2022 meeting. This proposal is intended to align Federal and State subunit boundaries and reduce regulatory complexity.

Existing Federal Regulation

50 CFR 100.26(n)(19)(i)

(A) Unit 19A consists of the Kuskokwim River drainage downstream from and including the Moose Creek drainage on the north bank and downstream from and including the Stony River drainage on the south bank, excluding Unit 19B;

(D) Unit 19D consists of the remainder of Unit 19.

Proposed Federal Regulation

50 CFR 100.26(n)(19)(i)

(A) Unit 19A consists of the Kuskokwim River drainage downstream from and including the ~~Moose Creek-George River drainage and downstream from and excluding the Downey Creek drainage; on the north bank and downstream from and including the Stony River drainage on the south bank, excluding Unit 19B;~~

(D) Unit 19D consists of the remainder of Unit 19.

(E) Unit 19E consists of the Kuskokwim River drainage upstream from and excluding the George River drainage and upstream from and including the Downey Creek drainage

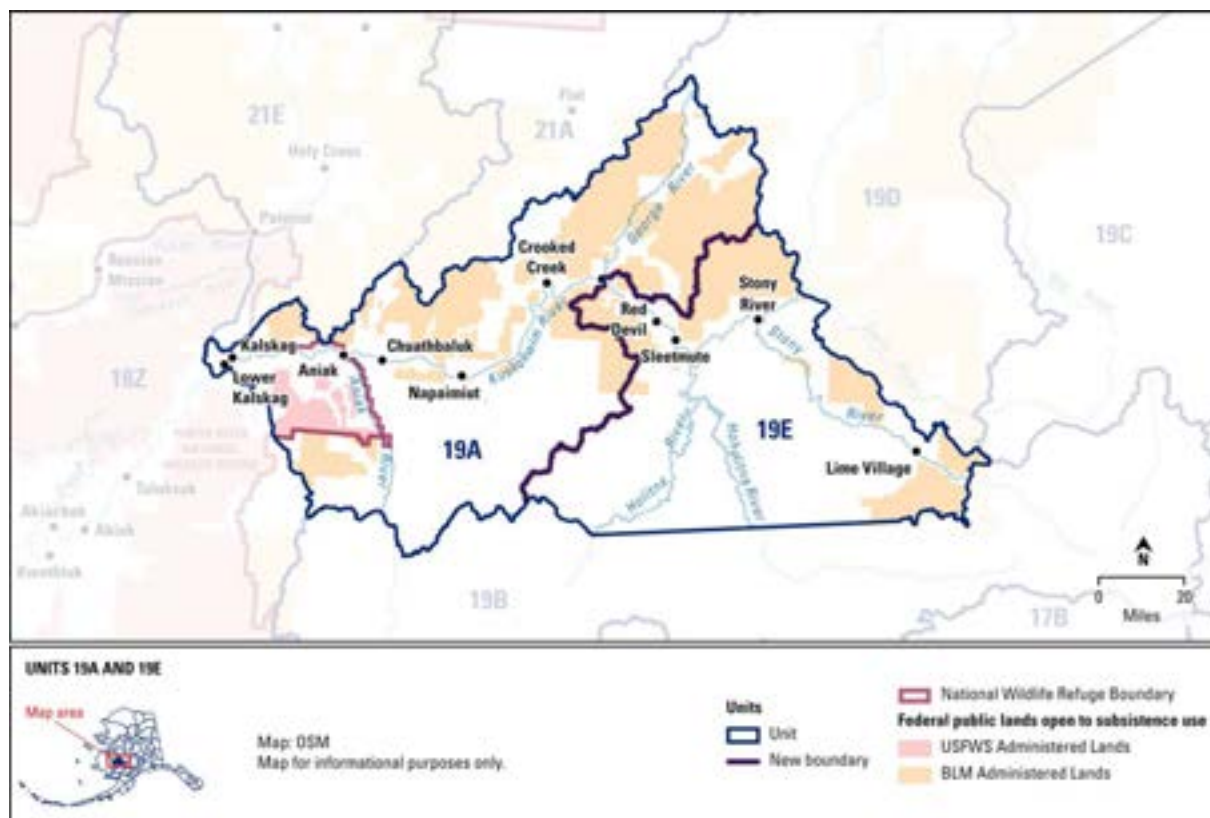


Figure 1. Map of Unit 19A with proposed division.

Existing State Regulation

5 AAC 92.450 (19)

(A) Unit 19(A) consists of that portion of Unit 19 in the Kuskokwim River drainage downstream from and including the George River drainage, and downstream from and excluding the Downey Creek drainage;

(D) Unit 19(0) consists of that portion of Unit 19 in the Kuskokwim River drainage upstream from and including the Swift River drainage, excluding Unit 19(C);

(E) Unit 19(E) consists of the remainder of Unit 19;

Extent of Federal Public Lands/Waters

Unit 19 is comprised of 20% Federal public lands and consists of 15% Bureau of Land Management (BLM), 4% National Park Service (NPS) and 1% U.S. Fish and Wildlife Service (USFWS) managed lands.

Unit 19A is comprised of 23% Federal public lands and consists of 21% BLM and 2% USFWS lands.

Customary and Traditional Use Determinations

Rural residents of Units 18 and 19 within the Kuskokwim River drainage upstream from, and including, the Johnson River have a customary and traditional use determination (C&T) for brown bear in Unit 19A.

Rural residents of Units 19A and 19B, Unit 18 within the Kuskokwim River drainage upstream from, and including, the Johnson River, and residents of St. Mary's, Marshall, Pilot Station, and Russian Mission have C&T for caribou in Unit 19A.

Rural residents of Unit 18 within the Kuskokwim River drainage upstream from and including the Johnson River, and residents of Unit 19 have C&T for moose in Unit 19A.

Rural residents of Units 6, 9, 10 (Unimak Island only), 11–13, Chickaloon, and 16–26 have C&T for wolves in Unit 19.

Regulatory History

Due to low moose numbers in 2005, Unit 19A had two distinct moose hunt areas with two different management strategies. One area had a Tier I hunt and the other a Tier II. This led to the formation of a new Advisory Committee in 2007. The Stony Holitna Fish and Game Advisory Committee (AC) was created out of the Central Kuskokwim AC to align more closely with these distinct hunt areas (ADF&G 2022). The creation of these two ACs allowed for affected communities to have more input on the management of moose in their area.

In 2021, Proposal 171 was submitted by the Stony Holitna AC to the Board of Game for deliberation at their March 2022 meeting. Both ACs supported Proposal 171 to create Units 19A and 19E from the original Unit 19A (ADF&G 2022). The Stony Holitna AC was in support of their proposal because of fundamental differences in moose management. The Central Kuskokwim AC felt this proposal would maintain local preference and would promote keeping the two moose hunt areas separate. The BOG adopted Proposal 171, creating Units 19A and 19E from the original Unit 19A.

Effects of the Proposal

If this proposal is adopted, Unit 19A would be divided into two subunits, Unit 19A and Unit 19E. This change would align Federal and State subunit boundaries, reducing regulatory complexity and confusion. Federal harvest regulations for wildlife within Unit 19 would be updated to reflect this boundary change. Adopting this proposal would simplify and clarify permit requirements for Federal moose hunts in Unit 19A. Currently, State permit RM682 is required to hunt moose in Unit 19E under State regulations and a portion of Unit 19A under Federal regulations. Creation of a new subunit is a regulatory change only and is not expected to affect wildlife populations, harvest, or subsistence opportunity in any way.

OSM CONCLUSION

Support Proposal WP24-24 **with modification** to clarify the regulatory language.

The modified regulations should read:

50 CFR 100.26(n)(19)(i)

*(B) Unit 19A consists of the Kuskokwim River drainage downstream from and including the ~~Moose Creek~~ **George River drainage and downstream from and excluding the Downey Creek drainage; on the north bank and downstream from and including the Stony River drainage on the south bank, excluding Unit 19B;***

*(D) Unit 19D consists of ~~the remainder of Unit 19~~ **that portion drained by the Kuskokwim River drainage upstream from and including the Swift River drainage, excluding Unit 19C;***

(E) Unit 19E consists of the remainder of Unit 19.

Justification

Adoption of this proposal would align Federal subunit boundaries with State subunit boundaries, reducing regulatory complexity and confusion. The modification is only to align subunit descriptors with the State descriptors.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Western Interior Alaska Subsistence Regional Advisory Council

Support WP24-24 with OSM modification. The Council supported the OSM modification to their proposal for congruency across regulations. Aligned Federal and State boundaries would make it less confusing and more beneficial to subsistence users hunting in this area, especially when using a joint permit to harvest moose under Federal regulations.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

WCR24-43 Executive Summary	
General Description	Wildlife Closure Review WCR24-43 reviews the closure to moose hunting, except by residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek in Unit 19A, remainder.
Current Regulation	<p>Unit 19A—Moose</p> <p><i>Unit 19A, remainder—1 antlered bull by Sept. 1-20. Federal drawing permit or a State permit.</i></p> <p><i>Federal public lands are closed to the taking of moose except by residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek hunting under these regulations</i></p>
OSM Conclusion	Retain the Status Quo
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	Retain the Status Quo
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	Retain the Status Quo
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	No Position
Written Public Comments	None

FEDERAL WILDLIFE CLOSURE REVIEW WCR24-43

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

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

Current Federal Regulation

Unit 19A—Moose

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

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

Closure Dates: Year-round

Current State Regulation

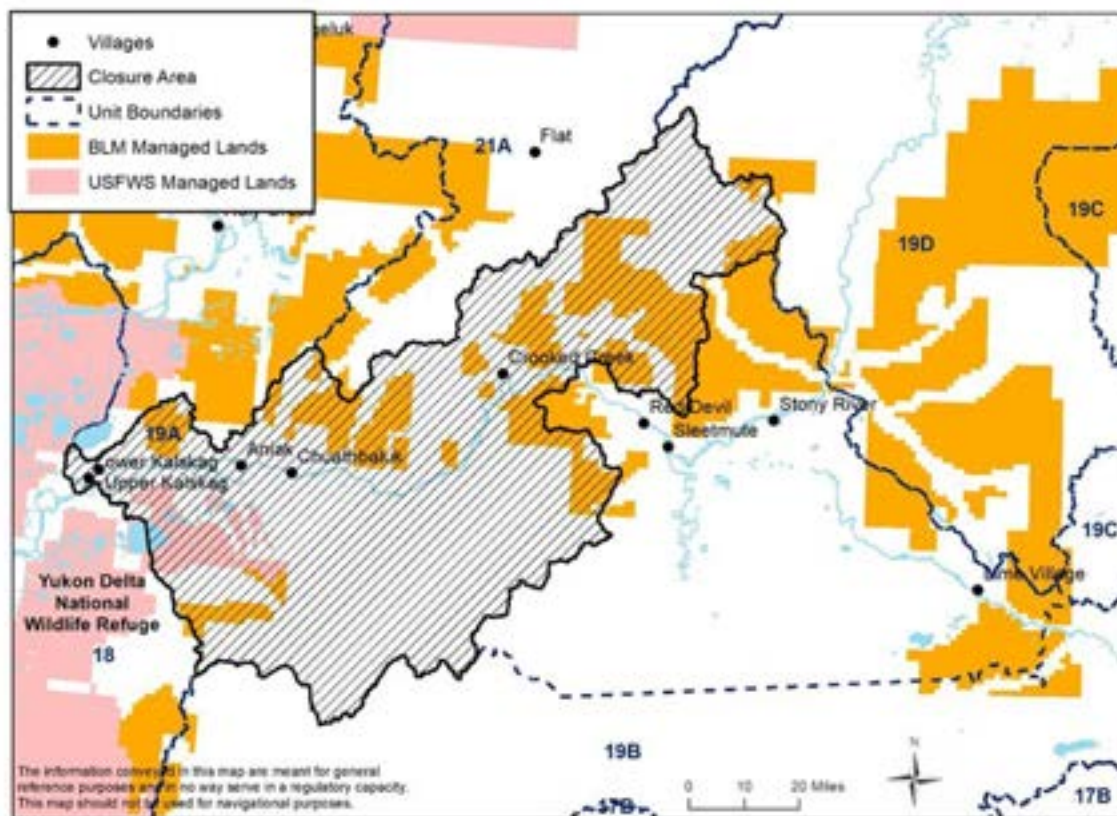
Unit 19A—Moose

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

Regulatory Year Initiated: 2007

Extent of Federal Public Lands/Waters

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



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

Customary and Traditional Use Determination

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

Regulatory History

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

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

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

(Councils) had considered the proposal. In November 1994, the Board adopted P94-54 with modification, aligning Unit 19A Federal moose regulations with State regulations with the exception of retaining the January season (FSB 1994). Unit 19A was divided into two hunt areas: that portion north of the Kuskokwim River upstream from, but not including the Kolmakof River drainage and south of the Kuskokwim River upstream from, but not including the Holokuk River drainage (Unit 19A east) and Unit 19A remainder. The seasons in both hunt areas were Sept. 1-20, Nov. 20-30, Jan. 1-10, and Feb. 1-10. The harvest limit in Unit 19A east was one moose, although antlerless moose could only be taken during the February season. The harvest limit in Unit 19A remainder was one bull.

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

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

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

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

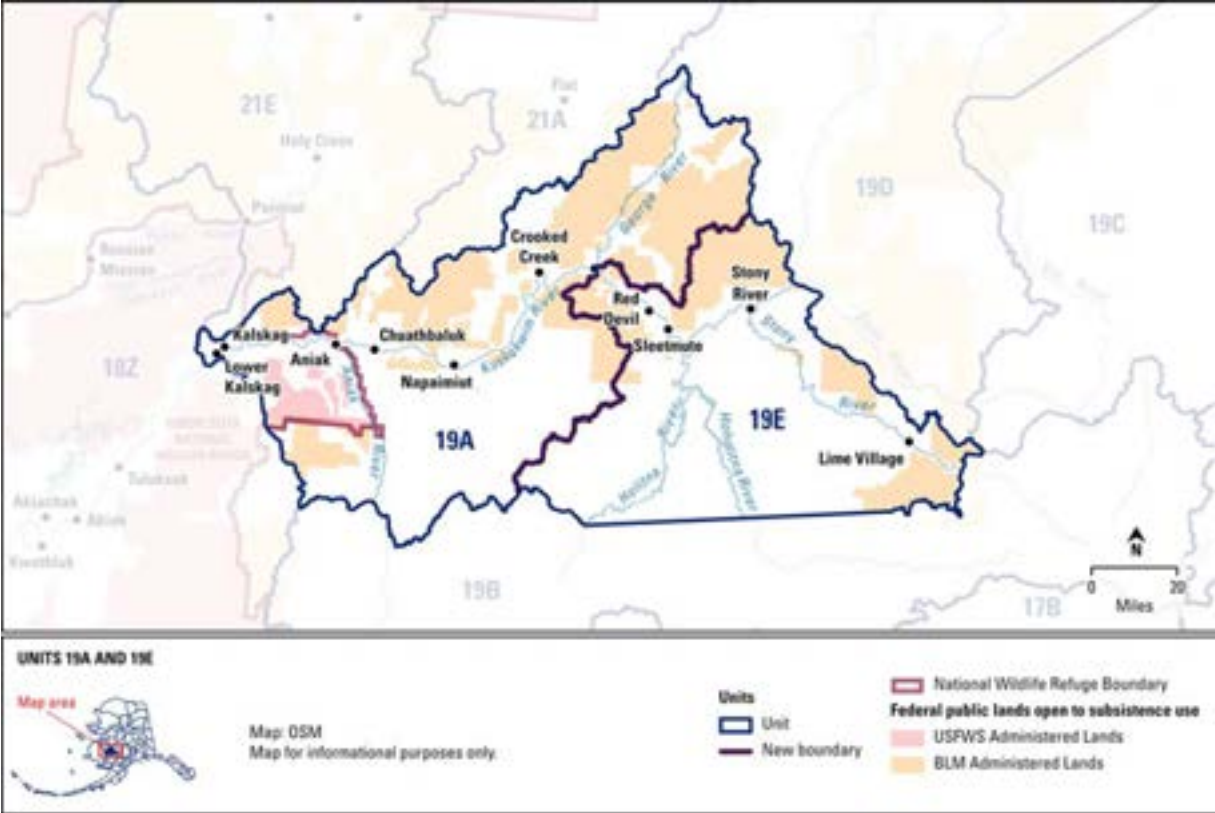
and ADF&G supported the proposal because of conservation concerns over the moose resource (OSM 2007).

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

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

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

In 2022, the BOG adopted proposal 171 dividing Unit 19A into two subunits (19A, 19E). Dividing Unit 19A into two smaller units would align with the current State moose hunting boundaries and would benefit moose management in these units (**Map 2**, Alaska Board of Game 2022).



Map 2. Boundaries of subunits 19A and 19E. (Alaska Board of Game 2022)

Closure last reviewed: 2020 – WCR20-43

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

§815(3) of ANILCA states:

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

The combination of low moose population densities, low calf production and survival, low bull:cow ratios and high hunting pressure contributed to declines in the Unit 19A moose population. In response to these conservation concerns, the Board closed moose hunting in Unit 19A remainder except by residents of Tuluksak, Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, and Crooked Creek in 2007.

Council Recommendation for Original Closure:

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

State Recommendation for Original Closure:

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

Biological Background

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

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

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

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

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

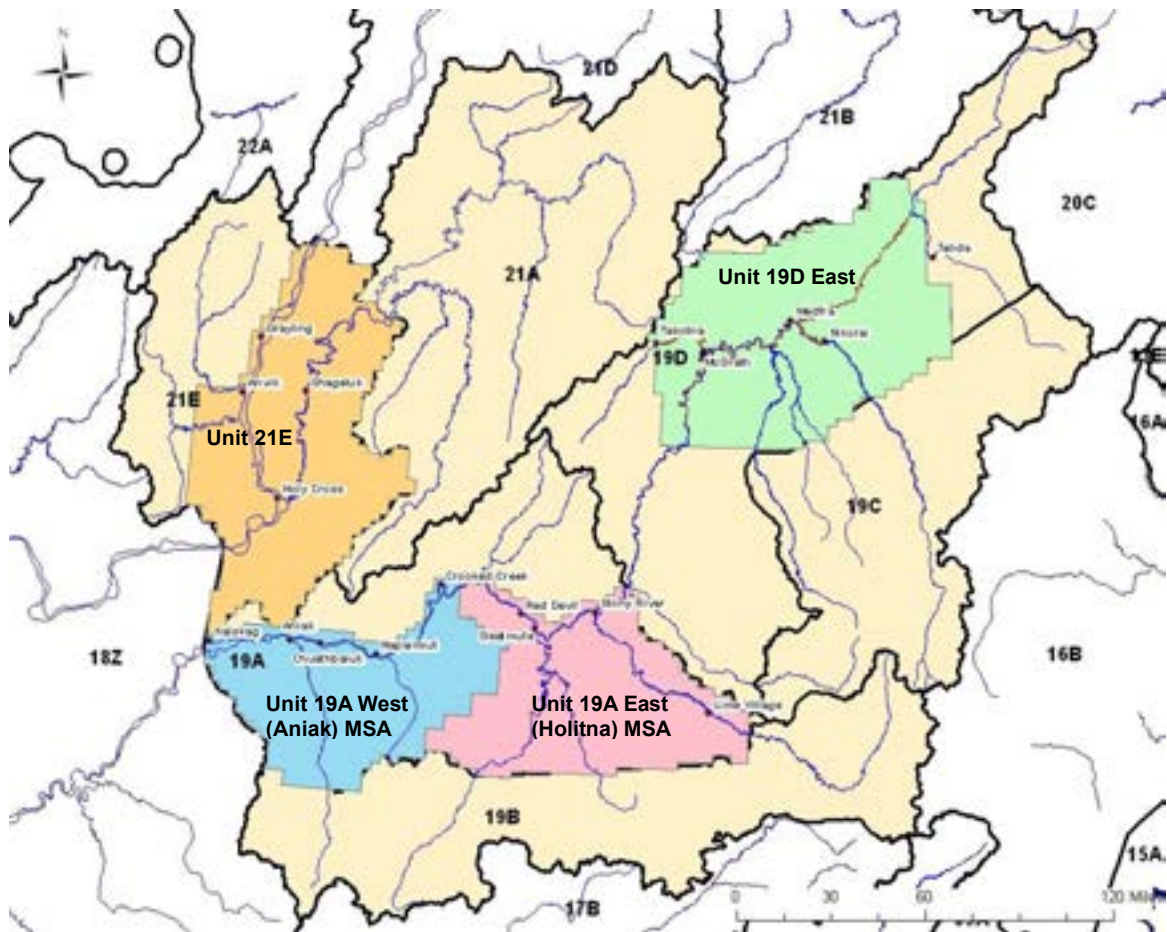
Moose densities of 0.75-0.93 moose/mi² are required to meet State population objectives (Seavoy 2014). Between 1998 and 2017, estimated moose density in Unit 19A ranged from 0.25 moose/mi² to 1.3 moose/mi² (**Table 1**) (ADF&G 2018a, Peirce 2018, Seavoy 2014,

ADF&G 2004, Peirce 2018, pers. comm.). While the 2017 density estimate for the Unit 19A West (Aniak) MSA of 1.3 moose/mi² is the highest ever recorded for this area and is well above State population objectives, the 2020 density estimate for the entire Unit 19A West hunt area increased to 0.9 moose/mi², which is within State management objectives (**Table 1, Table 2**).

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

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

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



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

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

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

^a Includes a sightability correction factor

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

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

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

^b Extrapolated SCF.

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

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

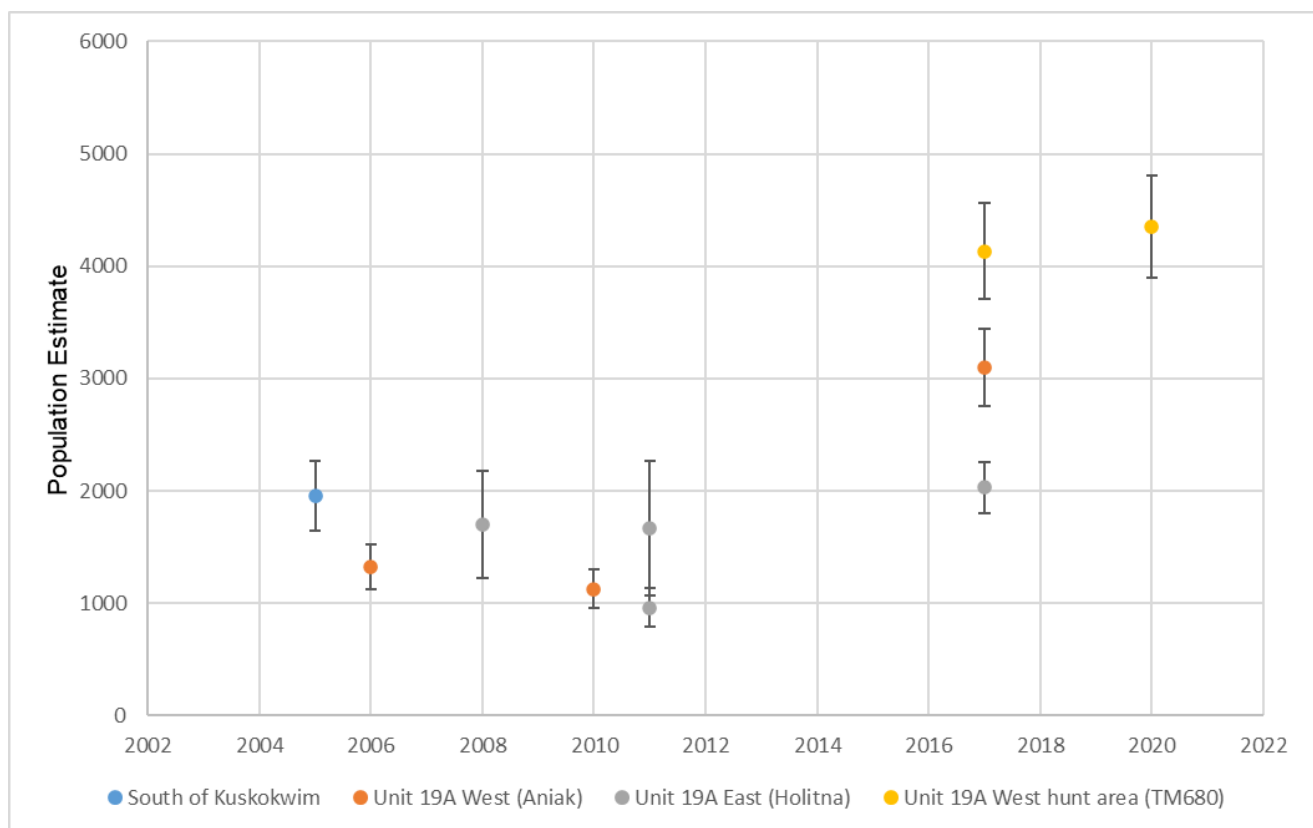


Figure 1. Population estimates for moose in Unit 19A with 90% confidence intervals. The higher estimate in 2011 and the 2017 estimate in the Unit 19A East (Holitna) survey area include sightability correction factors. See Map 2 for survey areas. The TM680 State hunt area is similar to the Federal Unit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

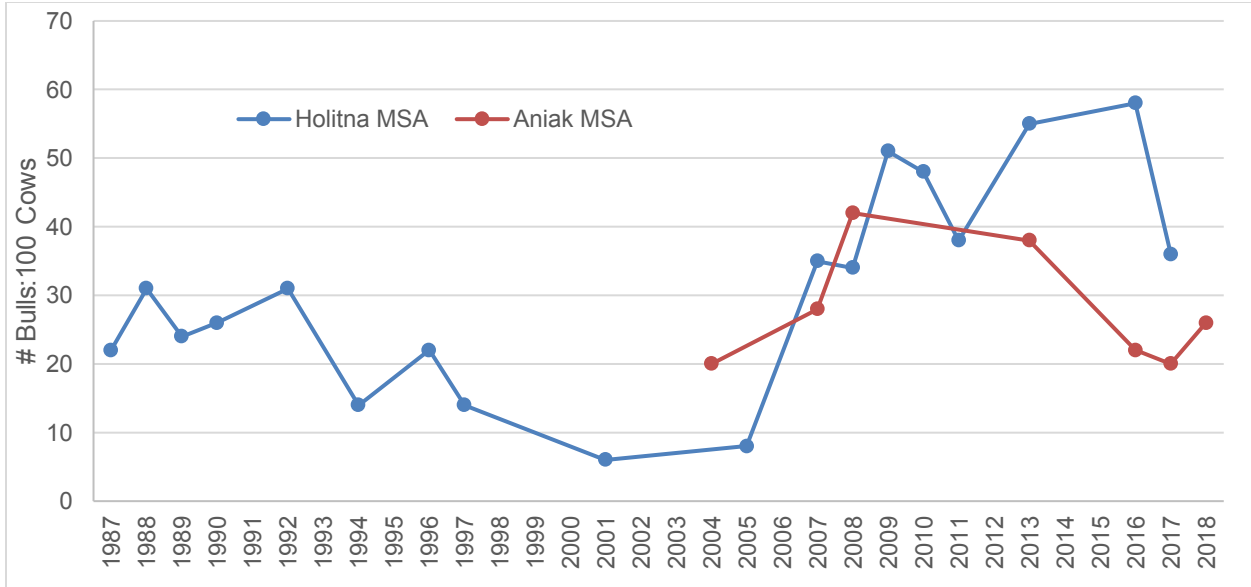


Figure 2. Fall bull:cow ratios for the Unit 19A East (Holitna) and Unit 19A West (Aniak) moose survey areas (Peirce 2018, ADF&G 2018a, Seavoy 2014, Peirce 2018, pers. comm., Peirce 2022, pers. comm.; WIRAC 2019). See Map 2 for survey areas.

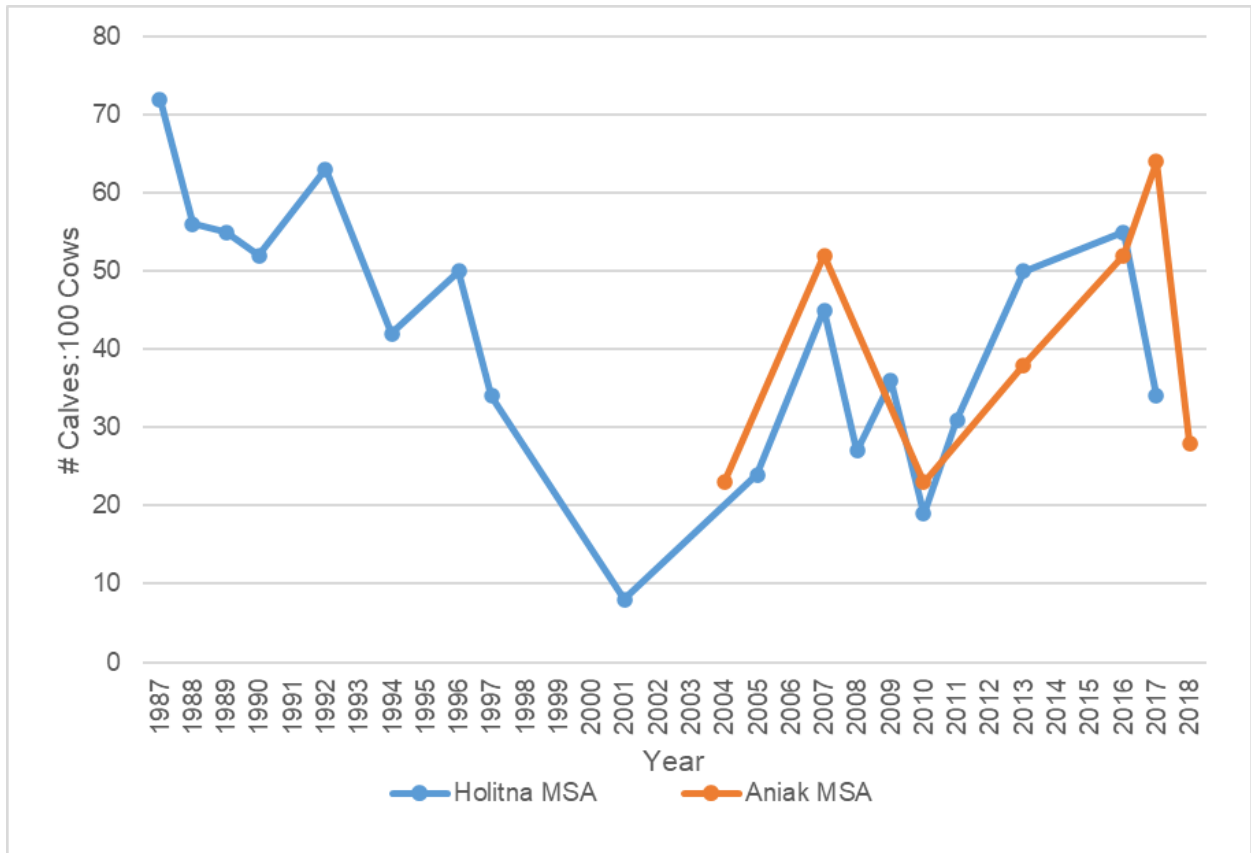


Figure 3. Fall calf:cow ratios for the Unit 19A East (Holitna) and Unit 19A West (Aniak) moose survey areas (Peirce 2018, ADF&G 2018a, Seavoy 2014, Peirce 2018, pers. comm., Peirce 2022, pers. comm.). See Map 2 for survey areas.

Harvest History

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

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

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

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

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

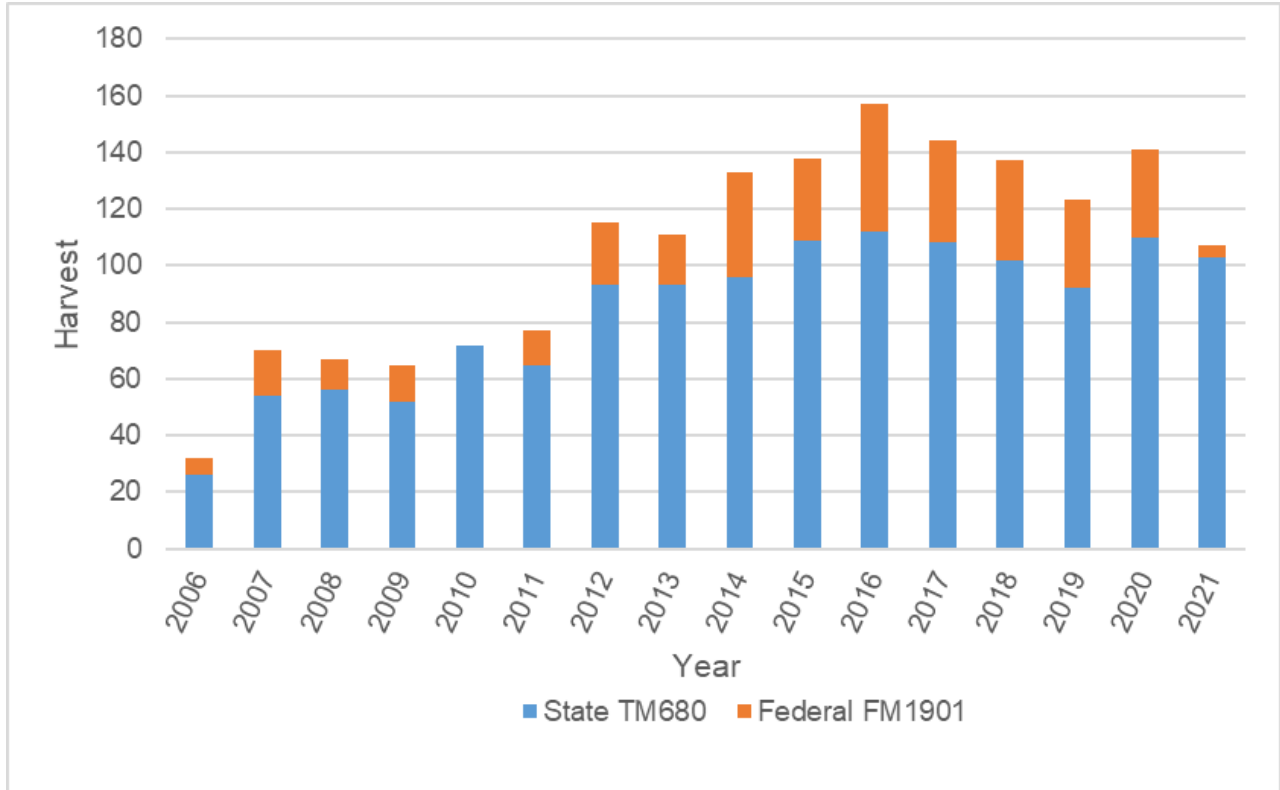


Figure 4. Reported moose harvest in Unit 19A remainder (ADF&G 2018b; OSM 2022; Peirce 2022, pers. comm.).

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

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

Effects

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

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

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

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

OSM CONCLUSION:

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

Justification

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

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Yukon-Kuskokwim Delta Subsistence Regional Advisory Council

The Council voted to **retain the status quo**. The Council agreed with the OSM preliminary conclusion and justification. The moose population still needs more time to grow before rescinding the closure and opening the hunt to other users.

Western Interior Alaska Subsistence Regional Advisory Council

The Council voted to **retain the status quo**. The Council feels that with the low bull:cow ratio, there are no extra bulls available for harvest. Deep snow years have severely impacted the moose population in the area, and several normal winters are needed to recoup the population before this closure can be modified or rescinded.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

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 National Park Service.</i>
Proposed Regulation	<p style="text-align: center;">Unit 22–Muskox</p> <p><i>Unit 22B — 1 bull by Federal drawing permit or State permit. Aug. 1- Federal public lands are closed to the taking of musk ox except by Mar. 15. federally qualified subsistence users hunting under these regulations</i></p> <p><i>Unit 22D, that portion west of the Tisuk River drainage and Canyon Sep. 1- Creek — 1 bull by Federal drawing permit or State permit. Federal Mar. 15. public lands are closed to the harvest of musk ox except by residents of Nome and Teller hunting under these regulations</i></p> <p><i>Unit 22D, that portion within the Kuzitrin River drainages — 1 bull Aug. 1- by Federal drawing permit or State permit. Federal public lands are Mar. 15. closed to the taking of musk ox except for residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission hunting under these regulations</i></p> <p><i>Unit 22D, remainder — 1 bull by Federal drawing permit or State Aug. 1- permit. Federal public lands are closed to the taking of musk ox Mar. 15. except by residents of Elim, White Mountain, Nome, Teller, and Brevig Mission hunting under these regulations</i></p> <p><i>Unit 22E — 1 bull by Federal drawing permit or State permit. Aug. 1- Federal public lands are closed to the harvest of musk ox except by Mar. 15. federally qualified subsistence users hunting under these regulations</i></p> <p><i>Unit 22, remainder No open season.</i></p>

WP24-27 Executive Summary	
	<p>Unit 23–Muskox</p> <p><i>Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage — 1 bull by Federal drawing 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</i> <i>Aug. 1- Mar. 15.</i></p> <p><i>Unit 23, Cape Krusenstern National Monument — 1 bull by Federal drawing permit.</i> <i>Aug. 1- Mar. 15.</i></p> <p><i>Unit 23, that portion north and west of the Kobuk River drainage — 1 bull by State permit or Federal drawing registration permit.</i> <i>Aug. 1- Mar. 15.</i></p> <p><i>Unit 23, remainder</i> <i>No open season.</i></p>
OSM Conclusion	Support Proposal WP24-27
Seward Peninsula Subsistence Regional Advisory Council Recommendation	Support
Northwest Arctic Subsistence Regional Advisory Council Recommendation	Support
North Slope Subsistence Regional Advisory Council Recommendation	Support
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and the Federal Subsistence Board action on this proposal.

WP24-27 Executive Summary	
ADF&G Position	No position
Written Public Comments	None

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 in-season 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 in-season 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 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 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 — 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 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 — 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 by Aug. 1-Mar. 15.
Federal **drawing** 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

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 Buckland Aug. 1-Mar. 15.
River drainage — 1 bull by Federal **drawing** 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

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 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	TX095 TX096	Aug 1- Mar 15
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	TX096	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–Musko

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 Diomed 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

See WCR24-28 analysis.

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 non-federally 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

Seward Peninsula Muskox

See WCR24-28 analysis.

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 1**).

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 1**).

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.).

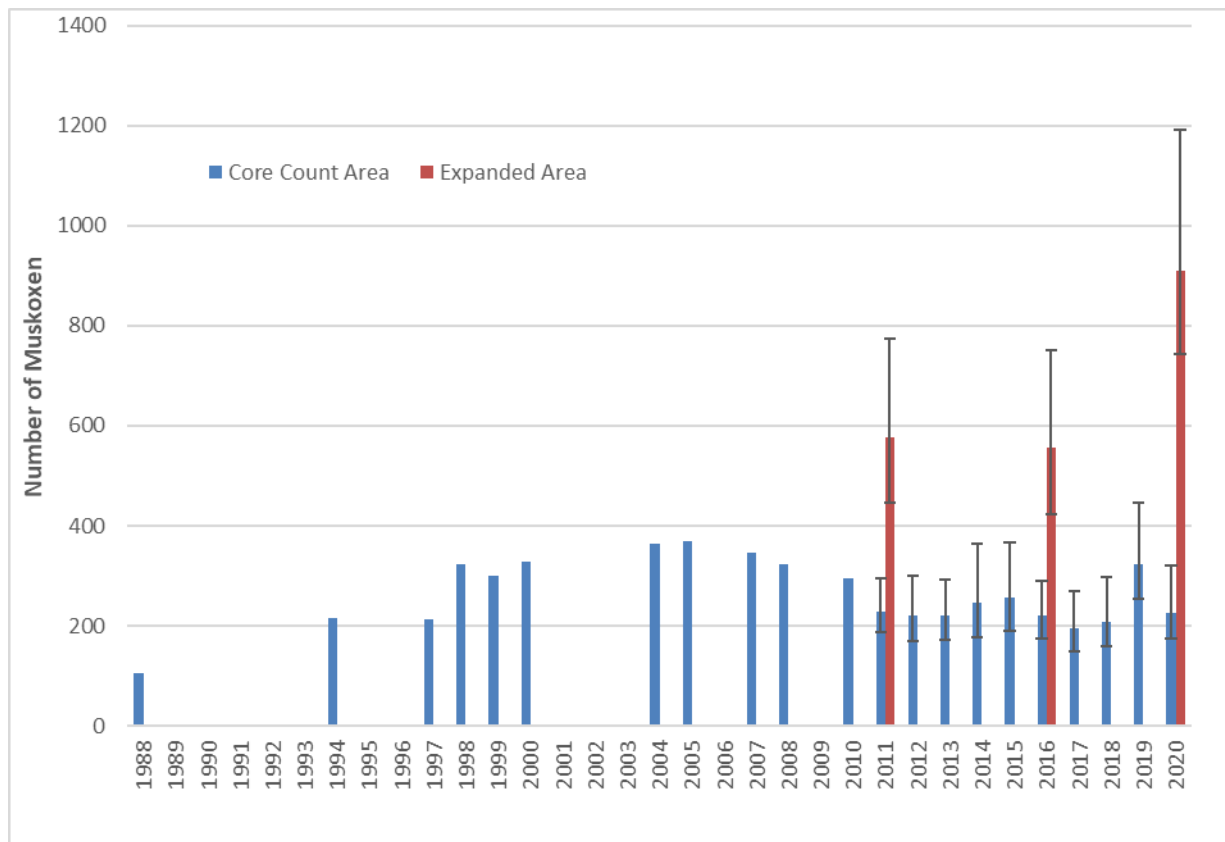


Figure 1. Number of Cape Thompson muskoxen counted in the core count area and expanded survey area (Hughes 2016, 2020 pers. comm., NPS 2017). Prior to 2011, minimum count methods were used.

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 *uningmak*, "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

See WCR24-28 analysis.

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 1**).

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 1. 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 Issued	FX2303 Harvest	FX2312 Permits Issued	FX2312 Harvest	TX107 Permits Issued	TX107 Harvest
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 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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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Seward Peninsula Subsistence Regional Advisory Council

Support WP24-27. The Council supported this proposal as drawing permits would maintain sustainable harvest of muskoxen. This system would be an equitable means of permit distribution, and delegating authority to land managers provides the management flexibility to protect the herd.

Northwest Arctic Subsistence Regional Advisory Council

Support WP24-27. The Council supported this proposal as changing the distribution of permits from registration to drawing would not cause any harm to the process of getting a permit or harvesting muskox on Federal land. The proposal is purely administrative and should make it easier for Federally qualified subsistence users to obtain a permit.

North Slope Alaska Subsistence Regional Advisory Council

Support WP24-27. The Council supported WP24-27. The Northwest Arctic Council had already acted in support on this proposal prior to the North Slope Council meeting; the North Slope Council wanted to support their neighboring Council.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

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. Delegation: 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. Authority: 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. Scope of Delegation: 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. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Delegation: 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. Support Services: 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
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. Delegation: 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. Authority: 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. Scope of Delegation: 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. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Delegation: 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. Support Services: 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. Delegation: 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. Authority: 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. Scope of Delegation: 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 Federal registration permits to be issued annually and determine the method of permit allocation 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. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Delegation: 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. Support Services: 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. Delegation: 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. Authority: 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. Scope of Delegation: 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 Federal registration permits to be issued annually and determine the method of permit allocation for muskox on Federal public lands in Unit 22D west of the Tisuk River drainage 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. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Delegation: 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. Support Services: 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 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. Delegation: 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. Authority: 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. Scope of Delegation: 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 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. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Delegation: 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. Support Services: 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. Delegation: 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. Authority: 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. Scope of Delegation: 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 Kotzebue 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. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Delegation: 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. Support Services: 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. Delegation:** 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. Authority:** 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. Scope of Delegation:** 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. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Delegation: 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. Support Services: 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 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. Delegation: 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. Authority: 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. Scope of Delegation: 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 north and 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. Effective Period: This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

5. Guidelines for Delegation: 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. Support Services: 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

WCR24-10 Executive Summary	
General Description	Wildlife Closure review WCR24-10 reviews the closure to muskox hunting by non-Federally qualified users in Unit 22B.
Current Regulation	<p>Unit 22B–Muskox</p> <p><i>Unit 22B - 1 bull by Federal permit or State permit. Aug. 1 -Mar. 15.</i></p> <p><i>Federal public lands are closed to the taking of musk ox except by federally qualified subsistence users hunting under these regulations</i></p>
OSM Conclusion	Retain the status quo.
Seward Peninsula Subsistence Regional Advisory Council Recommendation	Retain the status quo.
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	No position
Written Public Comments	None

FEDERAL WILDLIFE CLOSURE REVIEW

WCR24-10

Issue: Wildlife Closure review WCR24-10 reviews the closure to muskox hunting by non-Federally qualified users in Unit 22B.

Closure Location and Species: Unit 22B—Muskox

Current Federal Regulation

Unit 22B–Muskox

Unit 22B - 1 bull by Federal permit or State permit. Aug. 1-Mar. 15.

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

Closure Dates: Year-round

Current State Regulation

Unit 22B–Muskox

Residents: Unit 22B, east of the Darby Mtns., including drainages of Kwiniuk, Tubutulik, Koyuk and Inglutalik rivers- one bull by permit TX105 Aug 1-Mar 15

Residents: Unit 22B remainder- one bull by permit TX105 Jan 1- Mar 15

All skulls require trophy destruction at time of take in the field subject to permit conditions; specimens required

Regulatory Year Initiated: 2001

Extent of Federal Public Lands/Waters

Unit 22B is comprised of approximately 42% Federal public lands, consisting of 39% Bureau of Land Management (BLM), 2% National Park Service (NPS) and less than 1% U.S. Fish and Wildlife Service (USFWS) managed lands (**Figure 1**).

Customary and Traditional Use Determination

Residents of Unit 22B have a customary and traditional use determination (C&T) for muskox in all of Unit 22B. Residents of Unit 22C have a C&T for muskox in Unit 22B, west of the Darby Mountains.

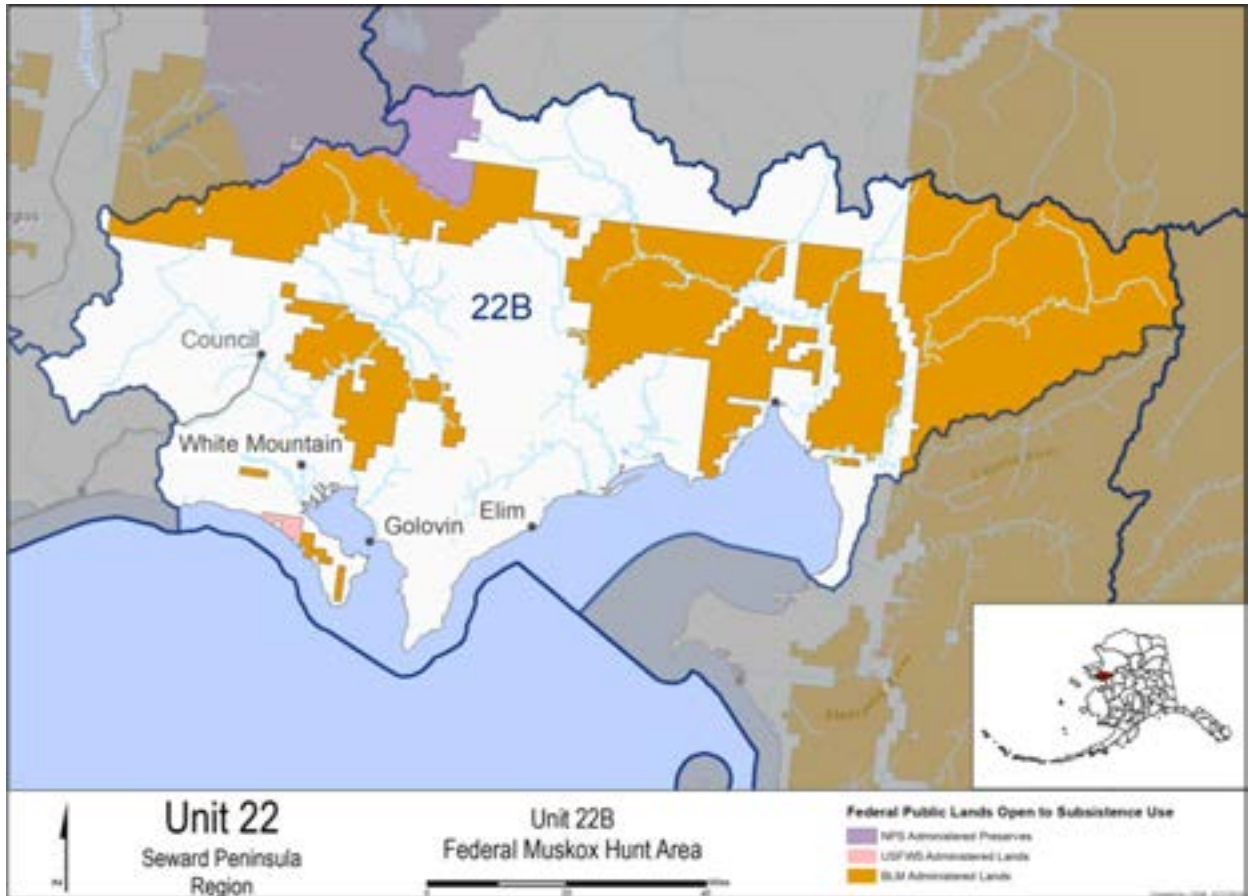


Figure 1. Unit 22B muskox hunt area.

Regulatory History

See WCR24-28 analysis.

Current Events

See WCR24-28 analysis.

Closure last reviewed: 2020 – WCR20-10

Justification for Original Closure:

§815(3) on 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...

Proposal WP01-35, which initiated the closure in 2001, was the result of a multi-year, cooperative effort of the Cooperators to establish a muskox harvest system that would be biologically sound and provide for continued subsistence uses of this muskox population. The Cooperators, composed of staff from BLM, NPS, 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 and organizations, had been involved in muskox management since the 1990s and provided guidance for establishing harvest regulations under both State and Federal jurisdictions. Prior to 2001, no muskox hunt existed in Unit 22B.

Council Recommendation for Original Closure:

The Seward Peninsula and Northwest Arctic Federal Subsistence Regional Advisory Councils supported Proposal WP01-35 because it provided additional subsistence opportunity to Federally qualified subsistence users.

State Recommendation for Original Closure:

ADF&G supported the recommendation of the Councils for Proposal WP01-35. The regulatory changes, including the closure of Federal public lands in Unit 22B, were developed cooperatively at the August 2000 meeting of the Cooperators.

Biological Background

Seward Peninsula Muskox Population

See WCR24-28 analysis.

Unit 22B Muskox

Unit 22B muskox population dynamics have been broadly like the range-wide population. The Unit 22B population appears to have peaked in 2012–2015 at over 450 muskoxen. The lag between the Seward Peninsula population peak and the Unit 22B population peak is likely the result of eastward redistribution of muskoxen from neighboring units, rather than factors relating to productivity or harvest (Gorn and Dunker 2015). Like the Seward Peninsula population, the Unit 22B population declined following its peak in 2012, declining 10% annually from 2015–2017 to 368 muskoxen (**Table 1**). Also like the Seward Peninsula population, the ratio of mature bulls in the Unit 22B population declined after 2002, recovering somewhat and stabilizing in 2015–2017 at 44 mature bulls (MB):100 cows (**Table 1**). Recruitment in the Unit 22B population has also declined since 2002, when it was 48 short yearlings (SY):100 (**Table 1**). Though it appears to have stabilized 2015–2017, it remains among the lowest values on record for Unit 22B at 13 SY:100 cows in 2017 (Dunker 2017b).

Table 1. Population estimates and herd composition for the Unit 22B muskox population (Gorn and Dunker 2015; Dunker 2017a, 2017b).

Year	Population estimate	Mature Bulls: 100 cows	Short Yearlings: 100 cows	% Mature bulls (95% CI)	% Short yearlings (95% CI)
1992	3	-	-	-	-
1994	11	-	-	-	-
1996	51	-	-	-	-
1998	27	-	-	-	-
2000	159	-	-	-	-
2002	189	58	48	22% (20–24%)	18% (17-19%)
2004	-	39	39	18% (13-23%)	18% (13-23%)
2005	326	-	-	-	-
2007	329	48	35	21% (20-22%)	15% (14-16%)
2009	-	38	26	17% (12-22%)	11% (6-16%)
2010	420	30	25	17% (13-21%)	14% (11-17%)
2012	460	28	19	16% (13-19%)	10% (8-12%)
2015	455	44	12	22% (18-26%)	6% (4-8%)
2017	368	44	13	25% (22-29%)	7% (5-9%)

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).

Residents of Units 22B (including Elim, Golovin, Koyuk, and White Mountain) have a customary and traditional use determination for muskoxen in all of Unit 22B. Residents of Unit 22C (Nome) have a customary and traditional use determination for muskoxen in Unit 22B, west of the Darby mountains only. Under the closure to non-Federally qualified users, these are the communities currently qualified to hunt for muskoxen on Federal public lands in all or a portion of Unit 22B. **Table 2** shows the most recent population estimates for these communities.

The year 2001 was the first-time residents of Unit 22B were eligible to participate in any hunt for muskoxen on the Seward Peninsula since the species' extirpation. Since 2001, all Unit 22B communities have been the subject of 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 3**). These data include estimates of all muskoxen harvested by residents under any hunt opportunity (State or Federal) and in any location during each study year. No ADF&G, Division of Subsistence survey data pertaining to use of muskoxen is available for the Unit 22C community of Nome for any year (ADF&G 2022). **Table 3** shows that in terms of estimated pounds per person harvested and percent using the resource, muskoxen have contributed most to subsistence harvests in Golovin and White Mountain during survey years.

Table 2. 2019 estimated populations for communities with a customary and traditional use determination for muskoxen in all or a portion of Unit 22B (ADLWD 2020).

Community	2019 Population Estimate
Elim	351
Golovin	150
Koyuk	348
White Mountain	201
Nome	3,690

Table 3. Three measures of muskox use by Unit 22B communities (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
Elim	2005	0	0	0%
	2010	1	2.3	7%
Golovin	2010	3	13	18%
	2012	2	2.9	27%
White Mountain	2008	4	13	20%

Community	Survey year	Estimated number of muskoxen harvested	Estimated pounds per person harvested	Percent using
Koyuk	2004	0	0	8%
	2010	0	0	0%

Harvest History

Seward Peninsula Muskox Range-wide Harvest

See WCR24-28 analysis.

Unit 22B Muskox

Within Unit 22B, harvest is currently administered by drawing permit in Federal regulation and Tier II permit in State regulation. Like range-wide harvest patterns, Unit 22B harvest rates dropped notably in 2012 under the revised harvest management strategy (**Figure 5**). In the six-year period leading up to the change (2006–2011) harvest in Unit 22B averaged 18.7 muskoxen annually. In the most recent ten-year period (2012–2021) harvest has averaged 5.6 muskoxen annually (ADF&G 2018; Germain 2022, pers. comm.).

Also notable since 2012 is the proportion of harvest taken by Federal permit in Unit 22B (**Figure 5**). From 2012-2021, 29% of the Unit 22B muskox harvest has been taken by Federal permit, in contrast to 9% during the earliest years of the hunt, 2001–2011. The four-year period of 2008–2012 saw only 1% of successful hunters using Federal permits (ADF&G 2018). Low utilization of Federal permits during these years coincides with the period that ADF&G administered the State hunt with registration permits rather than Tier II permits. Given that less than half of the land in Unit 22B is Federal, and considering the remoteness of those lands, it is likely that local hunters prefer to hunt under State regulation when possible but may be unable to do so in Tier II hunts, where permit availability is limited.

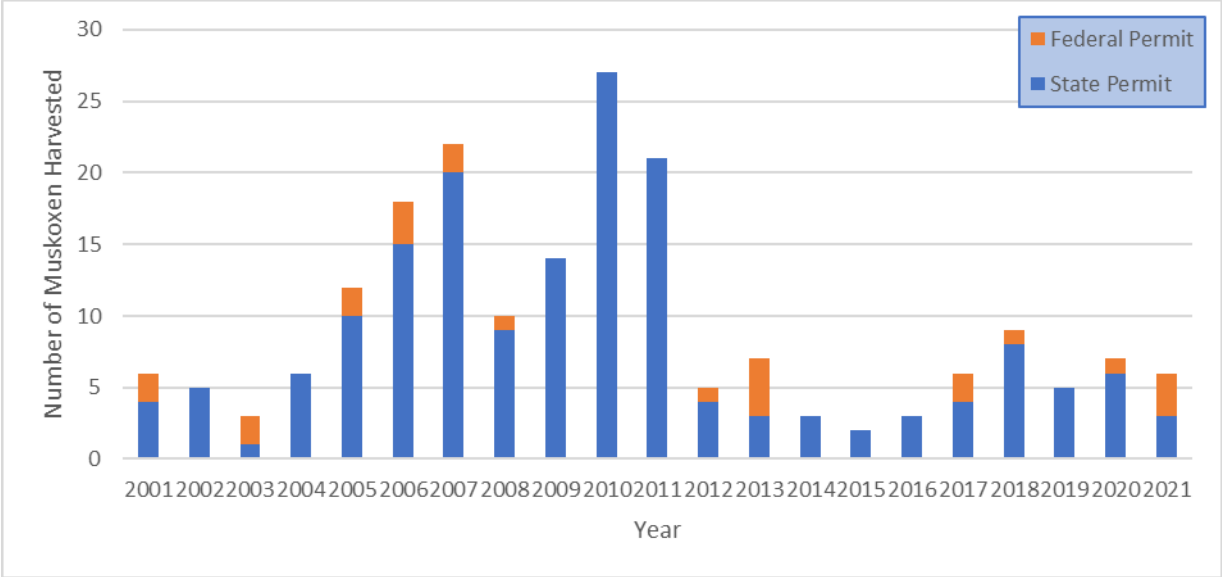


Figure 5. Reported muskox harvest in Unit 22B by Federal and State permit for regulatory years 2001 – 2021 (ADF&G 2018). Harvest of muskox in Unit 22 is limited to bulls.

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 22B by either State or Federal 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.

If the closure were rescinded, Federal public lands in Unit 22B would be open to the harvest of muskoxen by anyone hunting under State regulations. Overharvest 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. If the closure were modified to close to all users, Federally qualified subsistence users would unnecessarily lose the opportunity to harvest muskox under Federal regulations in Unit 22B.

OSM CONCLUSION:

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

Justification

The muskox population in Unit 22B has declined since 2015. It has also experienced declines in the proportion of mature bulls and the estimated rate of recruitment is among the lowest on record. Given these conservation concerns, the current management approach, which includes a more conservative harvest strategy, and the use of Tier II permits, the closure of Federal public lands except to Federally qualified subsistence users appears to be appropriate for the Unit 22B muskox population.

The consequence of this approach is that fewer muskoxen are available for harvest. Relatively high Federal permit usage since 2012, when the new harvest guidelines were implemented and the Tier II hunt was reinstated, suggests that Federally qualified subsistence users are relying more heavily on Federal subsistence regulations to meet their subsistence needs. Retaining the Federal public lands closure will ensure Federally qualified subsistence users continuance of subsistence uses and, in combination with the State's current management approach, provides for continued maintenance and improvement of the Seward Peninsula muskox population status.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Seward Peninsula Subsistence Regional Advisory Council

Retain the status quo on WCR24-10. The Council concurred with OSM that this closure, in conjunction with decreased harvest, has slowed the muskox population decline on the Seward peninsula. Maintaining this closure will ensure the continued conservation of this muskox population.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

WCR24-28 Executive Summary	
General Description	Wildlife Closure review WCR24-28 reviews the closure to muskox hunting in Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek (Unit 22D SW), except by residents of Nome and Teller.
Current Regulation	<p>Unit 22D–Muskox</p> <p><i>Unit 22D, that portion west of the Tisuk River drainage Sep. 1-Mar. 15 and Canyon Creek - 1 bull by Federal permit or State permit.</i></p> <p><i>Federal public lands are closed to the harvest of musk ox except by residents of Nome and Teller hunting under these regulations</i></p>
OSM Conclusion	Retain the status quo
Seward Peninsula Subsistence Regional Advisory Council Recommendation	Retain the status quo
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	No position
Written Public Comments	None

FEDERAL WILDLIFE CLOSURE REVIEW

WCR24-28

Issue: Wildlife Closure review WCR24-28 reviews the closure to muskox hunting in Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek (Unit 22D SW), except by residents of Nome and Teller.

Closure Location and Species: Unit 22D SW—Muskox (**Figure 1**).

Current Federal Regulation

Unit 22D—Muskox

Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek - 1 bull by Federal permit or State permit. Sep. 1-Mar. 15.

Federal public lands are closed to the harvest of musk ox except by residents of Nome and Teller hunting under these regulations

Closure Dates: Year-round

Current State Regulation

Unit 22D—Muskox

Unit 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

All skulls require trophy destruction at time of take in the field subject to permit conditions; specimens required

Regulatory Year Initiated: 1995, closed except by Federally qualified subsistence users; 2014, closed except by some Federally qualified subsistence users (§804 restriction).

Extent of Federal Public Lands/Waters

Unit 22D is comprised of approximately 23% Federal public lands, consisting of 12% Bureau of Land Management (BLM), and 11% National Park Service (NPS) managed lands (**Figure 1**).

Unit 22D SW is comprised of approximately 11% Federal public lands, all of which are BLM managed lands.

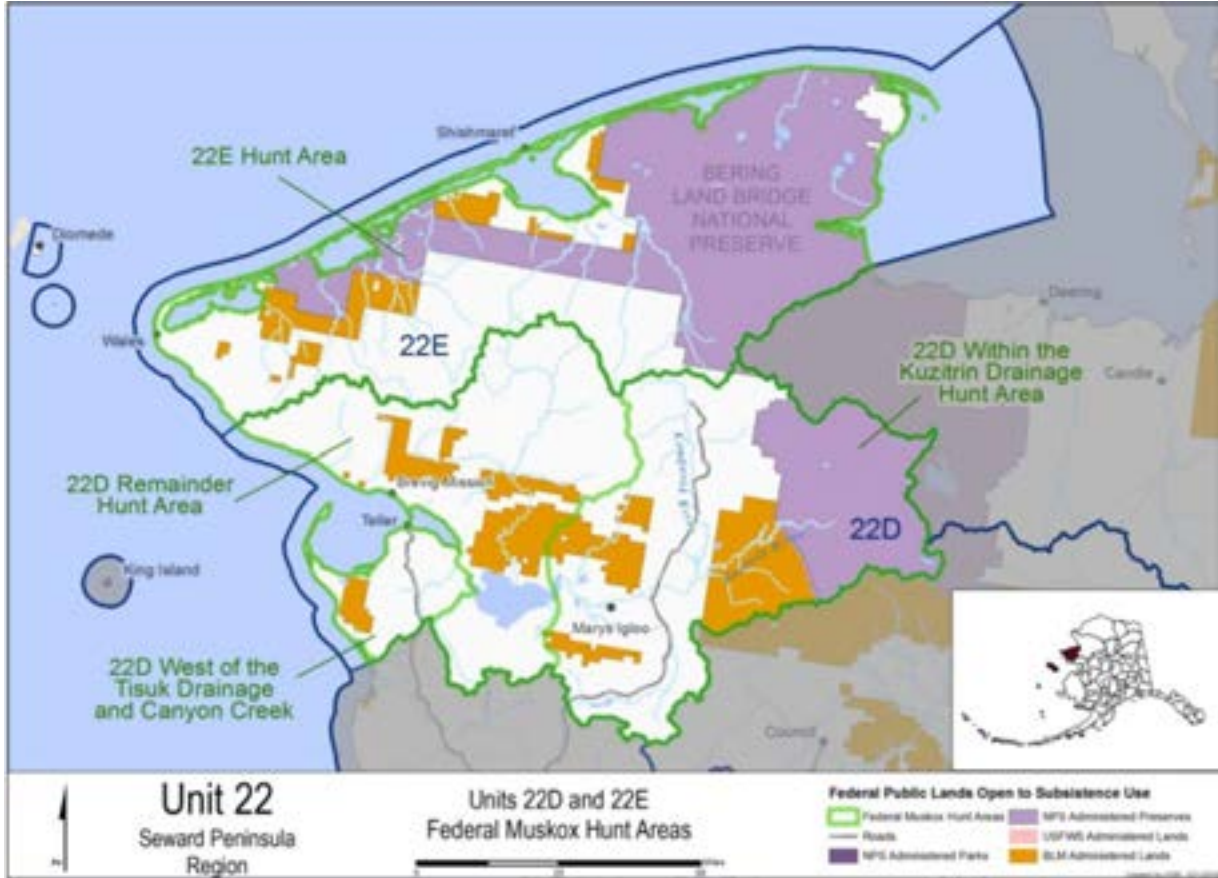


Figure 1. Current muskox hunt areas in Units 22D and 22E.

Customary and Traditional Use Determination

Residents of Units 22B, 22C, 22D, and 22E (excluding St. Lawrence Island) have a customary and traditional use determination (C&T) for muskox in Unit 22D.

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).

Also in 1995, the Board adopted Proposal P95-43 with modification, recognizing the C&T of muskoxen in Unit 22D by residents of Unit 22D (Teller and Brevig Mission), in Unit 22E by residents of Unit 22E (Shishmaref and Wales), excluding Little Diomed Island, and in Unit 23 SW by residents of Unit 23 South of Kotzebue Sound and west of and including the Buckland River drainage (Deering and Buckland) (OSM 1995b).

In August 1995, the Board rejected two Requests for Reconsideration regarding the establishment of the Federal muskox season, R95-04 submitted by Anne Ruggles and R95-05 submitted by ADF&G. Although the Board rejected both requests, they revised the harvest quota for Unit 22D, reducing it from 12 to 2 muskoxen. The Board made this change in response to concerns for the maintenance of a healthy muskox population (FSB 1995b).

In 1996, the Board adopted Proposal WP96-51 with modification to increase the harvest quota from two to eight muskoxen in Unit 22D. The proposal was submitted by the Council to increase the harvest quota to 12 muskoxen but was adopted with modification by the Board to increase the harvest quota to eight muskoxen.

In 1997, the Board denied a Request for Reconsideration, R96-06 submitted by ADF&G which asked to reduce the number of Federal muskox permits from 8 to 2. The Board deferred a decision until the April 1998 FSB meeting, where they decided to keep the harvest quota set at eight muskoxen, but stratified Unit 22D into two permit areas comprising BLM lands and NPS lands, with half of permits designated in each area (FSB 1997). This decision was based on harvest information indicating all muskox harvest in Unit 22D was on BLM land. The split of permits was intended to encourage Federally qualified subsistence users to harvest from NPS lands in the eastern end of the unit.

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

In 2001, the Board adopted Proposal WP01-35, changing the Units 22 and 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.

Also in 2001 the Board adopted WP01-35, establishing a muskox season in Unit 22B. The season was open Aug. 1–Mar. 15 throughout the unit, harvest was limited to one bull by Federal or State permit, and Federal public lands were closed except by Federally qualified subsistence users. There was a harvest quota associated with this season and was set at 8 bulls. The BOG established a State season in Unit 22B during the same year. At that time, the harvest of one bull was allowed by Tier II permit (TX105) in the portion of Unit 22B within the Fox River drainage upstream of the Fox River bridge

and within one mile of the Council Road east of the Fox River bridge, the season was Nov. 1–Mar. 15. In Unit 22B remainder, the season was Aug. 1–Mar. 15.

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 2003, the Board considered WP03-41, which originally requested to expand C&T for muskoxen in Units 22B and 22D but was subsequently amended to request that the Federal public lands closures in those subunits be rescinded. The proponent argued that many Tier II users with a history of subsistence use of muskoxen were being excluded from Federal lands. The Seward Peninsula and the Northwest Arctic Councils recommended that the proposal be deferred until after it was considered by the Cooperators. ADF&G and the Interagency Staff Committee concurred with this recommendation, and the Board deferred the proposal.

In 2004, deferred Proposal WP03-41 was withdrawn, and WP04-71 was submitted in its place. This proposal requested C&T for muskoxen in Units 22B and 22D be extended to all residents of Unit 22, except those from St. Lawrence Island. Previously, only residents of Unit 22B had C&T in Unit 22B and only residents of Unit 22D, excluding residents of St. Lawrence Island, had C&T in Unit 22D. The Board adopted the proposal with modification, as recommend by the Seward Peninsula Council, to 1) add residents of Unit 22C to the C&T determination in the portion of Unit 22B west of the Darby Mountains and 2) add residents of Unit 22C and White Mountain to the C&T determination in the portion of Unit 22D in the Kougarok, Kuzitrin and Pilgrim River drainages.

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, Proposal WP06-41 and -55 established the use of a designated hunter permit for muskoxen in Unit 22 and 23SW, respectively, by Federally qualified subsistence users. During the same year the Federal public lands closure in Unit 22B was reviewed through WCR06-10. The Seward Peninsula Council decided to take no action, thereby maintaining status quo.

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.

Also in 2008, the Board rejected Temporary Special Action WSA08-08, which requested the Federal muskox hunt in Unit 22B west of the Darby Mountains be limited to the communities of White Mountain and Golovin. This Special Action was submitted in response to the proposed Aug. 1–Mar. 15 State season in the western portion of Unit 22B. The BOG’s decision to delay opening the season until January 1, along with limited permitting locations and trophy destruction requirements, were influential in the Board’s decision to reject this request.

In 2009, State Emergency Order 05-11-09 closed the State subsistence hunting season for muskoxen by registration permit in Unit 22D remainder on October 13, 2009, because the joint Federal/State harvest quota of 16 muskoxen had been reached. Based on this closure, the Federal manager closed the Federal subsistence muskox hunt in Unit 22D remainder on October 17, 2009.

The Board approved Emergency Special Action WSA09-11 on December 30, 2009, reopening the winter muskox season within Unit 22D remainder (that portion within the Kougarok, Kuzitrin, and Pilgrim River drainages) from January 15 to March 15, 2009. The Board adopted this special action based on the difference between Federal and State hunt units. The State separated Unit 22D into three distinct hunt areas, while Federal regulations only divided Unit 22D into two hunt areas. When the State closed one hunt area that had met its quota, the Federal manager followed suit by closing the corresponding area. But the Federal area encompassed more than the State managed closure area, it also contained the neighboring 22D Kuzitrin area as well, which still had a harvestable surplus. By closing this area, Federal managers had reduced harvest opportunities for Federally qualified subsistence users.

In 2010, the Board adopted WP10-73 with modification, expanding C&T for muskoxen in Unit 22D. This combined Unit 22D within the Kougarok, Kuzitrin, and Pilgrim river drainages customary and traditional use area with the Unit 22D remainder area. This also added residents of Unit 22B (White Mountain, Golovin, Elim, Council, and Koyuk) and Unit 22E (Wales and Shishmaref) to the C&T for all of Unit 22D. The Board also considered Proposal WP10-77, which 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 this proposal with modification to separate from Unit 22D remainder the current Unit 22D Kuzitrin hunt area, which encompasses the Kougarok and Pilgrim river drainages (**Figure 1**). They also adopted Proposal WP10-84 with modification, clarifying the regulatory language and requiring a Federal or 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.

Also in 2010, Proposal WP10-74 requested rescinding the closure of Federal public lands to the harvest of muskoxen in Unit 22E, except by Federally qualified subsistence users, and was adopted by the Board. Harvest quotas were rarely met in Unit 22E, indicating harvest should be allowed on Federal public lands under both Federal and State regulations. Conservation concerns were minimal due to harvest quotas. At the same time the Board adopted WP10-75 which requested the harvest of cow muskoxen be allowed for the entire Aug. 1–Mar. 15 season in Unit 22E, rather than restricting it to Jan. 1–Mar. 15.

The Council reviewed Federal public lands closure in Unit 22B through WCR10-10. At that time, the Seward Peninsula Council voted to maintain the status quo. They believed the harvestable surplus was not sufficient to support use by non-Federally qualified users and that maintaining the Federal lands closure was good for the conservation status of the population and allowed for the continuation of subsistence uses.

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.). This change would allow ADF&G to determine which type of permit would be required annually based on results from population surveys without having to request the BOG to make the change. 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 several proposals were adopted by the Board affecting muskox harvest on the Seward Peninsula: Proposal WP14-33 affected Unit 22D, that portion within the Kuzitritin River drainage; WP14-35 affected Unit 22D Southwest; WP14-36 affected Unit 22E; WP14-38 affected Unit 22D remainder; and WP14-41 affected Unit 23 SW. All these proposals eliminated cow harvest in their respective subunit. The proposals also provided the in-season managers (Superintendent of the Bering Land Bridge National Preserve or the BLM Anchorage Field Office Manager) with authority to limit the respective number of Federal registration permits issued each season. Each proposal closed Federal public land in their respective units to the harvest of muskoxen except by eligible residents as determined by an §804 analysis. Residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission were allowed to harvest muskoxen in Unit 22D Kuzitritin (WP14-33); residents of Nome and Teller were eligible to harvest muskoxen in Unit 22D Southwest (WP14-35); residents of Elim, Council, Golovin, Koyuk, White Mountain, Nome, and Teller were able to harvest muskoxen in Unit 22D remainder (WP14-38); and all Federally qualified subsistence users were able to harvest muskox in Unit 22E (WP14-36) and Unit 23 SW (WP14-41). These restrictions were enacted due to significant declines in the muskox population, low harvestable surplus, and concerns over sustainable harvests and maintaining rural subsistence priority. WP14-41 included a review of the Federal public land closure in Unit 23 SW, which the Council decided to maintain.

In 2014, Proposal WP14-39 requested Federal permit requirements be updated, the BLM Anchorage Field Office Manager be designated as the Federal in-season manager and that authority be delegated to restrict the number of Federal permits issued each year in Unit 22B. The Council was supportive of

the proposal and recommended that the muskox season be shortened. The Board adopted Proposal WP14-39 with modification to make minor changes in the regulatory language and to delegate additional authority to close the season and to determine annual quotas, the number of permits to be issued, and the method of permit allocation via a delegation of authority letter only. Permit allocation meant allocating permits between State and Federal hunts, although in-season managers later misinterpreted this to mean the type of permit that could be issued (i.e. registration vs. draw).

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

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.

In 2020, Wildlife Closure Reviews WCR20-10, -19, -28, -29, -30 and -44 reviewed the Federal public lands closure in Units 22B, 23 SW, 22D SW, 22D remainder, 22E and 22D Kuzitritin, respectively. The Board recommended to retain the status quo for all of these closures. Low muskox population numbers, poor population metrics and high harvest rates prompted this decision. The small amount of Federal harvest allowed still provided for a Federal subsistence priority.

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 in-season 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.

Current Events

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 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 (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.

Closure last reviewed: 2020 – WCR20-28

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 by adopting WP95-44 in 1995 to establish a Federal muskox hunt and to close Federal public lands to non-Federally qualified users was to provide a subsistence priority for Alaskan residents with C&T for muskox in Unit 22. The Board did not feel that the State muskox seasons would provide adequate opportunity and priority for subsistence users who were active participants in developing the cooperative muskox management plan. Therefore, the Board determined that a Federal season managed via a Federal registration permit and the closure of Federal public lands to non-Federally qualified users was necessary.

In 2014, the Board supported WP14-35, restricting the closure to a subset of Federally qualified subsistence users because of declining population, low harvestable surplus, concerns over sustainable harvests, and maintaining a subsistence priority.

Council Recommendation for Original Closure:

In 1995, the Seward Peninsula Subsistence Regional Advisory Council (Council) supported P95-44 to provide a subsistence priority for local users due to a lack of subsistence priority under State regulations.

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).

Although these were the original recommendations from the Councils, both Councils agreed to support the modified proposal, adopted by the Board, which included that portion of Unit 23 including and west of the Buckland River drainage (FSB 1995a).

In 2014, the Seward Peninsula Council supported Proposal WP14-35 to give a subsistence priority to residents of Nome and Teller for muskoxen in Unit 22D SW because they agreed these two communities were the most reliant on the resource.

State Recommendation for Original Closure:

Although ADF&G agreed with the intent of the cooperative muskox management planning effort, they believed it was advisable to postpone a decision on Proposal P95-44 to close Federal public lands until the BOG had decided on State Regulations for a muskox hunt in Unit 22 and Unit 23 SW. When the amendment that contained the closure language was proposed, the State had concerns in regard to permitting and wanted to be kept informed; however, no direct comments about the closure were made and the State's official recommendation was neutral.

In 2014, ADF&G was in support of Proposal WP14-35 following the Cooperator's recommendations. They also asked for a modification to describe the State permit in such a way as to explain the flexibility in their permitting.

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 even 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 muskoxen in 2021 (**Figure 2**). 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 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 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 3**). Ratios have been increasing since 2015 to almost as high as 2002 levels, peaking in 2021 at 42:100.

Unit 22D Muskox Population

In Unit 22D, the muskox population followed a similar trend as the overall Seward Peninsula population. The population experienced growth from 1992 until approximately 2010, peaking at 878

muskoxen. The Unit 22D population then declined to 457 muskoxen in 2021 (Dunker 2017a; Gorn and Dunker 2013, 2015; Germain 2022, pers. comm.; **Table 1**). The Unit 22D SW hunt area has similarly experienced a decline after 2010 but has appeared to have stabilized from 2015-2017 (Gorn and Dunker 2013, 2015; Dunker 2017a; **Table 1**). Short yearling composition in Unit 22D showed an increase starting in 2015 after having declined since 2002 (Dunker 2017b; **Figure 3**). The SY:100 cow ratio ranged from 13-49 from 2002–2021, with the highest ratio occurring in 2021. The mature bull:cow ratios in Unit 22D followed the same trend as the population, with the number of mature bulls per 100 cows increasing 2002–2010 and then declining and stabilizing 2015-2017, before increasing in 2021 to 49 MB:100 cows (Dunker 2017b; Germain 2022; **Figure 4**).

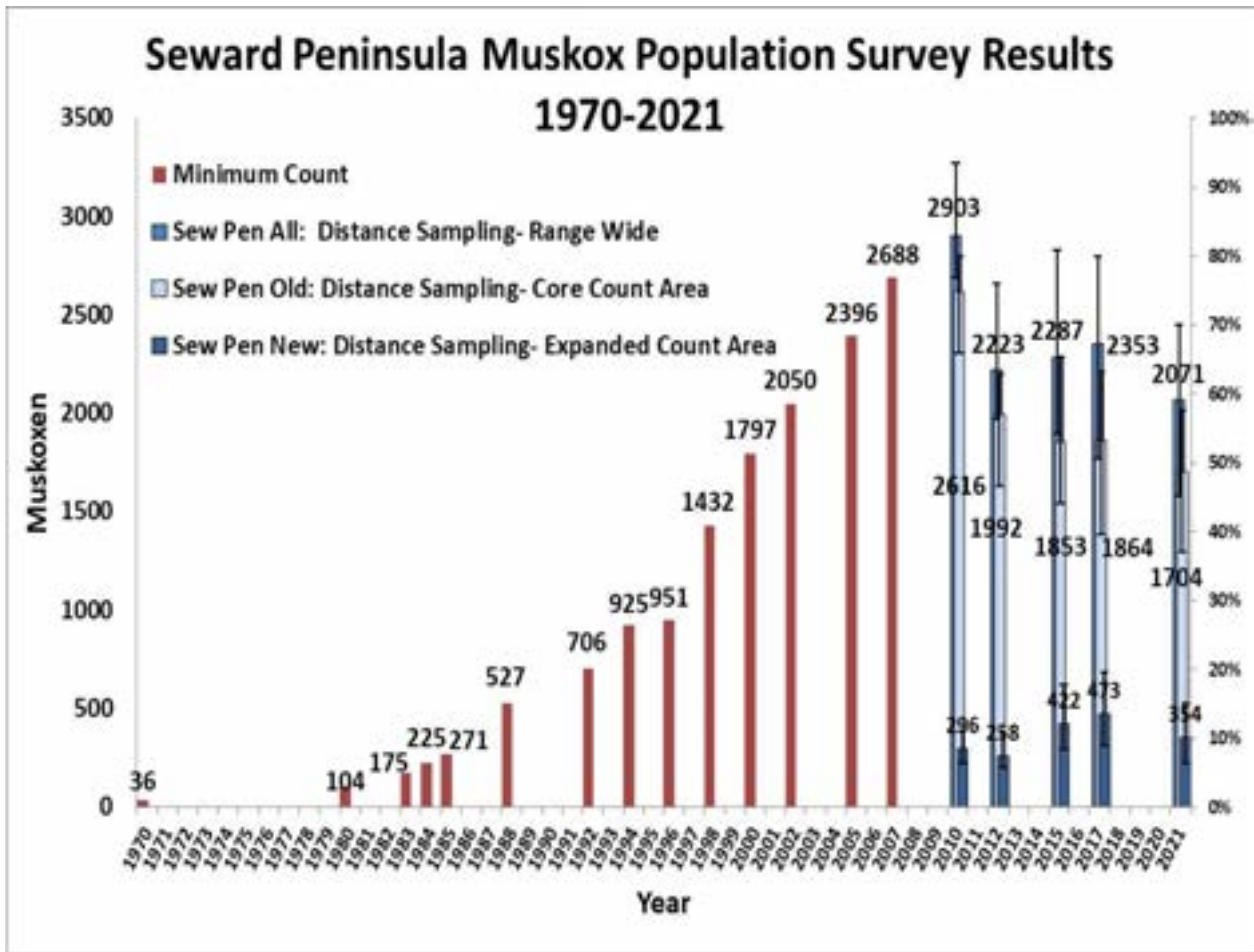


Figure 2. Population estimates for Seward Peninsula muskox. The results pre-2010 are from the minimum count surveys and post-2010 are from distance sampling technique. The core count area includes Units 22B, 22C, 22D, 22E, and 23 SW. The expanded count area includes the core count area, northern Unit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

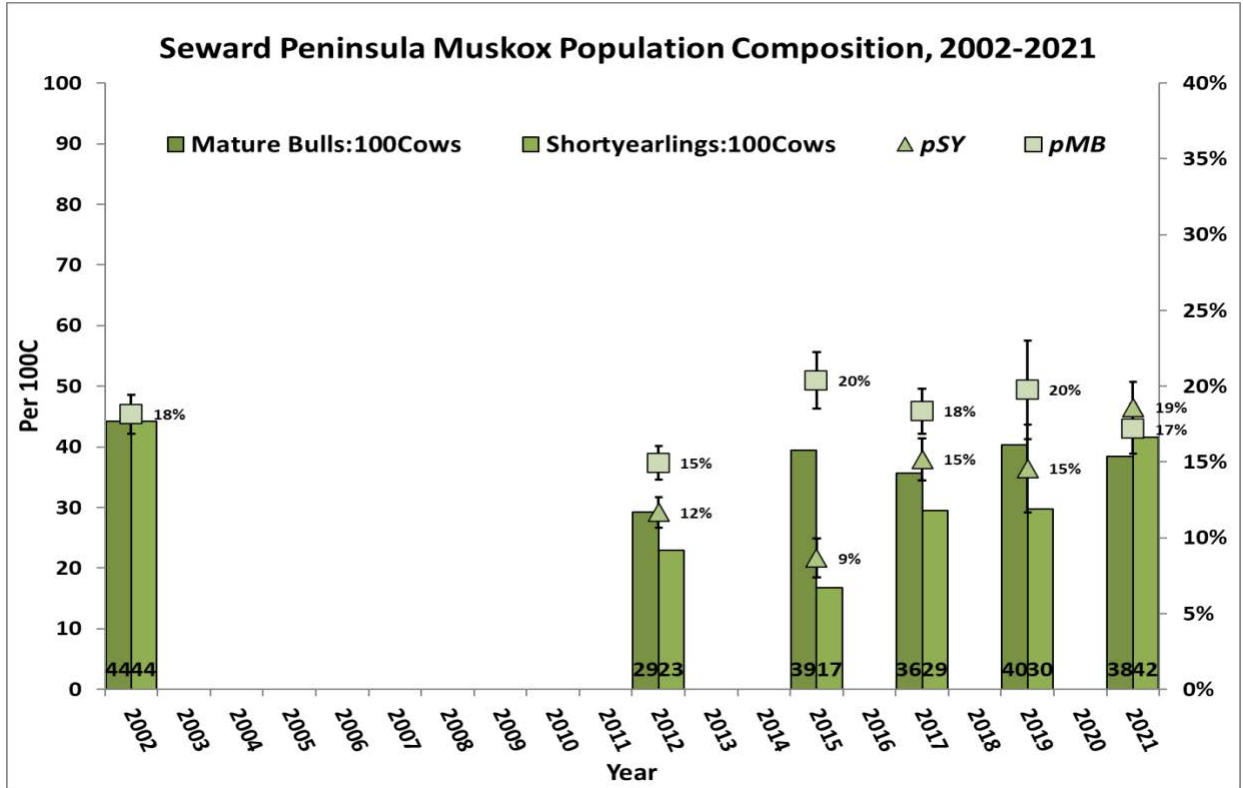


Figure 3. Population composition for Seward Peninsula muskox. Ratios are the number of mature bulls:100 cows and short yearlings:100 cows. Mature bulls are ≥ 4 years old. Short yearlings are muskoxen between 10 and 12 months old. pSY and pMB are the proportion of short yearlings and mature bulls (respectively)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

Table 1. Muskox population estimates in Unit 22D and 22D SW (Germain 2022, pers. comm.).

Year	Unit 22D Muskox Population	Unit 22D SW Muskox Population
1992	340	
1994	405	
1996	308	
1998	714	
2000	774	
2002	771	
2005	796	
2007	746	
2010	878	160
2012	629	77
2015	523	78
2017	556	142
2021	457	

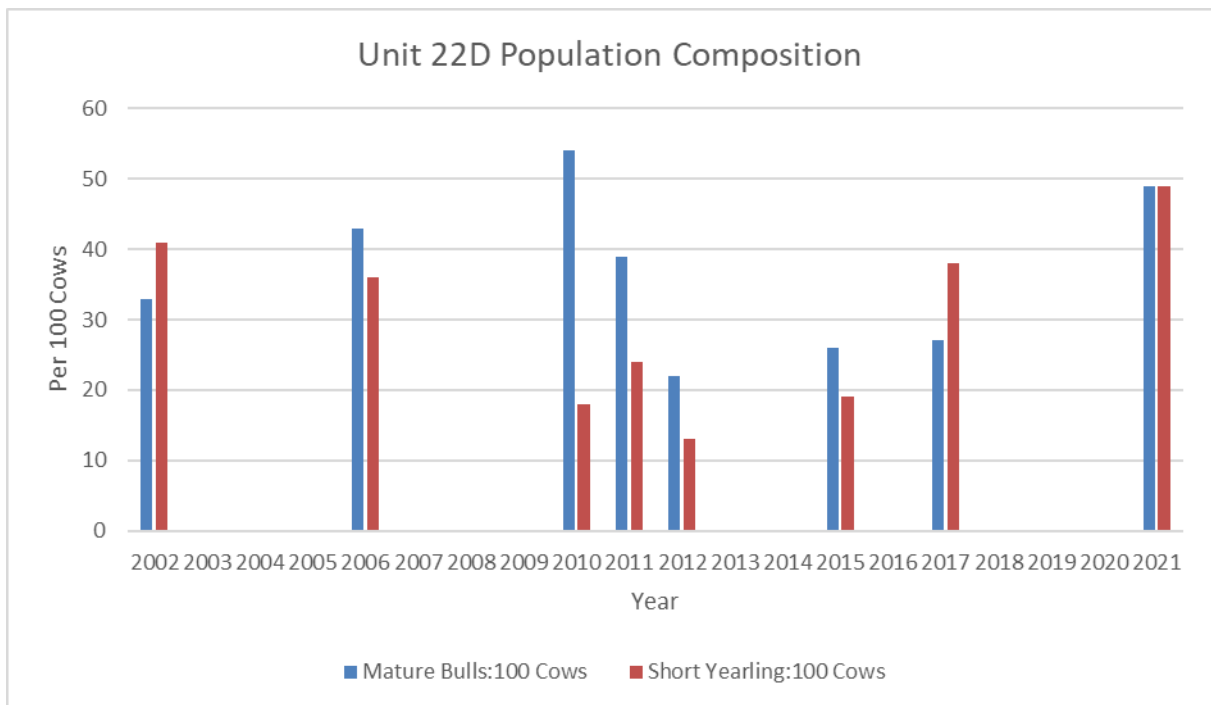


Figure 4. Bull and short yearling to 100 cow ratios in Unit 22D, from 2002 to 2021.

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).

Under the current closure, only residents of Nome and Teller may participate in the Federal subsistence hunt for muskoxen in Unit 22D SW. In 2022, the estimated population of Nome was 3,469 and the estimated population of Teller was 234 (ADLWD 2022). No ADF&G, Division of Subsistence survey data pertaining to use of muskoxen is available for Nome for any year (ADF&G 2022).

Since the initiation of muskox hunting opportunities in 2001, Teller has been the subject of two subsistence surveys conducted by ADF&G, Division of Subsistence (ADF&G 2022, **Table 2**). These data include estimates of all muskoxen harvested by residents of Teller under any hunt opportunity (State or Federal) and in any location during the study year. Under Federal subsistence regulations, residents of Teller do not have a customary and traditional use determination for muskox beyond Unit 22D. **Table 2** indicates that residents of Teller did not harvest muskoxen in either of the two survey years. In 2000, 8% of surveyed households reported using muskoxen, possibly indicating sharing from harvests outside the community.

Table 2. Three measures of muskox use by Teller (ADF&G 2022).

Community	Survey year	Estimated amount harvested	Pounds per person harvested	Percent using
Teller	2005	0	0	0
	2000	0	0	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 2014a). 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 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 0.7%-5.8%, peaking in 2009 (**Figure 5**) (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 3**). 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 4**) (OSM 2022).

Unit 22D SW Muskox Harvest

In Unit 22D, the average annual muskox harvest was 42 muskoxen from 2007 through 2011 (**Table 5**) (ADF&G 2018; Dunker 2018, pers. comm.). When the harvest management strategy was modified, in 2012, the harvest of muskox greatly decreased; nonresident harvest was no longer permitted and nonlocal resident (State of Alaska resident from outside of Unit 22) harvest was greatly reduced (ADF&G 2018). From 2012 through 2017, the average annual harvest under State regulations dropped to eight muskoxen in Unit 22D (ADF&G 2018); with Federally qualified subsistence users harvesting an average of one additional muskox by Federal registration permit annually (OSM 2022).

Unit 22D Southwest is currently managed under the Federal harvest permit FX2205 and State Tier II permit TX103 (**Table 5, Table 6**). In Unit 22D Southwest, the State harvest quota was reduced to one muskox in 2012, following the modification in harvest strategy (Dunker 2018, pers. comm.). Since 2012, the allowable harvest has remained low in this hunt area. In 2014, Federal public lands in Unit 22D Southwest were closed to the taking of muskox except by residents of Nome and Teller and the hunt was limited to bull muskox only under both Federal and State regulations. Following this modification, average annual combined harvest in this subunit was reported as one muskox for the 2014–2021 timeframe (Adkisson 2018, pers. comm.; OSM 2022).

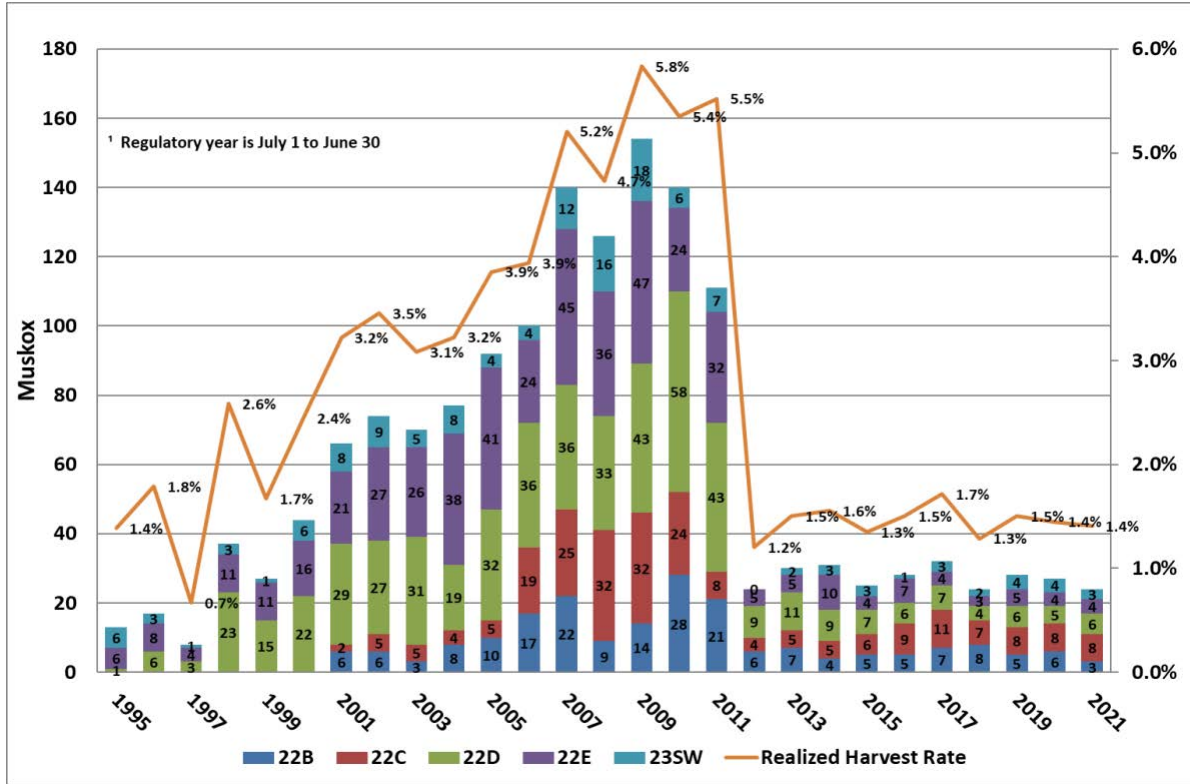


Figure 5. Reported harvest and realized harvest rate as percentage of herd population for Seward Peninsula muskox by subunit (Gorn and Dunker 2015, Dunker 2022; Germain 2022, pers. comm.).

Table 3. 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.

Regulatory Year	Unit 22		Unit 23		Total	
	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 4. Percentage of total reported Seward Peninsula muskox harvest by Federal permit (OSM 2022; Germain 2023, pers. comm.; Osburn 2023, pers. comm.).

Year	State Harvest	Federal Harvest	Total	Federal Harvest %
2012	24	2	26	7.70%
2013	30	10	40	25.00%
2014	31	4	35	11.40%
2015	25	3	28	10.70%
2016	28	2	30	6.70%
2017	32	3	35	8.60%
2018	24	2	26	7.70%
2019	28	1	29	3.40%
2020	22	5	27	18.50%
2021	29	3	32	9.40%
2022	25	9	34	26%

Table 5. Harvest of muskox by user residency in Unit 22D from 2007 through 2021 (ADF&G 2018; Adkisson 2018, pers. comm.; Dunker 2018, pers. comm.; Germain 2022, pers. comm.). Resident harvest means resident of Unit 22 and nonlocal resident means State of Alaska resident outside of Unit 22.

Year	Resident Harvest	Nonlocal Resident Harvest	Nonresident Harvest	Unspecified	Total
2007	33	2	0	0	35
2008	23	8	2	0	33
2009	25	14	0	4	43
2010	30	24	1	3	58
2011	22	19	1	1	43
2012	9	0	0	0	9
2013	11	0	0	0	11
2014	9	0	0	0	9
2015	7	0	0	0	7
2016	6	0	0	0	6
2017	7	0	0	0	7
2018	4	0	0	0	4
2019	6	0	0	0	6
2020	5	0	0	0	5
2021	6	0	0	0	6

Table 6. Muskox harvest in Unit 22D Southwest by State and Federal reported harvest (ADF&G 2018; Dunker 2018; pers. comm.; Germain 2022, pers. comm.; OSM 2022).

Year	Federal Harvest (FX2205)	State Harvest (TX103)	Total Harvest	Allowable Harvest Estimate
2012	0	0	0	1
2013	0	1	1	1
2014	1	1	2	1
2015	0	0	0	1
2016	0	1	1	1
2017	0	1	0	1
2018	0	-	-	2
2019	0	1	1	2
2020	0	1	1	2
2021	1	2	3	2

Effects

If the closure were to remain in place there would be no change in how the hunt is currently managed. Only residents of Nome and Teller would be allowed to harvest muskoxen on Federal public lands in Unit 22D Southwest, providing a Federal subsistence priority to the users most dependent on the resource. The muskox population that currently exists in the area would remain protected from overharvest through limited permits and harvest.

Under the current closure, only residents of Nome and Teller are eligible to hunt for muskoxen in Unit 22D SW, resulting from a §804 analysis and closure dating to 2014. One option is to modify the closure to allow all federally qualified subsistence users to harvest muskoxen in Unit 22D Southwest. This would expand the pool of eligible users to include residents of Units 22B, 22C, 22D, and 22E (excluding St. Lawrence Island), all of whom have a C&T determination for muskoxen in Unit 22D.

As the Federal and State hunts both function under a shared quota managed through limited drawing and Tier II permits, there would be no increased harvest of muskoxen under this option, and there would be no impact to the muskoxen population. However, residents of Nome and Teller would face increased competition and decreased opportunity as all federally qualified subsistence users would be eligible to apply for the Federal draw permit. Residents living in Unit 22 communities further from the hunt area may be granted draw permits, while it would be possible for residents of Nome and Teller to receive no permits.

However, the conditions warranting the original §804 closure have not changed. The 2014 §804 analysis was originally conducted as part of consideration of WP14-35 “due to the small number of muskoxen anticipated to be available for harvest and the relatively large number of subsistence users with a customary and traditional use determination for muskoxen in the Unit 22D Southwest hunt area” (OSM 2014). The Seward Peninsula Council supported giving priority to residents of Nome and Teller for muskoxen in Unit 22D SW because they agreed these two communities were the most reliant on

the resource. At that time, one bull permit was available. Since that time, the number of Federal permits available each year has been either zero or one.

A second option would fully rescind the closure and open Federal public lands in Unit 22D SW to the harvest of muskoxen by all federally qualified subsistence users and by anyone hunting under State regulations. Overharvest would not be a concern, as harvest would still be managed by a shared quota with a limited number of permits issued. However, residents of Nome and Teller would face increased competition for a small number of Federal draw permits, and all federally qualified subsistence users would experience competition for muskoxen on Federal public lands in Unit 22D SW. Again, however, there has been no meaningful change in the conditions leading to the current §804 closure.

Another option would modify the closure by closing muskox harvest in Unit 22D SW to all users. However, this would mean that residents of Nome and Teller would unnecessarily lose the opportunity to harvest muskoxen under Federal regulations in Unit 22D SW.

OSM CONCLUSION:

- 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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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Seward Peninsula Subsistence Regional Advisory Council

Retain the status quo on WCR24-28. The Council concurred with OSM that this closure, in conjunction with decreased harvest, has slowed the muskox population decline on the Seward peninsula. Maintaining this closure will ensure the continued conservation of this muskox population.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

WCR24-29 Executive Summary	
General Description	Wildlife Closure Review WCR24-29 reviews the closure to muskox hunting in Unit 22D, remainder, except by residents of Elim, White Mountain, Nome, Teller, and Brevig Mission.
Current Regulation	<p>Unit 22D–Muskox</p> <p><i>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</i> Aug. 1-Mar. 15.</p>
OSM Conclusion	Retain the status quo
Seward Peninsula Subsistence Regional Advisory Council Recommendation	Retain the status quo
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	No position
Written Public Comments	None

FEDERAL WILDLIFE CLOSURE REVIEW

WCR24-29

Issue: Wildlife Closure Review WCR24-29 reviews the closure to muskox hunting in Unit 22D, remainder, except by residents of Elim, White Mountain, Nome, Teller, and Brevig Mission.

Closure Location and Species: Unit 22D, remainder—Muskox (**Figure 1**).

Current Federal Regulation

Unit 22D—Muskox

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.

Closure Dates: Year-round

Current State Regulation

Unit 22D—Muskox

Unit 22D remainder—One bull by permit TX102 Aug 1–
Mar 15
All skulls require trophy destruction at time of take in the field subject to permit conditions; specimens required

Regulatory Year Initiated: 1995, closed except by federally qualified subsistence users; 2014, closed except by some federally qualified subsistence users (§804 restriction).

Extent of Federal Public Lands/Waters

Unit 22D is comprised of approximately 23% Federal public lands, consisting of 12% Bureau of Land Management (BLM), and 11% National Park Service (NPS) managed lands.

Unit 22D remainder is comprised of approximately 15% Federal public lands, all of which are BLM managed lands.

Customary and Traditional Use Determination

Residents of Units 22B, 22C, 22D, and 22E (excluding St. Lawrence Island) have a customary and traditional use determination (C&T) for muskox in Unit 22D.

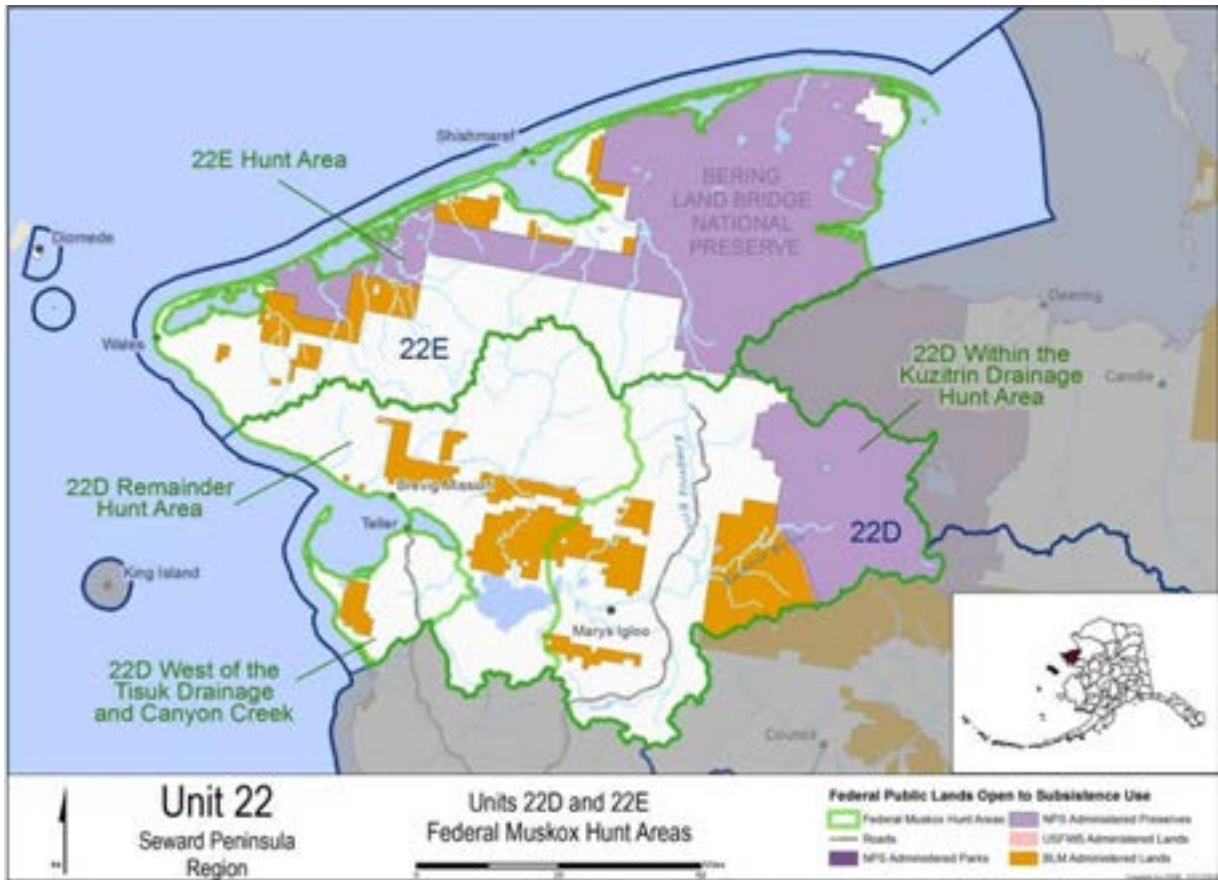


Figure 1. Muskox hunt areas in Units 22D and 22E.

Regulatory History

See WCR24-28 analysis.

Current Events

See WCR24-28 analysis.

Closure last reviewed: 2020 – WCR20-29

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 by adopting WP95-44 to establish a Federal muskox hunt and to close Federal public land was to provide a subsistence priority for Alaskan residents with a customary & traditional use determination for muskox in Unit 22. The Board did not consider the State muskox seasons to

provide adequate opportunity and priority for subsistence users who provided active participation in the cooperative muskox management plan, and therefore determined that a Federal season managed via a Federal registration permit and the closure of Federal public lands to non-federally qualified users was necessary.

In 2014, Proposal WP14-38 modified the closure as results of an 804-analysis conducted by OSM. The Council decided to restrict the closure further by limiting harvest to certain rural residents rather than all federally qualified subsistence users. This further restriction was put in place due to significant declines in the muskox population, a low harvestable surplus, and concerns over sustainable harvests and maintaining rural subsistence priority.

Council Recommendation for Original Closure:

In 1995, the Seward Peninsula Subsistence Regional Advisory Council (Council) supported P95-44 to provide a subsistence priority for local users due to a lack of subsistence priority under State regulations.

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).

Although these were the original recommendations from the Councils, both Councils agreed to support the modified proposal, voted on by the Board, which included that portion of Unit 23 including and west of the Buckland River drainage (FSB 1995a).

In 2014, Proposal WP14-38 was supported by the Seward Peninsula Council with further restriction to included communities. They felt the communities they limited harvest to were historically dependent on the muskoxen in the area.

State Recommendation for Original Closure:

Although ADF&G agreed with the intent of the cooperative muskox management planning effort, they believed it was advisable to postpone a decision on the proposal to close Federal public lands (Proposal P95-44) until the BOG had decided on State Regulations for a muskox hunt in Unit 22 and Unit 23SW. In 2014, they supported the modified proposal as long as Federal and State management follows the recommendations of the Cooperators.

Biological Background

Seward Peninsula Muskox Population

See WCR24-28 analysis.

Unit 22D Remainder Muskox

In Unit 22D, the muskox population followed a similar trend as the overall Seward Peninsula population. The population experienced growth from 1992 until approximately 2010, peaking at 878 muskoxen. The Unit 22D population then declined to 457 muskoxen in 2021. (Dunker 2017a, Gorn and Dunker 2013, 2015; **Table 1**). The Unit 22D remainder hunt area similarly experienced a decline after 2010 but has appeared to have stabilized from 2015-2021 (Gorn and Dunker 2013, 2015, Dunker 2017a; **Table 1**). Short yearling composition in Unit 22D showed an increase starting in 2015 after having declined since 2002 (Dunker 2017b; **Figure 2**). The SY:100 cow ratio ranged from 13-49 from 2002–2021, with the highest ratio occurring in 2021. The mature bull:cow ratios in Unit 22D followed the same trend as the population, with the number of mature bulls per 100 cows increasing 2002–2014 and then declining and stabilizing 2015-2017, before increasing in 2021 to 49 MB:100 cows (Dunker 2017b; Germain 2022; **Figure 2**).

Table 1. Muskox population estimates in Unit 22D and 22D remainder from 1992 to 2021 (Germain 2022, pers. comm.).

Year	Unit 22D Muskox Population	Unit 22D Remainder Muskox Population
1992	340	
1994	405	
1996	308	
1998	714	
2000	774	
2002	771	
2005	796	
2007	746	
2010	878	532
2012	629	344
2015	523	258
2017	556	278
2021	457	260

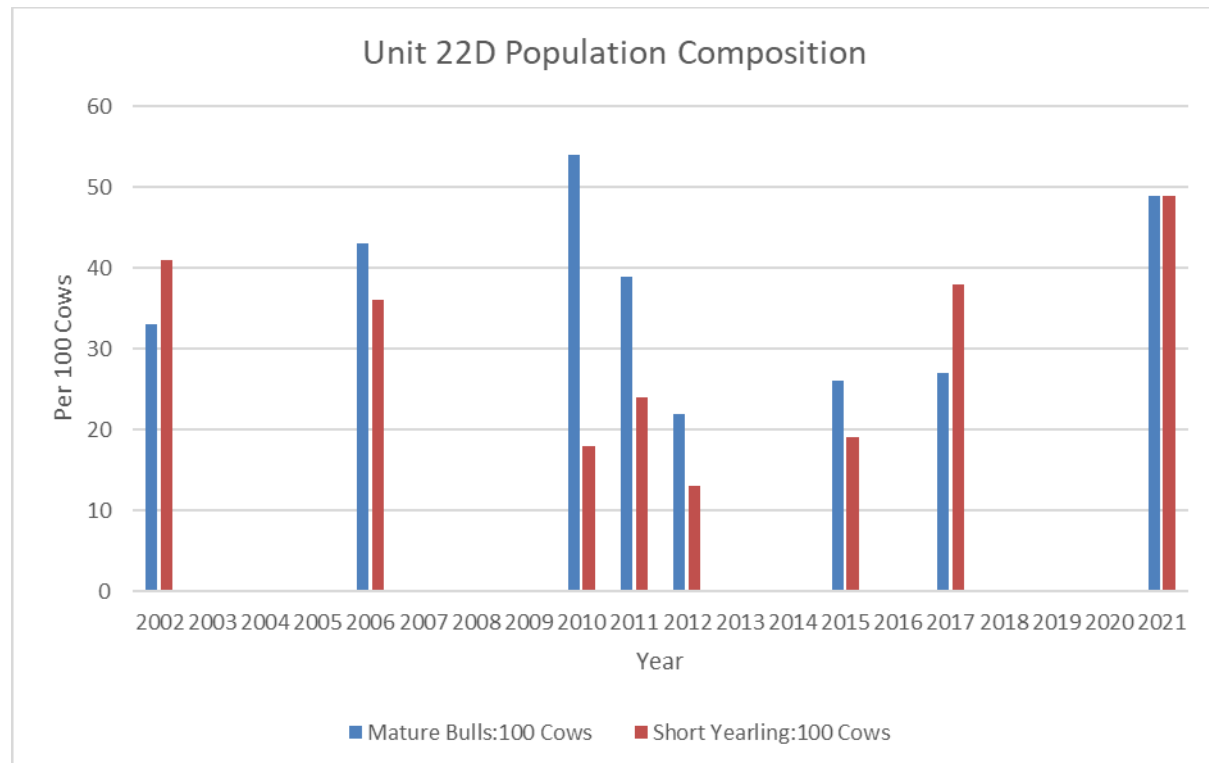


Figure 2. Bull and short yearling to cow ratios in Unit 22D, from 2002 to 2021 (Dunker 2022, pers. comm.).

Cultural Knowledge and Traditional Practices

In Iñupiaq, muskoxen are called *uningmak*, "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).

Under the current closure, dating to a Section 804 analysis-based restriction put in place in 2014, only residents of Elim, White Mountain, Nome, Teller, and Brevig Mission may participate in the Federal subsistence hunt for muskoxen in Unit 22D remainder. **Table 2** shows the subunit location and most recent population estimates for each of these communities.

Since 2001, Elim, White Mountain, Teller, and Brevig Mission have been the subject of 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 3**). These data include estimates of all muskoxen harvested by residents of the four communities under any hunt opportunity (State or Federal) and in any location during the survey year. No ADF&G, Division of Subsistence survey data pertaining to use of muskoxen are available for Nome for any year (ADF&G 2022). **Table 3** shows that in terms of pounds per person harvested and percent using the resource, muskoxen have contributed most to subsistence harvests in White Mountain and Brevig Mission during survey years.

Table 2. 2022 estimated populations for communities that may currently participate in the Federal subsistence hunt for muskoxen in Unit 22D remainder (ADLWD 2022).

Community	Subunit	2019 Population Estimate
Elim	22B	354
White Mountain	22B	205
Nome	22C	3,469
Teller	22D	234
Brevig Mission	22D	437

Table 3. Three measures of muskox use by communities that may currently participate in Federal subsistence hunts for muskoxen in Unit 22D, remainder (ADF&G 2022).

Community	Survey year	Estimated number of muskoxen harvested	Estimated pounds per person harvested	Percent using
Elim	2010	1	2.3	7%
	2005	0	0	0%
White Mountain	2008	4	13.0	20%
Brevig Mission	2005	2	4.0	3%
	2000	4	8.2	36%
Teller	2005	0	0	0%
	2000	0	0	8%

Harvest History

Seward Peninsula Muskox Range-wide Harvest

See WCR24-28 analysis.

Unit 22D Muskox Harvest

In Unit 22D, the average annual muskox harvest was 42 muskoxen from 2007 through 2011 (**Table 4**) (ADF&G 2018; Dunker 2018, pers. comm.). When the harvest management strategy was modified, in 2012, the harvest of muskox greatly decreased; nonresident harvest was no longer permitted and nonlocal (Alaska residents from outside of Unit 22) resident harvest was greatly reduced (ADF&G 2018). From 2012 through 2017, the average annual harvest under State regulations dropped to eight muskoxen in Unit 22D (ADF&G 2018); with federally qualified subsistence users harvesting an average of one additional muskox by Federal registration permit annually (OSM 2022).

Unit 22D remainder is currently managed under the Federal harvest permit FX2208 and State Tier II permit TX102 (**Table 5**). In Unit 22D remainder the State harvest quota was reduced to seven muskoxen in 2012, following the modification in harvest strategy (Dunker 2018, pers. comm.). Since 2012, the allowable harvest has remained low in this hunt area. In 2014, Federal public lands in Unit 22D remainder were closed to the taking of muskox except by residents of Elim, White Mountain, Nome, Teller, and Brevig Mission and the hunt was limited to bull muskox only under both Federal and State regulations. Following this modification, average annual harvest in this subunit was reported as two muskoxen for the 2014-2017 timeframe (Adkisson 2018, pers. comm., OSM 2022).

Table 4. Harvest of muskox by user residency in Unit 22D from 2007 through 2017 (ADF&G 2018; Adkisson 2018, pers. comm.; Dunker 2018, pers. comm.; Germain 2022, pers. comm.).

Year	Resident Harvest	Nonlocal Resident Harvest	Nonresident Harvest	Unspecified	Total
2007	33	2	0	0	35
2008	23	8	2	0	33
2009	25	14	0	4	43
2010	30	24	1	3	58
2011	22	19	1	1	43
2012	9	0	0	0	9
2013	11	0	0	0	11
2014	9	0	0	0	9
2015	7	0	0	0	7
2016	6	0	0	0	6
2017	7	0	0	0	7
2018	4	0	0	0	4
2019	6	1	0	0	7
2020	5	0	0	0	5
2021	6	1	0	0	7

Table 5. Muskox harvest in Unit 22D remainder by State and Federal reported harvest (ADF&G 2018; Adkisson 2018, pers. comm.; Dunker 2018, pers. comm.; OSM 2022)

Year	Federal Permits Issued	Federal Harvest (FX2208)	State Permits Issued	State Harvest (TX102)	Total Harvest	Allowable Harvest Estimate
2012	0	0	7	5	5	7
2013	2	1	7	2	3	7
2014	2	0	7	4	4	7
2015	2	1	7	2	3	7
2016	2	0	5	1	1	5
2017	2	0	5	0	0	5
2018	2	1	4	2	3	4
2019	2	1	4	3	4	4
2020	2	0	4	2	2	4
2021	2	0	4	3	3	4

Effects

If the closure were to remain in place there would be no change in how the hunt is currently managed. Only residents of Elim, White Mountain, Nome, Teller and Brevig Mission would be allowed to harvest muskoxen on federally managed lands in Unit 22D remainder, providing a Federal subsistence priority to the users most dependent on the resource. The muskox population that currently exists in the area would remain protected from overharvest through limited permits and harvest.

Under the current closure, only residents of Elim, White Mountain, Nome, Teller, and Brevig Mission are eligible to hunt for muskoxen in Unit 22D remainder, resulting from a §804 analysis and closure dating to 2014. One option would modify the closure to allow all federally qualified subsistence users to harvest muskoxen in Unit 22D remainder. This would expand the pool of eligible users to include residents of Units 22B, 22C, 22D, and 22E (excluding St. Lawrence Island), all of whom have a customary and traditional use determination for muskoxen in Unit 22D.

As the Federal and State hunts both function under a shared quota managed through limited drawing and Tier II permits, there would be no increased harvest of muskoxen with this modification, and there would be no impact to the muskoxen population. However, residents of Elim, White Mountain, Nome, Teller, and Brevig Mission would face increased competition and decreased opportunity as all federally qualified subsistence users would be eligible to apply for the Federal draw permit. Residents living in Unit 22 communities further from the hunt area may be granted draw permits, while it would be possible for residents of Elim, White Mountain, Nome, Teller, and Brevig Mission to receive no permits.

The 2014 §804 analysis was originally conducted as part of consideration of WP14-38 “due to the small number of muskoxen anticipated to be available for harvest and the relatively large number of subsistence users with a customary and traditional use determination for muskoxen in the Unit 22D remainder hunt area” (OSM 2014). The Seward Peninsula Council supported giving priority to residents of Elim, White Mountain, Nome, Teller, and Brevig Mission for muskoxen in Unit 22D remainder because these are the communities that depend on the muskoxen in the area. Two Federal permits were available in Unit 22D remainder when the §804 closure was established in 2014, and that number has not changed. The conditions warranting the original closure remain in place.

A second option would fully rescind the closure and open Federal public lands in Unit 22D remainder to the harvest of muskoxen by all federally qualified subsistence users and by anyone hunting under State regulations. Overharvest would not be a concern, as harvest would still be managed by a shared quota with a limited number of permits issued. However, residents of Elim, White Mountain, Nome, Teller, and Brevig Mission would face increased competition for a small number of Federal draw permits, and all federally qualified subsistence users would experience competition for muskoxen on Federal public lands in Unit 22D remainder. Again, however, there has been no meaningful change in the conditions leading to the current §804 closure.

A third option would modify the closure by closing muskox harvest in Unit 22D remainder to all users. However, this would mean that residents of Elim, White Mountain, Nome, Teller, and Brevig Mission

would unnecessarily lose the opportunity to harvest muskoxen under Federal regulations in Unit 22D remainder.

OSM CONCLUSION:

- 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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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Seward Peninsula Subsistence Regional Advisory Council

Retain the status quo on WCR24-29. The Council concurred with OSM that this closure, in conjunction with decreased harvest, has slowed the muskox population decline on the Seward peninsula. Maintaining this closure will ensure the continued conservation of this muskox population.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

WCR24-30 Executive Summary	
General Description	Wildlife Closure Review WCR24-30 reviews the closure to muskox hunting in Unit 22E, except by federally qualified subsistence users.
Current Regulation	<p>Unit 22E–Muskox</p> <p><i>Unit 22E—1 bull by Federal permit or State permit. Aug. 1–Mar. 15.</i></p> <p><i>Federal public lands are closed to the taking of muskox except by federally qualified subsistence users hunting under these regulations.</i></p>
OSM Conclusion	Retain the status quo
Seward Peninsula Subsistence Regional Advisory Council Recommendation	Retain the status quo
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	No position
Written Public Comments	None

FEDERAL WILDLIFE CLOSURE REVIEW

WCR24-30

Issue: Wildlife Closure Review WCR24-30 reviews the closure to muskox hunting in Unit 22E, except by federally qualified subsistence users.

Closure Location and Species: Unit 22E—Muskox (**Figure 1**)

Current Federal Regulation

Unit 22E—Muskox

Unit 22E—1 bull by Federal permit or State permit.

Aug. 1-Mar. 15.

Federal public lands are closed to the taking of muskox except by Federally qualified subsistence users hunting under these regulations.

Closure Dates: Year-round

Current State Regulation

Unit 22E—Muskox

Residents: Unit 22E—One bull by permit.

*TX104 Aug 1–
Mar 15*

All skulls require trophy destruction at time of take in the field subject to permit conditions; specimens required

Regulatory Year Initiated: 1995, closed to non-federally qualified users; 2010-2013, closure rescinded; 2014, closure to non-federally qualified users re-established.

Extent of Federal Public Lands/Waters

Unit 22E is comprised of approximately 62% Federal public lands, consisting of 55% National Park Service (NPS) and 7% Bureau of Land Management (BLM) managed lands (**Figure 1**).

Customary and Traditional Use Determination

Residents of Units 22E (excluding Little Diomed Island) have a customary and traditional use determination (C&T) for muskox in Unit 22E.

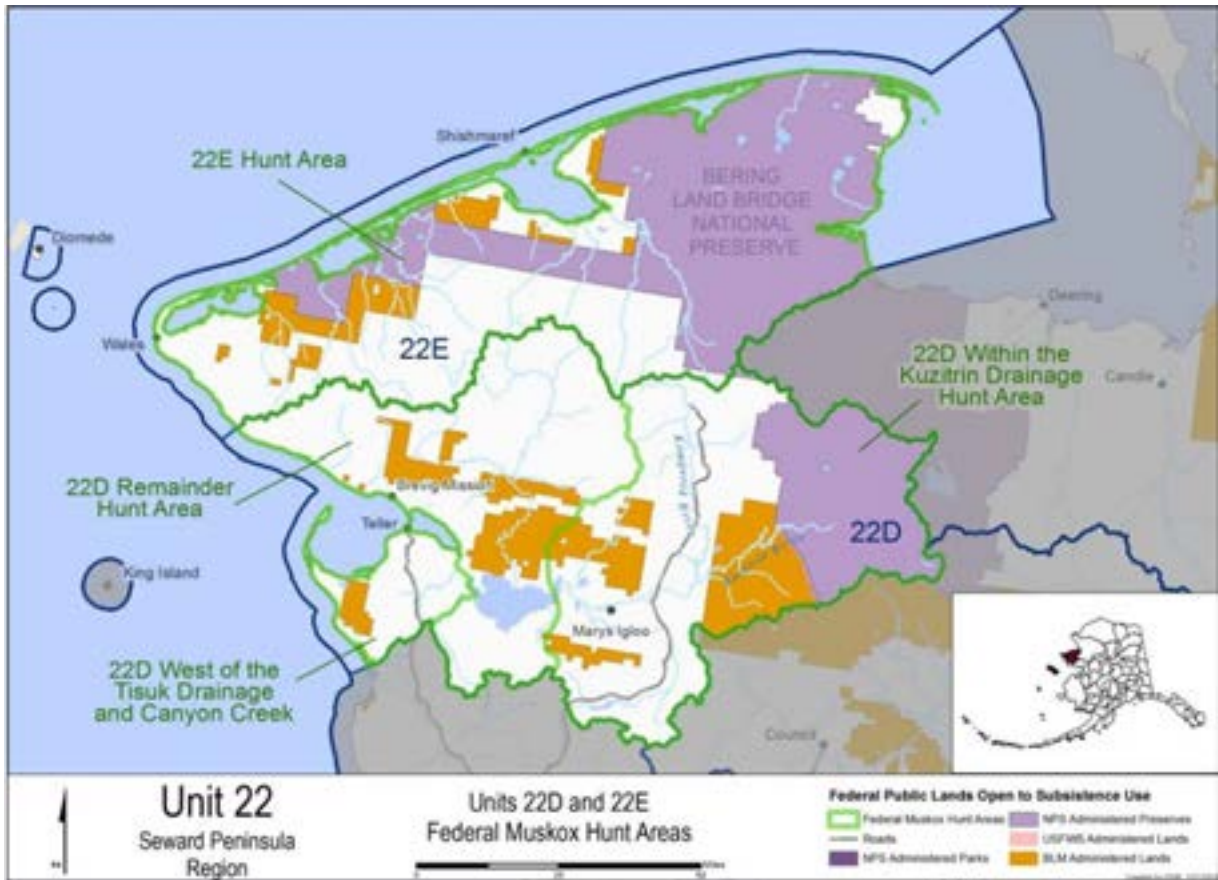


Figure 1. Muskox hunt areas in Units 22D and 22E.

Regulatory History

See WCR24-28 analysis.

Current Events

See WCR24-28 analysis.

Closure Last Reviewed: 2020 – WCR20-30

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 Federal Subsistence Board's intent by adopting WP95-44 in 1995 to establish a Federal muskox hunt and to close Federal public lands to non-federally qualified users was to provide a subsistence priority for Alaskan residents with a C&T for muskox in Unit 22. The Board did not feel that the State

muskox hunts would provide adequate opportunity and priority for subsistence users who provided active participation in the development of a cooperative muskox management plan, and therefore determined that a Federal season managed via a Federal registration permit and the closure of Federal public lands to non-federally qualified users was necessary.

In 2010, the Board adopted Proposal WP10-74 to rescind the closure in Unit 22E because harvest quotas were rarely met, indicating harvest could be allowed under both Federal and State regulations on Federal public lands.

In 2014, the Board adopted Proposal WP14-36 to re-establish the closure to muskox hunting by non-federally qualified users in Unit 22E because of results of a §804 analysis in combination with declining muskox population metrics.

Council Recommendation for Original Closure:

In 1995, the Seward Peninsula Subsistence Regional Advisory Council (Council) supported P95-44 to provide a subsistence priority for local users due to a lack of subsistence priority under State regulations. 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).

In 2010, the Council supported WP10-74 because the muskox population was healthy enough to support the additional harvest that would come with opening Federal public lands to harvest by all users. Harvest quotas had not been met in Unit 22E for several years prior and cow harvest was allowed under State regulations, thereby indicating the herd was at a sustainable level.

In 2014, the Council supported the decision to close Federal public lands to non-federally qualified users in response to a drastic decline in the muskox population. The Council recognized that the harvestable surplus has declined enough they would have to reinstate the closure to maintain a Federal subsistence priority.

State Recommendation for Original Closure:

Although ADF&G agreed with the intent of the cooperative muskox management planning effort, they believed it was advisable to postpone a decision on Proposal P95-44 to close Federal public lands until the BOG had decided on State Regulations for a muskox hunt in Unit 22 and Unit 23SW. When the amendment that contained the closure language was proposed, the State had concerns in regard to permitting and wanted to be kept informed; however, no direct comments about the closure were made and the State’s official recommendation was neutral.

In 2010, ADF&G supported rescinding the closure because there was no conservation concern as the hunt was managed by established harvest quotas.

In 2014, ADF&G supported the proposal with modification to re-establish the closure with change to describe the State permit flexibility and to follow the recommendations of the Cooperators.

Biological Background

Seward Peninsula Muskox Population

See WCR24-28 analysis.

Unit 22E Muskox

In Unit 22E, the population followed a similar trend as the overall Seward Peninsula population. The population experienced growth from 1992 until approximately 2007, at which point the population declined and then remained stable from 2015 until the most recent population survey in 2017 (Gorn and Dunker 2013, Dunker 2017a; **Table 1**). Short yearling composition in Unit 22E fluctuated substantially between 2002 and 2017, ranging from 21-62 SY:100 cows, with the highest ratio occurring in 2017 (Gorn and Dunker 2013, Dunker 2017b; **Table 1**). The mature bull (MB):cow ratio in Unit 22E ranged from 29-53 MB:100 cows between 2002 and 2017, with the lowest ratio occurring in 2017 (Gorn and Dunker 2013, Dunker 2017b; **Table 1**).

Table 1. Muskox population estimates and composition survey results in Unit 22E, from 1992 to 2021 (Dunker 2022a, 2022b).

Year	Muskox Population	Mature Bulls:100 Cows	Short Yearlings:100 Cows
1992	180		
1994	184		
1996	327		
1998	362		
2000	461		
2002	632	49	49
2005	863	35	32
2007	949		
2010	879	51	32
2011		53	59
2012	431	33	28
2015	291	39	21
2017	306	29	62
2021	269	28	57

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).

Residents of Units 22E (excluding Little Diomed Island) have a customary and traditional use determination for muskoxen in Unit 22E and are the only residents who may hunt for muskoxen on Federal public lands in the subunit under the current closure. The primarily Iñupiat communities of Shishmaref and Wales are located in Unit 22E. In 2022, Shishmaref had an estimated population of 590 and Wales had an estimated population of 113 (ADLWD 2022).

Both communities have been the subject of subsistence surveys conducted by ADF&G, Division of Subsistence (ADF&G 2022, **Table 2**). These data include estimates of all muskoxen harvested by residents under any hunt opportunity (State or Federal) and in any location during the study year. During study years since 1995, Wales has harvested an estimated average of 1.3 muskoxen, and Shishmaref has harvested an estimated average of 4.3 muskoxen (**Table 2**, ADF&G 2022).

Table 2. Three measures of muskox use by Unit 22E communities (ADF&G 2022).

Community	Survey year	Estimated number of muskoxen harvested	Estimated pounds per person harvested	Percent using
Wales	2000	4	16.2	0
	2010	0	0	23%
	2017	0	0	12%
	Average	1.3	5.4	12%
Shishmaref	2000	11	11.6	34%
	2009	6	5.8	3%
	2014	0	0	8%
	2017	0	0	2%
	Average	4.3	4.4	12%

Harvest History

Seward Peninsula Muskox Range-wide Harvest

See WCR24-28 analysis.

Unit 22E Muskox

In Unit 22E, the average annual muskox harvest was 36 muskoxen from 2007 through 2011 (ADF&G 2018). When the harvest management strategy was modified in 2012, the harvest of muskox greatly decreased; nonresident harvest was no longer permitted and nonlocal resident harvest was greatly reduced (ADF&G 2018; **Table 3**). Starting in 2012 through 2017, average annual reported harvest dropped to 5.7 muskox, with 4.2 and 1.5 muskox being harvested by State and Federal permit, respectively on average (ADF&G 2018; OSM 2018).

Unit 22E is currently managed under the Federal harvest permit FX2210 and State Tier II permit TX104 (although the State hunt was by registration permit from until 2017). In Unit 22E the State harvest quota was reduced to 10 muskoxen in 2012, following the modification in harvest strategy (Dunker 2018, pers. comm.; **Table 4**). Since 2012, the harvest quota has remained low in this hunt area and was down to four muskoxen in 2018. In 2014, Federal public lands in Unit 22E were closed to the taking of muskox except by federally qualified subsistence users and the hunt was limited to bull muskox only. Following this modification, average annual harvest in this subunit was reported as six muskoxen for the 2014-2017 timeframe (Adkisson 2018, pers. comm.; OSM 2018).

Table 3. Harvest of muskox by user residency in Unit 22E from 2007 through 2021 (ADF&G 2018; Adkisson 2018, pers. comm.; Germain 2022, pers. comm.). Nonlocal resident means an Alaska state resident from outside of Unit 22.

Year	Unit 22E Resident Harvest	Nonlocal Resident Harvest	Nonresident Harvest	Unspecified	Total
2007	9	32	1	0	42
2008	7	24	3	2	36
2009	14	30	2	0	46
2010	8	16	0	0	24
2011	5	24	1	2	32
2012	2	3	0	0	5
2013	3	2	0	0	5
2014	6	3	0	0	9
2015	4	0	0	0	4
2016	4	3	0	0	7
2017	2	2	0	0	4
2018	3	0	0	0	3
2019	5	0	0	0	5
2020	4	0	0	0	4
2021	4	0	0	0	4

Table 4. Muskox permits issued and reported harvest in Unit 22E by Federal and State permit (ADF&G 2018; Adkisson 2018, pers. comm.; Dunker 2018, pers. comm.; Germain 2022, pers. comm.).

Year	Federal Permits Issued (FX2210)	Federal Harvest	State Permits Issued (RX104)	State Harvest	Total Harvest	Allowable Harvest Estimate
2012	0	0	10	5	5	10
2013	2	2	10	3	5	10
2014	5	3	10	6	9	10
2015	2	2	6	2	4	6
2016	2	2	6	5	7	6
2017	0	0	4	4	4	4
2018	2	2	4	4	3	4
2019	3	2	4	3	5	4
2020	3	2	4	2	4	4
2021	3	0	4	4	4	4

Effects

If the closure were retained, there would be no change in how the hunt is currently managed. Only federally qualified subsistence users, residents of Unit 22E (excluding Little Diomedea) would be allowed to harvest muskoxen on Federal public lands in Unit 22E by either State or Federal 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.

Another option is to rescind the closure, opening Federal public lands in Unit 22E to the harvest of muskoxen by all users, including 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. Currently, however, there are fewer Federal permits available for Unit 22E than when the closure was implemented in 2014.

Another option would modify the closure by closing muskox harvest in Unit 22E 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 22E.

OSM CONCLUSION:

- 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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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Seward Peninsula Subsistence Regional Advisory Council

Retain the status quo on WCR24-30. The Council concurred with OSM that this closure, in conjunction with decreased harvest, has slowed the muskox population decline on the Seward peninsula. Maintaining this closure will ensure the continued conservation of this muskox population.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

WCR24-44 Executive Summary	
General Description	Wildlife Closure Review WCR24-44 reviews the closure to muskox hunting in Unit 22D, within the Kuzitrin River drainages (Unit 22D Kuzitrin), except by residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission.
Current Regulation	<p>Unit 22D–Muskox</p> <p><i>Unit 22D, that portion within the Kuzitrin River drainages - 1 bull by Federal permit or State permit. Aug. 1-Mar. 15.</i></p> <p><i>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</i></p>
OSM Conclusion	Retain the status quo
Seward Peninsula Subsistence Regional Advisory Council Recommendation	Retain the status quo
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.

WCR24-44 Executive Summary	
ADF&G Position	No position
Written Public Comments	None

FEDERAL WILDLIFE CLOSURE REVIEW

WCR24-44

Issue: Wildlife Closure Review WCR24-44 reviews the closure to muskox hunting in Unit 22D, within the Kuzitrin River drainages (Unit 22D Kuzitrin), except by residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission.

Closure Location and Species: Unit 22D, Kuzitrin—Muskox (**Figure 1**)

Current Federal Regulation

Unit 22D–Muskox

Unit 22D, that portion within the Kuzitrin River drainages - 1 bull by Federal Aug. 1-Mar. 15. 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

Closure Dates: Year-round

Current State Regulation

Unit 22D–Muskox

Residents: Unit 22D, Kuzitrin River drainage (Includes Kougarok and TX102 Jan 1– Pilgrim rivers) —One bull by permit. All skulls require trophy destruction at Mar 15 time of take in the field subject to permit conditions; specimens required

Regulatory Year Initiated: 1995, closed except by federally qualified subsistence users; 2014, closed except by some federally qualified subsistence users (§804 restriction).

Extent of Federal Public Lands/Waters

Unit 22D is comprised of approximately 23% Federal public lands, consisting of 12% Bureau of Land Management (BLM), and 11% National Park Service (NPS) managed lands (**Figure 1**).

Unit 22D Kuzitrin is comprised of approximately 46% Federal public lands, consisting of 28% NPS managed lands and 18% BLM managed lands.

Customary and Traditional Use Determination

Residents of Units 22B, 22C, 22D, and 22E (excluding St. Lawrence Island) have a customary and traditional use determination (C&T) for muskox in Unit 22D.

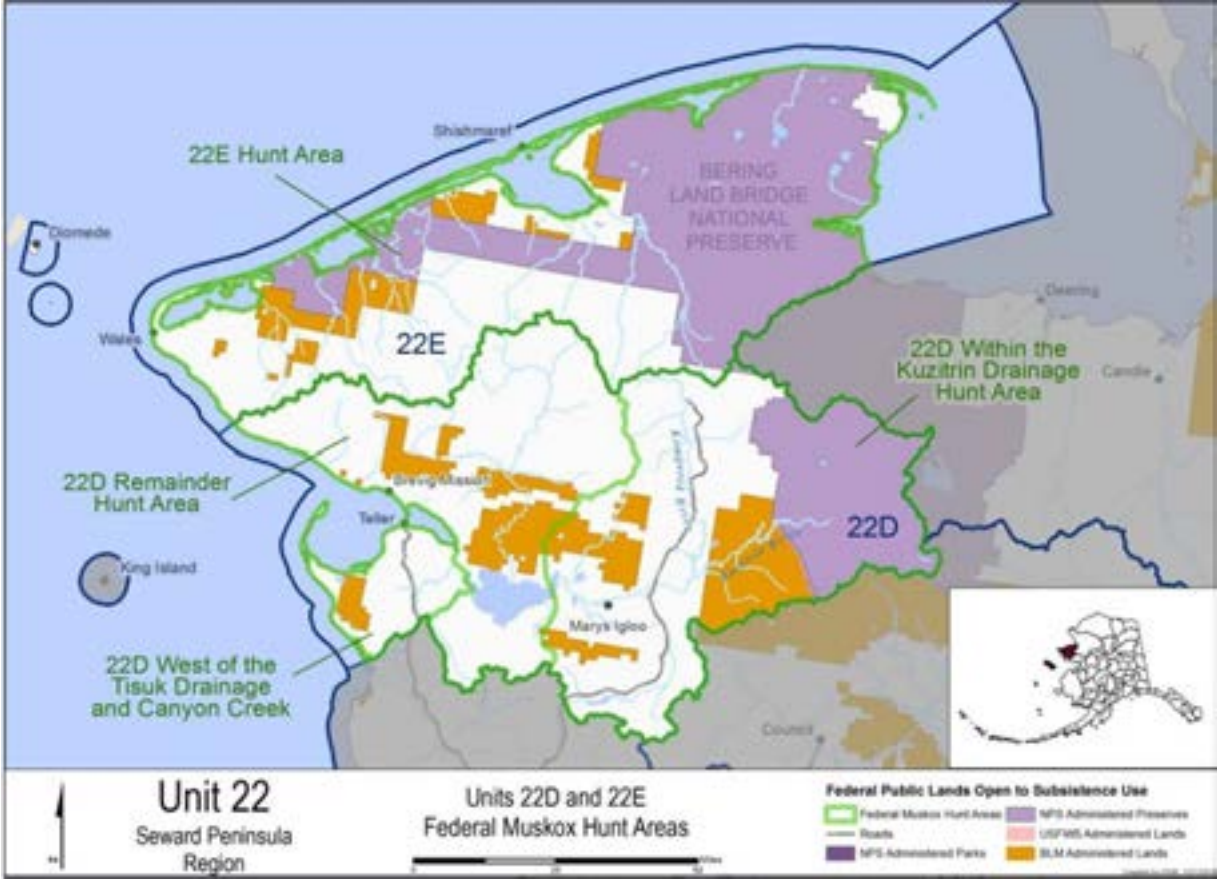


Figure 1. Muskox hunt areas in Units 22D and 22E.

Regulatory History

See WCR24-28 analysis.

Current Events

See WCR24-28 analysis.

Closure last reviewed: 2020 – WCR20-44

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 Federal Subsistence Board’s intent was to provide a subsistence priority for Alaskan residents with C&T for muskox. The Board did not feel that the State muskox seasons would provide adequate opportunity and priority for subsistence users who provided active participation in the cooperative muskox management plan, and therefore determined that a Federal season managed via a Federal

registration permit and the closure of Federal public lands to non-federally qualified users was necessary.

In 2014, the Board supported WP14-33, restricting the closure to a subset of federally qualified subsistence users because of declining population, low harvestable surplus, concerns over sustainable harvests, and maintaining a subsistence priority.

Council Recommendation for Original Closure:

In 1995, the Seward Peninsula Subsistence Regional Advisory Council (Council) supported P95-44 to provide a subsistence priority for local users due to a lack of subsistence priority under State regulations.

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).

Although these were the original recommendations from the Councils, both Councils agreed to support the modified proposal, adopted by the Board, which included that portion of Unit 23 including and west of the Buckland River drainage (FSB 1995a).

In 2014, the Seward Peninsula Council supported Proposal WP14-33 to give a subsistence priority to residents of Council, Golovin, White Mountain, Nome, and Teller for muskoxen in Unit 22D Kuzitrin because they agreed these communities were the most reliant on the resource.

State Recommendation for Original Closure:

Although ADF&G agreed with the intent of the cooperative muskox management planning effort, they believed it was advisable to postpone a decision on Proposal P95-44 to close Federal public lands until the BOG had decided on State Regulations for a muskox hunt in Unit 22 and Unit 23 SW. When the amendment that contained the closure language was proposed, the State had concerns in regard to permitting and wanted to be kept informed; however, no direct comments about the closure were made and the State’s official recommendation was neutral.

In 2014, ADF&G was in support of Proposal WP14-33 following the Cooperator’s recommendations. They also asked for a modification to describe the State permit in such a way as to explain the flexibility in their permitting.

Biological Background

Seward Peninsula Muskox Population

See WCR24-28 analysis.

Unit 22D Kuzitrin Muskox

In Unit 22D, the muskox population followed a similar trend as the overall Seward Peninsula population. The population experienced growth from 1992 until approximately 2010, peaking at 878 muskoxen. The Unit 22D population then declined to 457 muskoxen in 2021. (Dunker 2017a; Gorn and Dunker 2013, 2015; Germain 2022, pers. comm.; **Table 1**). The Unit 22D Kuzitrin hunt area similarly declined after 2010, from 285 to 136 muskox in 2017 (Gorn and Dunker 2013, 2015, Dunker 2017a; **Table 2**). Short yearling composition in Unit 22D showed an increase starting in 2015 after having declined since 2002 (Dunker 2017b; **Figure 2**). The SY:100 cow ratio ranged from 13-49 from 2002–2021, with the highest ratio occurring in 2021. The mature bull:cow ratios in Unit 22D followed the same trend as the population, with the number of mature bulls per 100 cows increasing 2002–2010 and then declining and stabilizing 2015-2017, before increasing in 2021 to 49 MB:100 cows (Dunker 2017b, 2022; **Figure 2**).

Table 1. Muskox population estimates in Unit 22D from 1992 to 2021.

Year	Muskox Population
1992	340
1994	405
1996	308
1998	714
2000	774
2002	771
2005	796
2007	746
2010	878
2012	629
2015	523
2017	556
2021	457

Table 2. Unit 22D Kuzitrin River drainage hunt area muskox population estimates from 2010 to 2017.

Year	Population
2010	285
2012	208
2015	187
2017	136

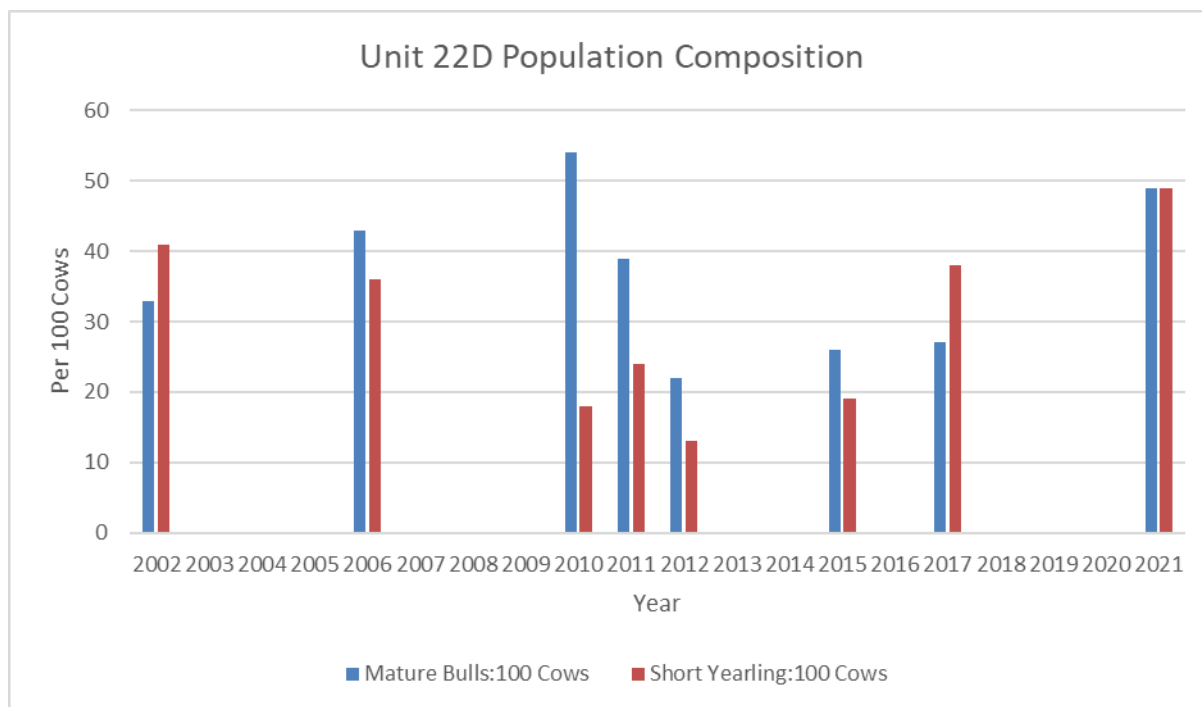


Figure 2. Bull and short yearling to 100 cow ratios in Unit 22D, from 2002 to 2021.

Cultural Knowledge and Traditional Practices

In Iñupiaq, muskoxen are called *uningmak*, "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).

Under the current closure, dating to a Section 804 analysis-based restriction put in place in 2014, only residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission may participate in the Federal subsistence hunt for muskoxen in Unit 22D, Kuzitrin River drainages. **Table 3** shows the subunit location and most recent population estimates for each of these communities. Of note, Council has no year-round residents.

Since 1996, Golovin, White Mountain, Teller, and Brevig Mission have been the subject of 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 4**). These data include estimates of all muskoxen harvested by residents of the four communities under any hunt opportunity (State or Federal) and in any location during the survey year. No subsistence survey data pertaining to use of muskoxen are available for Council or Nome for any year (ADF&G 2022).

Table 3. 2022 estimated populations for communities that may currently participate in the Federal subsistence hunt for muskoxen in Unit 22D, Kuzitrin River drainages (ADLWD 2022).

Community	Subunit	2019 Population Estimate
Golovin	22B	190
White Mountain	22B	205
Nome	22C	3,469
Teller	22D	234
Brevig Mission	22D	437

Table 4. Three measures of muskox use by communities that may currently participate in Federal subsistence hunts for muskoxen in Unit 22D, Kuzitrin River drainages (ADF&G 2022).

Community	Survey year	Estimated number of muskoxen harvested	Estimated pounds per person harvested	Percent using
Golovin	1998	0	0	0%
	2010	3	13	18%
	2012	2	2.9	27%
White Mountain	2008	4	13	20%
Teller	2000	0	0	8%
	2005	0	0	0
Brevig Mission	2000	4	8.2	36%
	2005	2	4	3%

Harvest History

Seward Peninsula Muskox Range-wide Harvest

See WCR24-28 analysis.

Unit 22D Kuzitrin Muskox Harvest

In Unit 22D, the average annual muskox harvest was 42 muskoxen from 2007 through 2011 (ADF&G 2018, Dunker 2018, pers. comm.; **Table 5**). When the harvest management strategy was modified, in 2012, the harvest of muskox greatly decreased; nonresident harvest was no longer permitted and nonlocal resident (Alaska residents from outside of Unit 22) harvest was greatly reduced (ADF&G 2018). Starting in 2012 through 2017, the State managed average annual harvest dropped to eight muskoxen in Unit 22D (ADF&G 2018); with federally qualified subsistence users harvesting an average of one additional muskox by Federal registration permit annually (OSM 2018).

The Unit 22D Kuzitrin drainage area is currently managed under the Federal harvest permit FX2206 and State Tier II permit TX102 (**Table 6**). In the Unit 22D Kuzitrin drainage area the State harvest quota was reduced to four muskoxen in 2012, following the modification in harvest strategy (Dunker 2018, pers. comm.). Since 2012, the allowable harvest has remained low in this hunt area. In 2014, Federal public lands in the Unit 22D Kuzitrin drainage hunt area were closed to the taking of muskox except by residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission and the hunt was limited to bull muskox only under both Federal and State regulations. Following this modification, average annual harvest in this subunit was reported as four muskoxen for the 2014-2017 timeframe (Adkisson 2018, pers. comm., OSM 2018).

Table 5. Harvest of muskox by user residency in Unit 22D from 2007 through 2021 (ADF&G 2018; Adkisson 2018, pers. comm.; Dunker 2018, pers. comm.; Germain 2022, pers. comm.). Resident harvest means resident of Unit 22 and nonlocal resident means State of Alaska resident outside of Unit 22.

Year	Resident Harvest	Nonlocal Resident Harvest	Nonresident Harvest	Unspecified	Total
2007	33	2	0	0	35
2008	23	8	2	0	33
2009	25	14	0	4	43
2010	30	24	1	3	58
2011	22	19	1	1	43
2012	9	0	0	0	9
2013	11	0	0	0	11
2014	9	0	0	0	9
2015	7	0	0	0	7
2016	6	0	0	0	6
2017	7	0	0	0	7
2018	4	0	0	0	4
2019	6	0	0	0	6
2020	5	0	0	0	5

Year	Resident Harvest	Nonlocal Resident Harvest	Nonresident Harvest	Unspecified	Total
2021	6	0	0	0	6

Table 6. Muskox harvest in Unit 22D Kuzitrin by State and Federal reported harvest (ADF&G 2018; Adkisson 2018, pers. comm.; Dunker 2018, pers. comm.; OSM 2018; Germain 2023, pers. comm.). Blank cells indicate no data available.

Year	Federal Permits Issued (FX2206)	Federal Harvest	State Permits Issued (TX102)	State Harvest	Total Harvest	Allowable Harvest Estimate
2012	5	0	12	2	2	12
2013	4	3	18	4	7	12
2014	2	1	17	2	3	12
2015	2	0	17	5	5	12
2016	2	0	14	4	4	9
2017	2	0	14	2	2	9
2018			13	1	1	8
2019	2	0	13	1	1	8
2020	2	0	13	1	1	8
2021		1	8	1	2	8

Effects

If the closure were to remain in place there would be no change in how the hunt is currently managed. Only residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission would be allowed to harvest muskoxen on federally managed lands in Unit 22D Kuzitrin, providing a Federal subsistence priority to the users most dependent on the resource. The muskox population that currently exists in the area would remain protected from overharvest through limited permits and harvest.

Under the current closure, only residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission are eligible to hunt for muskoxen in Unit 22D Kuzitrin, resulting from a §804 analysis and closure dating to 2014. One option would be to modify the closure to allow all federally qualified subsistence users to harvest muskoxen in Unit 22D Kuzitrin. This would expand the pool of eligible users to include residents of Units 22B, 22C, 22D, and 22E (excluding St. Lawrence Island), all of whom have a customary and traditional use determination for muskoxen in Unit 22D.

As the Federal and State hunts both function under a shared quota managed through limited drawing and Tier II permits, there would be no increased harvest of muskoxen with this modification, and there would be no impact to the muskoxen population. However, residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission would face increased competition and decreased opportunity as all federally qualified subsistence users would be eligible to apply for the Federal draw permit. Residents living in Unit 22 communities further from the hunt area may be granted draw

permits, while it would be possible for residents of communities currently included in the §804 prioritization to receive no permits.

The 2014 §804 analysis was originally conducted as part of consideration of WP14-33 “due to the small number of muskoxen anticipated to be available for harvest and the relatively large number of subsistence users with a customary and traditional use determination for muskoxen in the Unit 22D Kuzitrin hunt area” (OSM 2014). The Seward Peninsula Council supported giving priority to residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission for muskoxen in Unit 22D Kuzitrin because they agreed these communities were the most reliant on the resource. Two Federal permits were available in Unit 22D remainder when the §804 closure was established in 2014, and that number has not changed. Therefore, the conditions warranting the original closure remain.

Another option would be to fully rescind the closure and open Federal public land in Unit 22D Kuzitrin to the harvest of muskoxen by all federally qualified subsistence users and by anyone hunting under State regulations. Overharvest would not be a concern, as harvest would still be managed by a shared quota with a limited number of permits issued. However, residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission would face increased competition for a small number of Federal draw permits, and all federally qualified subsistence users would experience competition for muskoxen on Federal public lands in Unit 22D Kuzitrin. Again, however, there has been no meaningful change in the conditions leading to the current §804 closure.

Yet another option would be to modify the closure by closing muskox harvest in Unit 22D Kuzitrin to all users. However, this would mean that residents of Council, Golovin, White Mountain, Nome, Teller, and Brevig Mission would unnecessarily lose the opportunity to harvest muskoxen under Federal regulations in Unit 22D Kuzitrin.

OSM CONCLUSION:

- 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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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Seward Peninsula Subsistence Regional Advisory Council

Retain the status quo on WCR24-44. The Council concurred with OSM that this closure, in conjunction with decreased harvest, has slowed the muskox population decline on the Seward peninsula. Maintaining this closure will ensure the continued conservation of this muskox population.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

WCR24-15 Executive Summary	
General Description	Wildlife Closure Review WCR24-15 reviews the closure to moose hunting in Unit 22D, remainder, except by Federally qualified subsistence users.
Current Regulation	<p style="text-align: center;">Unit 22–Moose</p> <p><i>Unit 22D, remainder - 1 bull by State registration permit. Aug. 10- Sep. 14.</i></p> <p><i>Federal public lands are closed to the harvest of moose except by Federally qualified subsistence users</i></p> <p><i>Unit 22D, remainder - 1 antlered bull by State registration permit. Season may be announced, Dec. 1-Jan. 31.</i></p> <p><i>Federal public lands are closed to the harvest of moose except by Federally qualified subsistence users</i></p>
OSM Conclusion	Retain the status quo
Seward Peninsula Subsistence Regional Advisory Council Recommendation	Retain the status quo
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	No position
Written Public Comments	None

FEDERAL WILDLIFE CLOSURE REVIEW
WCR24-15

Issue: Wildlife Closure Review WCR24-15 reviews the closure to moose hunting in Unit 22D, remainder, except by Federally qualified subsistence users.

Closure Location and Species: Unit 22D, remainder—Moose (**Figure 1**)

Current Federal Regulation

Unit 22–Moose

*Unit 22D, remainder - 1 bull by State registration permit. Aug. 10-
Sep. 14.*

Federal public lands are closed to the harvest of moose except by Federally qualified subsistence users

*Unit 22D, remainder - 1 antlered bull by State registration permit. Season may be
announced,
Dec. 1-Jan. 31.*

Federal public lands are closed to the harvest of moose except by Federally qualified subsistence users

Closure Dates: Year-round

Current State Regulation

Unit 22–Moose

*Residents: Unit 22D remainder—One bull by permit available in person in RM840 Aug 10–
Brevig Mission, Golovin, Nome, Teller, and White Mountain from July 25- Aug
25. Harvest quota to be announced. Season will be closed by emergency order
when quota is reached. OR Sept 14*

*Residents: Unit 22D remainder –One antlered bull by permit available online at RM849 May be
<http://hunt.alaska.gov> or in person in Brevig Mission, Golovin, Nome, Teller,
and White Mountain (a season may be announced Dec 1-Jan 31) announced*

*Nonresidents No open
season*

Regulatory Year Initiated: 2002, closure initiated; 2007–2019, closure rescinded; 2020, closure reestablished.

Extent of Federal Public Lands/Waters

Unit 22D is comprised of approximately 23% Federal public lands, consisting of 12% Bureau of Land Management (BLM), and 11% National Park Service (NPS) managed lands.

Unit 22D remainder is comprised of approximately 8% Federal public lands, consisting of 100% BLM managed lands (**Figure 1**).

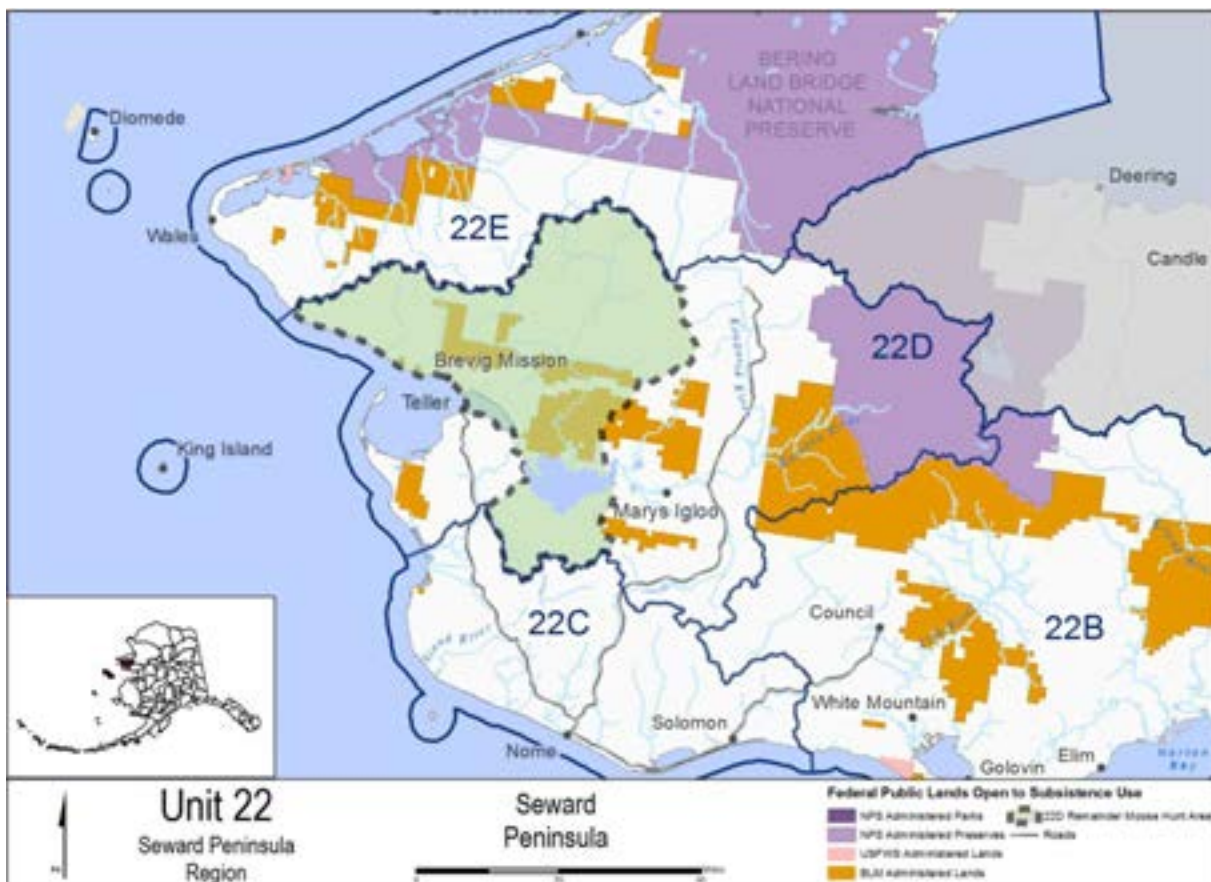


Figure 1. Unit 22D remainder moose hunt area.

Customary and Traditional Use Determination

Residents of Unit 22 have a customary and traditional use determination (C&T) for moose in Unit 22.

Regulatory History

In 1998, the Federal Subsistence Board (Board) adopted Proposal WP98-87, which changed the harvest limit from one moose to one antlered bull in that portion of Unit 22D that lies within the Kuzitrin River drainage, just east of Unit 22D remainder (**Figure 1**), due to a declining local moose population and heavy hunting pressure. As a result of a continuing regional trend in declining moose populations, the Board also restricted the harvest in adjacent Unit 22B in 2000 (P00-055).

In 2001, the Board approved Special Action Requests WSA01-09 and WSA01-11 with modification to shorten the season and close Federal public lands to the harvest of moose by non-Federally qualified users in Unit 22B west of the Darby Mountains, Unit 22D within the Kuzitrin River drainage, and Unit 22E. WSA01-09 created and closed a new hunt area: 22D west of the Tisuk River drainage and Canyon Creek (Unit 22D SW). It also modified Unit 22E harvest limits from one moose to one bull for the 2001 fall and winter seasons.

As a follow-up to these actions, the Alaska Board of Game (BOG) addressed concerns about declining moose populations in parts of Unit 22 by shortening seasons in portions of Units 22B and 22D, adding registration permit requirements in Unit 22D, dividing Unit 22D into additional hunt areas, modifying harvest limits, and closing nonresident hunts in portions of Units 22B, 22D, and 22E. The BOG also decided to restrict the season in Unit 22D remainder, despite a relatively healthy moose population. The fall season was closed from Sep. 15–30, to match other portions of Unit 22D, to prevent focusing hunting efforts on the American and Agiapuk River drainages when all the other areas would have been closed. These changes went into effect in regulatory year 2002/03.

In May 2002, the Board adopted Proposal WP02-34 with modification to add State registration permit requirements to the portion of Unit 22B west of the Darby Mountains, the portion of Unit 22D that lies within the Kuzitrin River drainage, and Unit 22D SW; revise harvest limits to bull only hunts in Units 22B, portions of 22D (Kuzitrin River drainage and Unit 22D SW), and Unit 22E, and shorten seasons in all these areas. It also closed Federal public lands in Unit 22D remainder and Unit 22E to the taking of moose except by Federally qualified subsistence users. The Board's justification stated that the closure "would improve rural subsistence harvest opportunities in an area recently deemed necessary by the State to restrict the moose harvest" (OSM 2002).

ADF&G issued an emergency order in 2005, changing the State fall moose hunt in Unit 22D to Sep. 1–14. In 2005, the Board approved Special Action Request WSA05-01, which shortened the moose hunting season for all of Unit 22D from Aug. 20–Sep. 30 to Sep. 1–14, in response to conservation concerns from harvests exceeding the joint Federal/State harvest quota for the Kuzitrin River drainage in 2003 and 2004 (OSM 2005). Overharvest occurred in 2003 and 2004, despite Federal and State efforts to reduce the harvest by closing the seasons early.

Upon consideration of Wildlife Closure Review WCR06-15 in 2006, the Seward Peninsula Subsistence Regional Advisory Council (Council) submitted Proposal WP07-38 to eliminate the closure in Unit 22D remainder put in place in 2002 to all non-Federally qualified users. In 2007, the Board adopted WP07-38, eliminating the closure to non-Federally qualified users in Unit 22D remainder, and aligning Federal and State hunting season dates. Harvest limits were one bull during the early fall, late fall and January seasons, but were one moose during a December season. The Council justified the request by stating that "land closures are no longer necessary to protect the moose population because numbers have increased unit-wide and have remained stable for at least ten years; recruitment rates are up; and bull:cow ratios are consistently high despite a five-month Federal season" (OSM 2007: 468).

In 2015, the BOG modified State regulations, transitioning to a bull moose hunt within Unit 22D remainder. In addition, for regulatory years 2015/16 and 2016/17, ADF&G established a three moose harvest quota for nonresident hunters in Unit 22D remainder to prevent excessive harvest. This harvest quota was enacted due to a decline in moose populations since 2011. ADF&G issued emergency orders in regulatory years 2015/16 and 2016/17 to close this season early due to the quota being met (ADF&G 2016a).

At its March 2016 meeting, the Council submitted Proposal 28 to the BOG, requesting elimination of the nonresident moose season in Units 22E and 22D remainder until the relationship between the changing moose population, distribution, growth, and decline between the subunits was better understood. During discussion of the proposal, ADF&G was asked for an overview of the moose population in the area. ADF&G brought concerns about the decreasing population numbers in Unit 22D to the attention of the Council, mentioning that moose in Unit 22D were last counted in 2014, and that declines in the population were observed in both major survey areas. Additionally, ADF&G noted that some Unit 22D moose may have migrated to Unit 22E. Even with the possible migration taken into consideration, a significant decline in Unit 22D moose was observed during the 2014 survey (SPRAC 2016). Proposal 28 was adopted in Unit 22D remainder by the BOG prior to the 2017/18 regulatory year.

Special Action Request WSA16-07, submitted by the BLM, requested that the Unit 22D remainder December cow season be closed, and was presented to the Council on November 2, 2016. The Council supported WSA16-07, stating that hunters had expressed concern about the moose populations in the area. In particular, the Council Chair discussed the need to refrain from harvesting cow moose during population declines and asked ADF&G to explain the current levels of antlerless moose harvest and the potential impacts to the population. ADF&G noted that the average annual reported harvest of cow moose in Unit 22D over the last ten years totaled one moose per year, but that an antlerless harvest as low as 3% could have a substantial negative impact to the population. The Council Chair emphasized that this special action would only close the Federal cow moose hunting season for one month. The Board approved WSA16-07 on November 30, 2016.

In 2017, the same request was submitted as Special Action Request WSA17-06. The proponent, BLM, submitted this request because they believed that continued harvest of cow moose in Unit 22D remainder would lead to further declines in the moose population. The Board approved WSA17-06 with modification to change the harvest limit from one moose to one antlered bull for the harvest season of Dec. 1–31, 2017. This modification was approved to prevent the accidental harvest of cows, since most larger bulls would have dropped their antlers by December. An antlered moose hunt was also preferred to reduce mid-winter harassment of non-antlered moose by hunters trying to distinguish the sex of the animal. It was stated that approval of this modification would help to ensure the long-term viability of the moose population in Unit 22D remainder.

Similarly, in 2018, the same request was submitted as Special Action Request WSA18-03. The Board again approved this request with modification. The modified WSA18-03 that was approved by the Board limited harvest from one moose to one antlered bull in Unit 22D remainder for the remainder of

the current wildlife regulatory cycle (through June 30, 2020). The harvest limit was modified through the remainder of the wildlife regulatory cycle to ensure that antlerless moose in Unit 22D remainder were protected until a proposal could be submitted to change Federal subsistence regulations.

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

In April 2020, the Board adopted WP20-40, which reestablished the closure of Federal public lands in Unit 22D remainder to moose hunting except by Federally qualified subsistence users. Unit 22D remainder was the only hunt area in Unit 22D that remained open to all users. This closure protected the moose population in Unit 22D remainder (OSM 2020a). The Board also adopted WP20-38 as modified by OSM. Proposal WP20-38 requested that the December and January moose seasons in Unit 22D remainder be combined into a may be announced season, that the Oct. 1–Nov. 30 season be eliminated, and that the harvest limit be modified to one bull by State registration permit for both remaining seasons. The modification was to delegate authority to the Federal manager to announce harvest quotas, close the fall season and to open a may be announced season between Dec. 1 and Jan. 31 via a delegation of authority letter only and to modify the harvest limit for the may be announced season between Dec. 1 and Jan. 31 to be one antlered bull (OSM 2020b).

At the 2020 BOG meeting, Proposal 33 was adopted which eliminated the Oct. 1–Nov. 30 hunt, changed the winter hunt to a may be announced season in Unit 22D remainder, established a registration permit (RM840 and RM849) with a strict reporting requirement, and a harvest quota system. Adoption of Proposal 35 changed the availability of the RM840 permit to make it only available in person from vendors on the Seward Peninsula. These two actions together limited the number of non-local hunters that would be able to obtain a registration permit and would allow ADF&G to be able to close the hunt when a quota was reached (ADF&G 2020).

Closure last reviewed: N/A

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 moose population in Unit 22D remainder was below State management goals and was declining due to poor calf recruitment leading to the closure in 2002. Harvest restrictions were also implemented in the form of shortened seasons and eliminating cow harvest. Again, the population had declined between 2011 and 2014 and estimated annual harvest was above sustainable levels. Due to this

population decline, the State removed antlerless hunts from their regulations in Unit 22 and eliminated non-resident harvest opportunity in the area. Closing Federal public lands in Unit 22D remainder to the harvest of moose except by Federally qualified subsistence users provided additional protection to ensure the long-term viability of this moose population (FSB 2020).

Council Recommendation for Original Closure:

The Council voted unanimously to support WP20-40. The Council had submitted this proposal to protect the moose population in Unit 22D remainder by eliminating non-local harvest while still allowing harvest by Federally qualified subsistence users in the region. The Council noted that all other subunits in Unit 22D are currently closed to non-Federally qualified users.

State Recommendation for Original Closure:

The State opposed Proposal WP20-40 as they believed action adopted by the BOG (Proposals 33 and 35, see Regulatory History) would be sufficient to protect the moose population in Unit 22D remainder. They felt less drastic steps (like changing the harvest limit from one moose to one bull) would be appropriate to protect the moose population and did not think a total closure was necessary. Harvest records indicated that federally qualified subsistence users harvested most moose from this hunt area and the State didn't believe the closure was necessary to provide for subsistence uses.

Biological Background

Moose migrated into the Seward Peninsula in the 1930s and by the late 1960s became a resident species due to suitable habitat in Unit 22. Moose populations increased during the 1970s and peaked in the mid-1980s (Gorn 2010). Density independent factors, specifically severe winters, were believed to have caused the population to decrease during the early 1990s (Nelson 1995). Populations within Unit 22 have never recovered to the peak levels of the 1980s. Brown bear predation on calves is considered the main limiting factor affecting Unit 22 moose populations (Gorn 2010).

State management goals for moose in Unit 22D include (Gorn and Dunker 2014):

- Unit 22 unit-wide: maintain a combined population of 5,100 – 6,800 moose
- Unit 22D: maintain a population of 2,000-2,500 moose
- Maintain a minimum bull:cow ratio of 30 bulls:100 cows in Units 22A, 22B, 22D, and 22E.

In 2021, ADF&G estimated the total Unit 22 moose population to be 6,657 moose, which is within State management objectives. ADF&G also considered the status of the Unit 22D moose population to be decreasing-stable (ADF&G 2020; Germain 2022, pers. comm.). Between 1993 and 2020, the moose population in Unit 22D ranged from 1,106-1,829 moose with the lowest estimate occurring in 2014 (**Figure 2**). While ADF&G does not conduct moose surveys specifically within the closure area, surveys are conducted within the Kuzitrin and Agiapuk River drainages within Unit 22D. The Agiapuk drainage survey area is in Unit 22D remainder (**Figure 1**). Between 1993 and 2014, for the Kuzitrin drainage area specifically, the moose population ranged from 615-1,251 moose with the lowest count occurring in 2014. Over the same time within the Agiapuk drainage, the moose population ranged from

483-781 moose (**Figure 2**) (ADF&G 2020, Dunker 2021, pers. comm.). A moose abundance survey for Units 22D and 22E was completed in March 2023. Results showed an estimated population of 1922 moose, which is down from the previous result in 2020 of 1998 moose. But, with an increase in recruitment rate estimated at 16% which is higher than the 2020 estimate of 12%. ADF&G considers the moose population in these units as stable (ADF&G 2023).

Between 2000 and 2019, bull:cow ratios within the Kuzitrin River survey area ranged from 15-40 bulls:100 cows, averaging 26 bulls:100 cows. Over the same period, bull:cow ratios within the Agiapuk (Unit 22D remainder) survey area ranged from 18-44 bulls:100 cows, averaging 28 bulls:100 cows (**Figure 3**). In recent years (2016-2019), bull:cow ratios were below State management objectives in all years within the Agiapuk survey area (18-24 bulls:100 cows) and were below objectives within the Kuzitrin survey area in 2016 (20 bulls:100 cows) and just above objectives in 2017 and 2019 (32-33 bulls:100 cows, respectively) (Gorn and Dunker 2014; Dunker 2021, pers. comm.).

Fall calf:cow ratios of < 20 calves:100 cows, 20-40 calves:100 cows and > 40 calves:100 cows may indicate declining, stable, and growing moose populations, respectively (Stout 2012). Between 2000 and 2019, calf:cow ratios within the Kuzitrin River survey area ranged from 9-33 calves:100 cows and averaged 16 calves:100 cows. Over the same period, calf:cow ratios within the Agiapuk survey area ranged from 6-29 calves:100 cows, averaging 21 calves:100 cows (**Figure 4**). In recent years (2016-2019), calf:cow ratios in the Kuzitrin River survey area ranged from 10-14 calves:100 cows. Low recruitment rates such as these may be an indicator that the moose population within the Kuzitrin River Drainage is declining (Gorn and Dunker 2014, Dunker 2021, pers. comm.). From 1993-2020, the percentage of yearlings measured in the spring population surveys within the Kuzitrin and Agiapuk river drainages averaged 13% and 17%, respectively (ADF&G 2020, Dunker 2020, pers. comm.).

There have been two browse surveys conducted in Unit 22D, each indicating low amounts of browse removal. The first survey in 2017 showed 16.2% removal and the second in 2020 showed 11% removal of browse (Germain 2020). Although winter browse was seen as a limiting factor when moose density/numbers were at their highest during the mid-1980s. Moose populations had been managed based on what winter browse can easily support throughout Unit 22D. Browse is no longer viewed as a limiting factor to moose in this unit, and brown bear predation on calves is now seen as the most significant factor influencing moose numbers (Gorn and Dunker 2014).

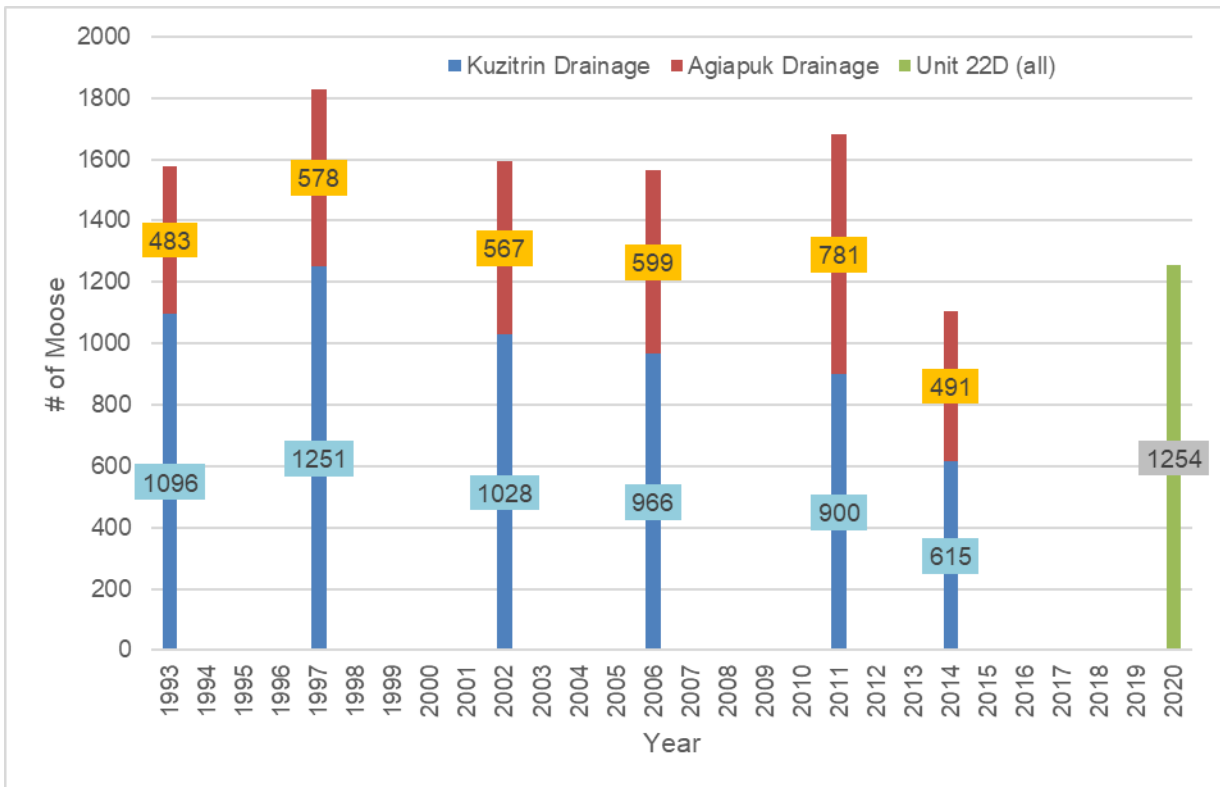


Figure 2. Moose population estimates within Unit 22D (ADF&G 2020; Dunker 2021, pers. comm.).

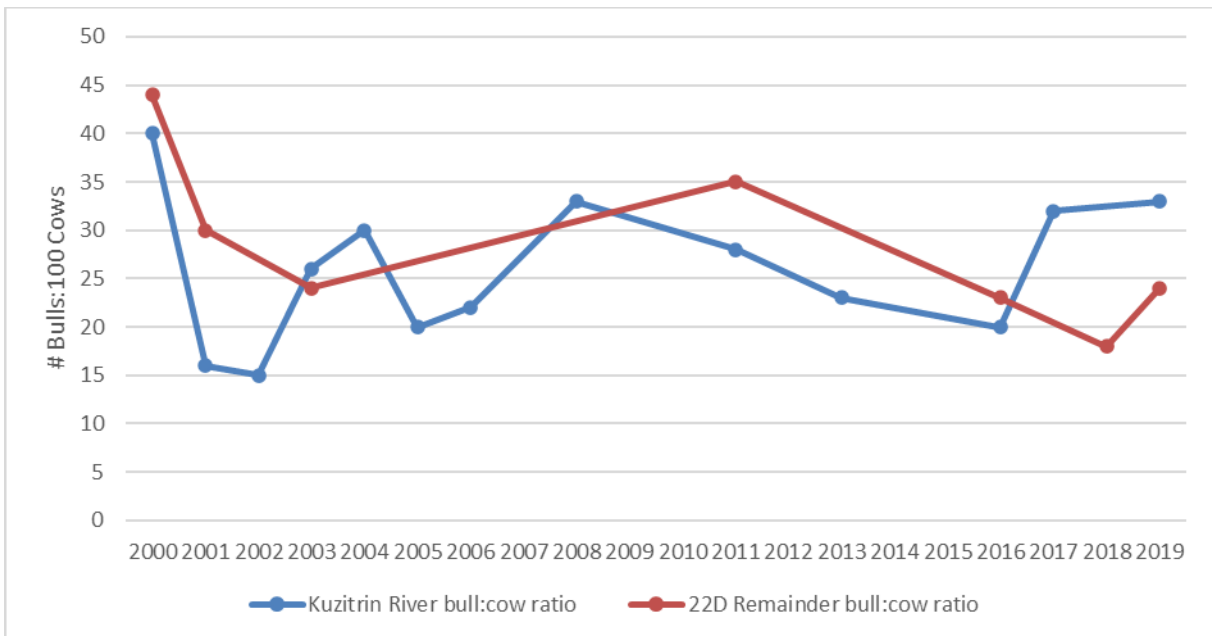


Figure 3. Bull:cow ratios within the Kuzitrin and Unit 22D remainder (Agiapuk) survey area of Unit 22D (Gorn and Dunker 2014; Dunker 2021, pers. comm.).

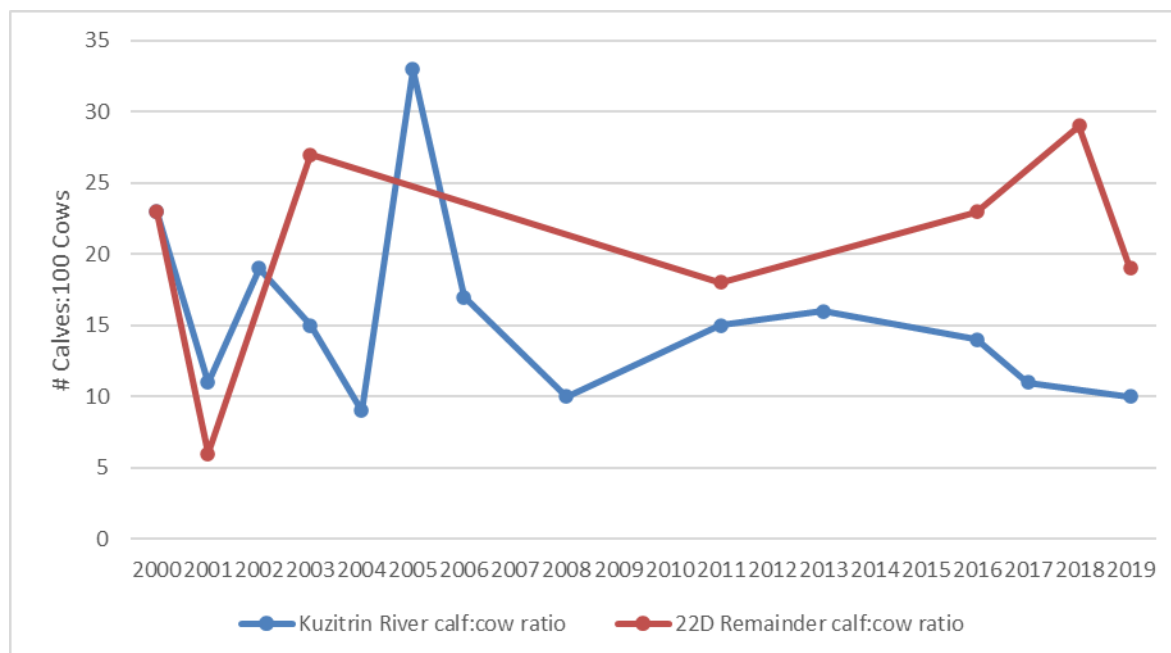


Figure 4. Calf:cow ratios within the Kuzitrin and Unit 22D remainder (Agiapuk) survey area of Unit 22D (Gorn and Dunker 2014; Dunker 2021, pers. comm.).

Cultural Knowledge and Traditional Practices

Historically, people in the Seward Peninsula area hunted a variety of species, but as moose moved into the region in the mid-20th century, harvest of these animals grew. Although all residents of Unit 22 have a customary and traditional use determination for moose in Unit 22D, remainder, this section focuses on communities closest to the hunt area. The western boundary of Unit 22D remainder is contiguous with the primarily Iñupiat villages of Teller and Brevig Mission; both communities hunt moose within this area (Mikow et al. 2018).

Nome, located in Unit 22C, is connected to Teller via the road system, or by snowmachine in winter. No ADF&G, Division of Subsistence survey-based harvest estimates for Nome’s use of moose are available for any year (ADF&G 2022). However, a mapping study conducted for the 1985 study year showed that the Nome’s moose harvest areas were focused on road and river systems, including the area around Teller (Magdanz and Olanna 1986).

In 2019, the estimated population of Brevig Mission was 451, and the estimated population of Teller was 235 (ADLWD 2020). Nome had an estimated population of 3,690 in 2019 (ADLWD 2020). Brevig Mission and Teller’s uses of wild resources have been documented in surveys conducted by ADF&G, Division of Subsistence; three measures of moose harvest and use over multiple study years are given in **Table 1**.

Between May 2015 and May 2016, the most recent study period for which big game subsistence data are available for Brevig Mission and Teller, 85% of surveyed households in Brevig Mission and 55% of surveyed households in Teller used moose (**Table 1**; ADF&G 2022). During this time, Brevig

Mission households harvested an estimated 33 pounds of moose in edible weight per person, with 90% of the harvest occurring within Unit 22D remainder (**Table 1**; ADF&G 2022; Mikow et al. 2018). During the same study period, Teller households harvested an estimated 31.6 pounds of moose in edible weight per person, with 27% of the harvest occurring in Unit 22D remainder (**Table 1**, ADF&G 2022; Mikow et al. 2018).

For Teller, a higher percentage of surveyed households used moose than caribou in 2015-2016, but that situation was reversed for Brevig Mission. The fall moose hunting season was most important for both communities. In Brevig mission, 85% of moose were taken in the fall, while in Teller 100% were taken in that season (Mikow et al. 2018). Recent comments by members of the Council indicate that closures within Unit 22D to non-Federally qualified users are desirable both to protect diminishing moose populations and to respect local hunting patterns (SPRAC 2021 and 2022).

Table 1. Three measures of moose harvest and use by Brevig Mission and Teller (ADF&G 2022, Mikow et al. 2014^{*}). Values for estimated number of moose harvested are rounded to whole numbers.

Community	Survey year	Estimated number of moose harvested	Estimated pounds per person harvested	Percent using
Brevig Mission	2015-2016	21	33.0	85%
	2011-2012*	18	23.7	43%
	2005	8	12.8	19%
	2000	24	42.5	86%
	Average	17.8	28.0	58%
Teller	2015-2016	15	31.6	55%
	2011-2012*	4	8.7	31%
	2005	5	10.8	78%
	2000	7	14.4	68%
	Average	7.8	16.4	58%

Harvest History

ADF&G estimates an average of 250-300 moose are harvested from all of Unit 22 each year and that the 2021 harvestable surplus was 345 moose, while the 2022 harvestable surplus was 350 moose (ADF&G 2020; Germain 2022 pers. comm.). In Unit 22D specifically, harvest occurs by Alaska residents under State regulations by registration permit RM840 during the September hunt and registration permit RM849 during a may be announced season. Within the closure area, harvest occurs by Federally qualified subsistence users under Federal regulations by State registration permit during the early fall season and the may-be-announced winter season.

In Unit 22D remainder the average annual reported moose harvest by State residents between 2009 and 2022 was 14 moose (**Table 1**) (ADF&G 2020; Germain 2022, pers. comm.). Accounting for unreported harvest, ADF&G estimated total moose harvest in Unit 22D between 2009 and 2018 as 42-57 moose per year, which translates to a 7%-10% harvest rate. This is a very high harvest rate,

especially for a low-density and declining moose population. In 2022 ADF&G estimate the harvestable surplus for Unit 22D remainder as 17 moose per year, which translates to a 3% harvest rate (ADF&G 2020; Germain 2022, pers. comm.).

Unit 22D remainder harvest ranged from 12–35 moose from 2013–2018, with an average of 23 moose per year. Unit 22 residents, most of which were residents of Nome, accounted for 74% of the total reported harvest between 2013 and 2018 in Unit 22D remainder, and 59% of reported harvest took place during the month of October (**Table 2**). According to household subsistence surveys between 2000 and 2015, residents of Brevig Mission and Teller, the communities closest to Unit 22D remainder, harvested an estimated average of 18 moose and 8 moose per community per year, respectively (**Table 1**, ADF&G 2020).

Table 1. Reported moose harvest in Unit 22D for 2005–2022. Local resident harvest refers to harvest by residents of Unit 22 (ADF&G 2016b, 2017, 2018, 2019; Germain 2022, pers. comm.).

Year	Local Resident Harvest	Nonlocal Resident Harvest	Total Resident Harvest	Unknown Residency Harvest	Nonresident Harvest	Total Harvest
2005	47	4	51	0	6	57
2006	47	11	58	0	8	66
2007	52	14	66	1	5	72
2008	42	10	52	1	7	60
2009	54	15	69	0	7	76
2010	39	12	51	3	4	58
2011	50	19	69	1	9	79
2012	50	12	62	1	6	69
2013	45	10	55	1	3	59
2014	43	11	54	2	8	64
2015	54	12	66	1	5	72
2016	52	8	60	0	3	63
2017	59	12	71	0	0	71
2018	47	14	61	0	0	61
2019	44	4	48	3	0	51
2020	44	4	48	0	0	48
2021	44	2	46	1	0	47
2022	47	6	53	0	0	53
Average:	48	10	58	1	4	63
Total:	860	180	1040	15	71	1126

Table 2. Unit 22D remainder moose harvest, 2013–2022, according to ADF&G Unit 22D GM000 harvest reports (ADF&G 2019; Germain 2022, pers. comm.). Local harvest refers to harvest by residents of Unit 22 and nonlocal refers to Alaska residents outside of Unit 22.

Year	Total Harvest	Local harvest		Nonlocal harvest	
		Number of moose	% of total	Number of moose	% of total
2013	12	7	58%	5	42%
2014	16	11	69%	5	31%
2015	22	17	77%	5	23%
2016	22	16	73%	6	27%
2017	35	28	80%	7	20%
2018	33	25	76%	8	24%
2019	26	22	85%	4	15%
2020	16	16	100%	0	0%
2021	14	14	100%	0	0%
2022	14	12	86%	2	14%

Other Alternatives Considered

Under Federal regulations, the winter may-be-announced season requires the use of a State registration permit. Therefore, the Federal season is dependent upon the State announcing a winter season. This may preclude a Federal priority if the State does not announce an opening. If the Federal regulations were changed to require a Federal permit, then a winter Federal hunt could occur independently from a State hunt. Of course, this is outside the scope of this closure review, but a proposal could be submitted to institute a Federal permit.

Effects

If the closure were rescinded, non-Federally qualified users would be able to harvest moose on Federal public lands within Unit 22D, remainder under State regulations. There would be no concern of increased non-resident harvest as there is no non-resident moose season under State regulations in all of Unit 22D. Since moose harvest is managed by State registration permit and a quota, rescinding the closure would likely result in a zero to minimal increase in harvest and have no impact on the moose population. However, rescinding the closure may decrease opportunity for Federally qualified subsistence users who would have to compete with non-Federally qualified users for moose harvest on Federal public lands. However, Federal public lands only comprise 8% of the closure area, and State RM840 permits are only available in Unit 22 from July 25– Aug. 25, limiting non-local hunter participation.

If the closure were retained, Federal public lands in Unit 22D remainder would remain closed to moose hunting by non-Federally qualified subsistence users. There would be little added protection for the Unit 22D remainder moose population as the amount of land protected by this closure is small. Methods adopted by the State for permit distribution and the quota system currently in place protects

the moose population from overharvest. Although the closure provides a subsistence priority for Federally qualified subsistence users to harvest a moose without competition from non-federally qualified users.

OSM CONCLUSION

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

Justification

Actions by the BOG to conserve the moose population, restrict harvest, and limit hunter numbers in Unit 22D remainder were successfully enacted in 2020. Given these actions, maintaining WCR24-15 would likely contribute little to overall conservation of the Unit 22D moose population. However, maintaining this closure may continue to reduce competition from non-local resident hunters in Unit 22D remainder for a small quota of available moose that is filled quickly.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Seward Peninsula Subsistence Regional Advisory Council

Retain the status quo on WCR24-15. The Council agreed with OSM's revised justification, after receiving the most recent population survey results, to retain the status quo.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

WCR24-19 Executive Summary	
General Description	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).
Current Regulation	<p>Unit 23–Muskox</p> <p><i>Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage - 1 bull by Federal permit or State permit</i> <i>Aug. 1- Mar. 15</i></p> <p><i>Federal public lands are closed to the taking of musk oxen except by federally qualified subsistence users hunting under these regulations</i></p>
OSM Conclusion	Retain the Status Quo
Northwest Arctic Subsistence Regional Advisory Council Recommendation	Rescind the closure
Interagency Staff Committee Comments	The Interagency Staff Committee found the analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	No position
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 River drainage - 1 bull by Federal permit or State permit Aug. 1- Mar. 15

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 River drainage - One bull by permit TX106 Aug. 1-Mar. 15

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**).

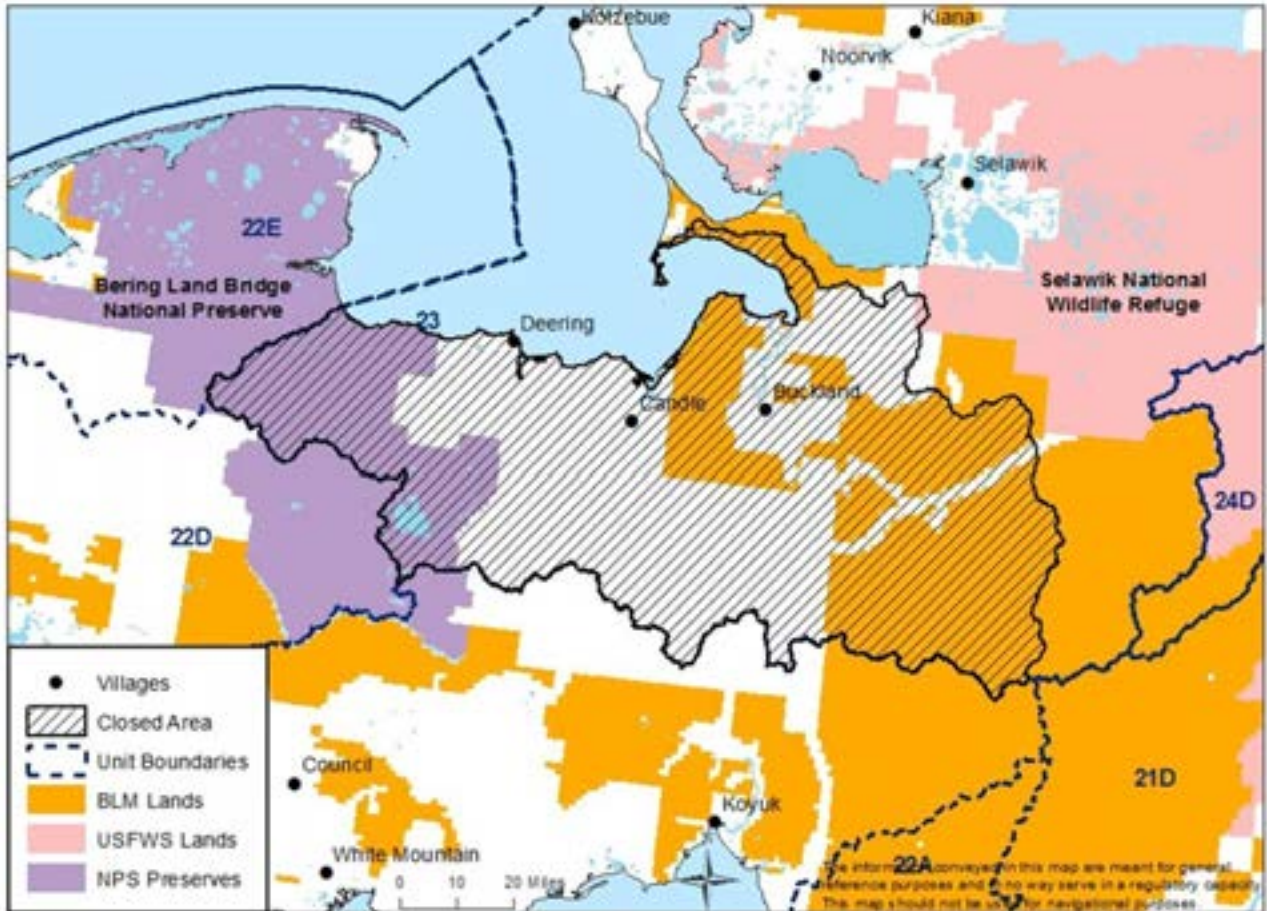


Figure 1. Map of Federal muskox hunt area Unit 23 SW.

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

See WCR24-28 analysis.

Current Events

See WCR24-28 analysis.

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 1995 when 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

See WCR24-28 analysis.

Unit 23 SW Muskox Population

Between 1992 and 2017, the number of muskoxen 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.).

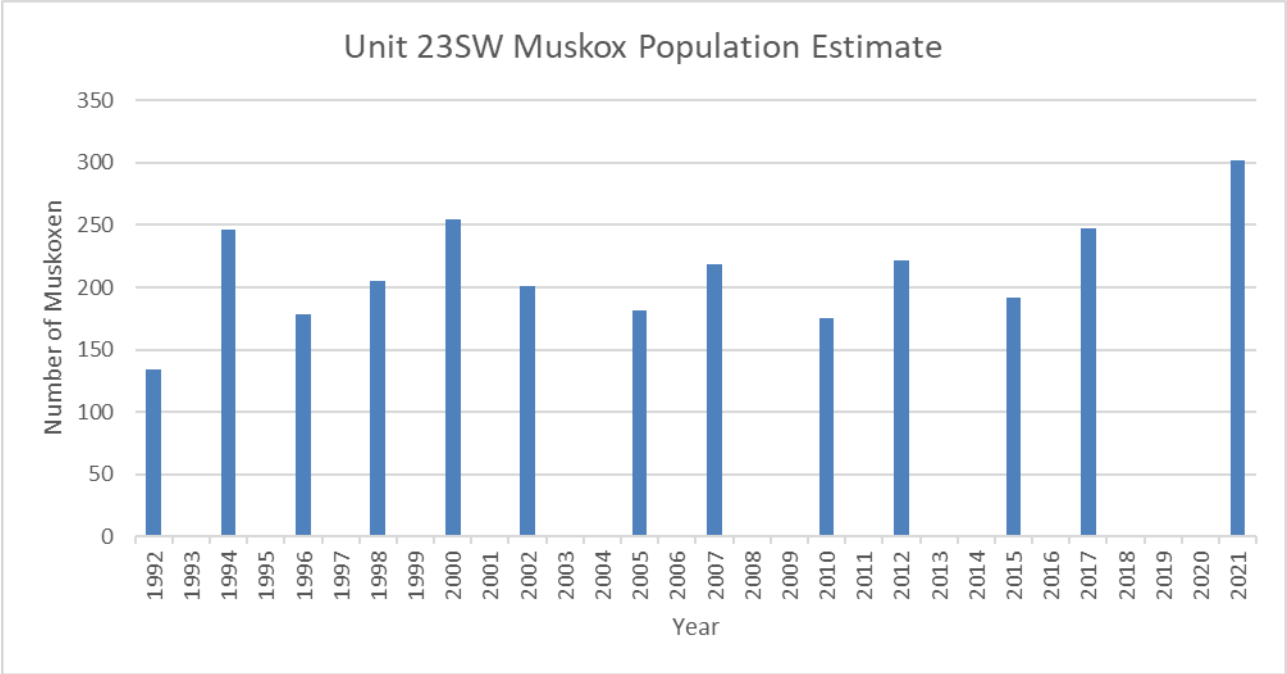


Figure 4. Population estimates for muskoxen in Unit 23SW (Gorn and Dunker 2015; Dunker 2017a; Osburn 2023, pers. comm.).

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

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

See WCR24-28 analysis.

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).

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 CONCLUSION:

- 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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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Northwest Arctic Subsistence Regional Advisory Council

Rescind the closure on WCR24-19. The Council voted to rescind the closure to provide more harvest opportunity, which is currently limited. The wildlife reports presented to the Council indicated that the muskox herd in the area is stable and the harvest quotas are currently low due to the closure. Presently, only residents of Deering and Buckland have customary and traditional use for muskox in this area, making them the only federally qualified subsistence users for this specific hunt. Rescinding the closure would extend hunting access to local and nonlocal hunters to hunt on Federal land in this area, which currently is only open to Deering and Buckland residents. Additionally, there is a growing issue of nuisance muskox herds encroaching into the communities of Deering and Buckland, causing damage to runway lighting, graves, and infrastructure, and safety concerns for residents. Allowing the closure to be rescinded and expanding hunting opportunities on Federal public land could help alleviate the impact of muskoxen on these communities by reducing their presence.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

WCR24-35 Executive Summary	
General Description	Wildlife Closure Review WCR24-35 reviews the closure to caribou hunting in the southeastern portion of Unit 12 where Federal public lands are closed to caribou hunting, except by federally qualified subsistence users. The closure targets the Chisana Caribou Herd.
Current Regulation	<p>Unit 12–Caribou</p> <p><i>Unit 12—that portion east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border — 1 bull by Federal registration permit only.</i></p> <p><i>Aug. 10- Sept. 30</i></p> <p><i>Federal public lands are closed to the harvest of caribou except by federally qualified subsistence users hunting under these regulations.</i></p>
OSM Conclusion	Retain Status Quo
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	Retain Status Quo
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	Retain Status Quo
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	No Position
Written Public Comments	2 Retain Status Quo

**FEDERAL WILDLIFE CLOSURE REVIEW
WCR24-35**

Issue: Wildlife Closure Review WCR24-35 reviews the closure to caribou hunting in the southeastern portion of Unit 12 where Federal public lands are closed to caribou hunting, except by federally qualified subsistence users. The closure targets the Chisana Caribou Herd (CCH).

Closure Location and Species: Unit 12, that portion east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border—caribou (**Map 1**).

Current Federal Regulation

Unit 12—Caribou

Unit 12—that portion east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border — 1 bull by Federal registration permit only. *Aug. 10-Sept. 30*

Federal public lands are closed to the harvest of caribou except by federally qualified subsistence users hunting under these regulations.

Closure Dates: Year-round

Current State Regulation

Unit 12 –Caribou

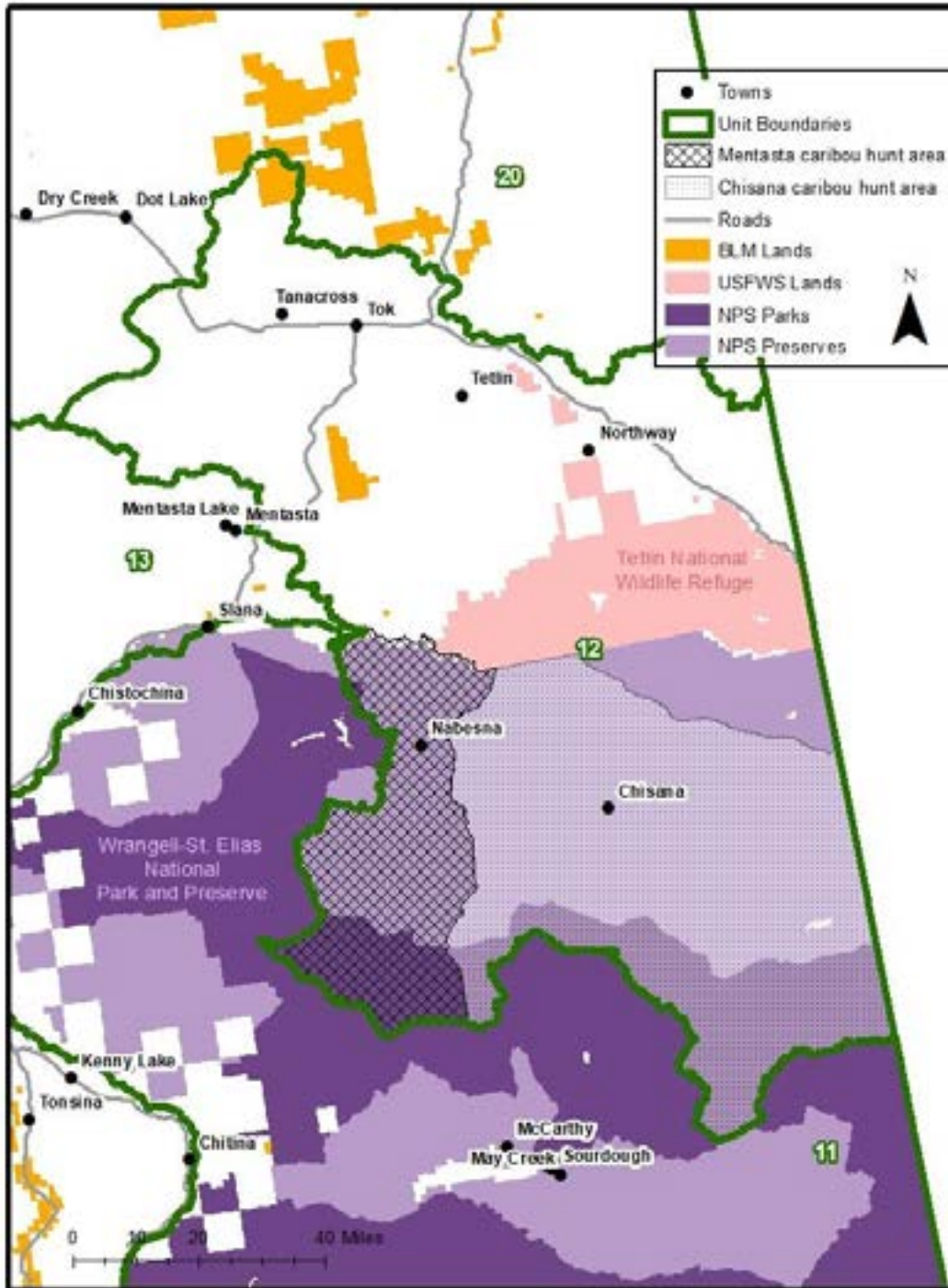
Residents and Nonresidents: Unit 12, remainder *No open season*

Regulatory Year Initiated: 1994, closed to all users; 2012, closed except by some federally qualified subsistence users (§804 restriction); 2016, closed except by federally qualified subsistence users.

Extent of Federal Public Lands/Waters

Federal public lands comprise approximately 61% of Unit 12 and consists of 48% National Park Service (NPS) managed lands, 11% U.S. Fish and Wildlife Service managed lands (FWS), and 2% Bureau of Land Management (BLM) managed lands (**Map 1**).

Federal public lands comprise nearly 100% of the closure area and consist of 100% NPS managed lands.



Map 1. Federal closures for caribou in Unit 12. The cross-hatched area targets the Mentasta Caribou Herd and is closed to all users. The stippled area targets the Chisana Caribou Herd and is closed to non-federally qualified users.

Customary and Traditional Use Determination

Residents of Unit 12, Chistochina, Dot Lake, Healy Lake, and Mentasta Lake have a customary and traditional use determination for caribou in Unit 12.

Under the guidelines of Alaska National Interest Lands Conservation Act (ANILCA), National Park Service regulations identify qualified local rural subsistence users in National Parks and National Monuments by: (1) identifying Resident Zone Communities that include a significant concentration of people who have customarily and traditionally used subsistence resources on park lands; and (2) identifying and issuing subsistence use (13.440) permits to individuals residing outside of the Resident Zone Communities who have a personal or family history of subsistence use within the park or monument.

Wrangell-St. Elias National Park has 23 resident zone communities: Chisana, Chistochina, Chitina, Copper Center, Dot Lake, Gakona, Gakona Junction, Glennallen, Gulkana, Healy Lake, Kenny Lake, Lower Tonsina, McCarthy, Mentasta Lake, Nabesna, Northway, Slana, Tazlina, Tanacross, Tetlin, Tok, Tonsina, and Yakutat.

Regulatory History

Because of its small population size, the CCH has never supported a large harvest. Between 1989 and 1994 under State regulations, the harvest limit was one bull caribou and the annual harvest ranged between 16–34 animals (Gross 2005). The Federal subsistence regulation from 1990 to 1994 was one bull, Sept. 1- 20. By 1991, due to declining population numbers, the harvest was reduced through voluntary compliance by guides and local hunters. In 1994, the bull portion of the population declined below the Alaska Department of Fish and Game's (ADF&G) management objective and hunting of Chisana caribou was closed by both the Alaska Board of Game (BOG) and the Federal Subsistence Board (Board).

In 1994, the Board adopted Proposal P94-71, which closed Federal public lands east of the Nabesna River to the Canadian border to the harvest of caribou by all users to protect the declining CCH resulting in the following hunt areas (OSM 1994):

Unit 12 – That portion west of the Nabesna River within the drainages of Jack Creek, Platinum Creek, and Totschunda Creek.

Unit 12 – That portion lying east of the Nabesna River and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border.

Unit 12 – remainder

In 2000, the Board adopted Proposal P00-59, combining the hunt areas west and east of the Nabesna River into one hunt area to make regulations consistent for Unit 12 (OSM 2000):

Unit 12 – That portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border.

In 2002, the CCH was designated as “Specially Protected” under the Yukon Wildlife Act, which prohibits all licensed harvest of the CCH in Canada and requires a regulation change to initiate a harvest.

In 2010, the BOG approved to establish a joint State/Federal drawing permit for the CCH. This hunt would follow guidelines set in the Management Plan for the CCH. The hunt was authorized in the portion of Unit 12 within the White River drainage and that portion within the Chisana River drainage upstream from the winter trail that runs southeast from Pickerel Lake to the Canadian Border. However, on Federal public lands, which comprised the vast majority of that hunt area, the Federal closure superseded the existing State regulation and thus Federal public lands remained closed to hunting of the CCH under State regulations. The Board considered Proposal WP10-104 that requested establishment of a joint Federal/State draw permit for the CCH in Unit 12 with a harvest limit of one bull and a season of Sept. 1–Sept. 30. The Board deferred Proposal WP10-104 until more information could be gathered.

In 2012, the Board considered proposals WP10-104 and WP12-65/66 (OSM 2012a). Proposal WP10-104 requested establishment of a joint Federal/State draw permit for the CCH in Unit 12 with a harvest limit of one bull and a season of Sept. 1–Sept. 30. Proposal WP12-65 requested establishment of a Federal registration hunt for the CCH with a harvest limit of one bull and a season of Aug. 10 – Sept. 30, while WP12-66 requested establishment of a Federal registration hunt with a harvest limit of one bull and a season of Sept. 1–Sept. 30, with the hunt restricted to Federal public lands in Unit 12 east of the Nabesna River and the Nabesna Glacier. OSM noted in its justification for WP12-66 that restricting the hunt west of the Nabesna River and Nabesna Glacier would protect the Mentasta Caribou Herd (MECH) with minimal impact to subsistence hunters wanting to harvest caribou from the CCH (OSM 2012a). The Board took no action on WP10-104 and WP12-65 and adopted WP12-66 with modification to list the communities allowed to harvest caribou in Unit 12, that portion east of the Nabesna River and Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border: Northway, Mentasta, Tetlin, Tok, Chisana, and Chistochina. The list of communities was based on an ANILCA §804 analysis. The authority to manage the Federal hunt was delegated to the Wrangell-St. Elias National Park and Preserve (WRST) Superintendent. The CCH was considered stable in 2010 and the bull:cow and calf:cow ratios were above the minimums set by the Draft Management Plan, which was finalized in the fall of 2011 (OSM 2012a, Chisana Caribou Herd Working Group 2012). As a result of the Board’s action on WP12-66, the areas west and east of the Nabesna River were once again split out into two areas (OSM 2012a).

Unit 12 – that portion within the Wrangell-St-Elias National Park that lies west of the Nabesna River and the Nabesna Glacier.

Unit 12 – that portion east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border.

Also in 2012, the Board adopted Proposal WP12-68, submitted by the Cheesh’na Tribal Council, which requested the residents of Chistochina be added to the Unit 12 caribou customary and traditional use determination (OSM 2012b).

In 2014, the Board adopted Proposal WP14-15/45 to expand the list of communities eligible to participate in the caribou hunt for the CCH under the ANILCA §804 analysis to also include residents of the hunt area and those living in Unit 12 along the Nabesna Road (mileposts 25-46) (OSM 2014a).

The Board also adopted Proposal WP14-49 with modification to change the fall season dates for the CCH hunt from Sept. 1-Sept. 30 to Aug. 10-Sept. 30, so that the bulls would be less likely to be in the rut, and thus, ensure the quality of the meat (OSM 2014b).

In 2016, the Board adopted Proposal WP16-60 opening Federal public lands in Unit 12, south of the Winter Trail and east of the Nabesna River and Glacier to all federally qualified subsistence users. Permits issued from 2012 to 2014 and the number of animals harvested had been below quotas, allowing expansion of harvest opportunity for all federally qualified subsistence users without concerns for overharvest (OSM 2016).

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

In 2020, the Board maintained status quo for closure review WCR20-42 due to continued conservation concerns. This closure review was a combined review of the closure to caribou hunting by all users in Unit 12 targeting the MECH within that portion of Wrangell-St. Elias National Park and Preserve that is west of the Nabesna River and Glacier and the closure to caribou hunting, except federally qualified subsistence users targeting the CCH in Unit 12, east of the Nabesna River and Nabesna Glacier and south of the Winter Trail for.

In 2022, WRST issued an emergency special action closing the CCH caribou hunt because recruitment had fallen below the minimum threshold identified in the CCH management plan for sustainable harvest (Bobowski 2022).

Closure last reviewed: 2020 – WCR20-42

Justification for Original Closure:

Section §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 adopted Proposal P94-71, which closed the CCH hunt to all users based upon the recommendation from the Eastern Interior Alaska Subsistence Regional Advisory Council (EI Council) and OSM that the closure was necessary to assure the continued viability of this herd. The Board's reauthorization of harvest limits in this area would be aided by the caribou management plan that NPS was developing with input from the interested agencies and affected parties including Regional Advisory Councils (OSM 1994).

In 2012, the Board modified the closure with the adoption of Proposal WP12-66 with modification to delegate authority to manage the Federal hunt to the WRST Superintendent. The CCH was considered stable in 2010 and the bull:cow and calf:cow ratios were above the minimums set by the Draft Management Plan, which was finalized in the fall of 2011. The Board concurred with The EI Council that while the harvest surplus is small, it should not pose a conservation concern with good in-season management. The Board also noted that the remoteness of the herd will limit access, but the proposal will provide increased subsistence opportunity.

In 2016, the Board modified the closure with the adoption of Proposal WP16-60 opening Federal public lands in Unit 12, south of the Winter Trail and east of the Nabesna River and Glacier to all federally qualified subsistence users. Permits issued from 2012 to 2014 and the number of animals harvested had been below quotas, allowing expansion of harvest opportunity for all federally qualified subsistence users without concerns for overharvest (OSM 2016)

Council Recommendation for Original Closure:

The Council concluded that the CCH should be protected from all hunting to stop the population decrease (OSM 1994). The justification for their decision was based on the following:

- Over the past 3 years (1990-1993) the CCH population had declined from 1,850 to 900 animals.
- The fall calf:cow ratio was below that which is required to balance the natural mortality of adults ($\approx 15\%$) for at least 4 consecutive years
- The potential for overharvest of this small herd was considered high since they cross international boundaries and are subject to an unknown amount of unreported harvest.

In 2012, the EI Council supported WP12-66 with modification to delegate authority to manage the Federal hunt to the WRST Superintendent. The EI Council stated that while the harvest surplus is small, it should not pose a conservation concern with good in-season management.

In 2016, The EI Council supported WP16-60 as modified by OSM. The EI Council stated that allowing all qualified Federal users in the hunt area to harvest the Chisana Caribou Herd would provide subsistence opportunity for these communities but only add about 200 people to the eligible list and therefore not cause any increase in competition for the resource. The EI Council further stated that there does not appear to be a conservation concern and it would be beneficial by allowing more opportunity for those who do wish to make the effort to hunt this herd

State Recommendation for Original Closure:

The ADF&G opposed this closure to caribou hunting of the CCH. ADF&G stated this Federal action is inappropriate and, as written, will create an undue administrative burden to management of the CCH.

In 2012, ADF&G supported portions of WP12-65, 66 and deferred WP10-104 with modification. The state recommended following the guidelines for a limited harvest of Chisana caribou shared between Alaska and Canada as laid out in the management plan and further recommended using a joint State/Federal permit to monitor harvest in Alaska. A joint Federal/State drawing permit would ensure continued cooperation between State and Federal managers who worked together to develop the herd management plan. If the harvest is limited to federal subsistence users only, a registration hunt should be used, and the season closed if the quota is met. Based on harvest records since the 1970s, the remote nature (aircraft access only), the likelihood of harvesting the quota is unlikely. A short reporting period should be adequate to ensure overharvest does not occur.

In 2016, ADF&G supported WP16-60 with OSM modification and the proposal was considered on the consensus agenda.

Biological Background

The ranges of the Mentasta, Chisana, and Nelchina caribou herds overlap in Unit 12 (**Map 2**). The Nelchina Caribou Herd (NCH) was declining and at the lower end of the State population objectives in 2018 (ADF&G 2018, Hatcher 2018, pers. comm.). In 2022, the NCH population had dropped to 21,000, well below the lower end of the State's fall population objective of 35,000 to 40,000 Nelchina caribou. Multiple Nelchina caribou hunts were closed early by Emergency orders, 04-02-22, 04-03-22, 04-06-22, and 04-08-22, due to harvest quotas being reached quickly (ADF&G 2022). However, since this closure is not associated with the NCH, the NCH is not considered further in this analysis.

The MECH occurs primarily in the western and northern portion of Unit 12 and the northern portion of Unit 11 within Wrangell-St. Elias National Park and Preserve (WRST). Since the overlap between the CCH and MECH is minimal, the MECH is be considered in a separate closure review analysis (WCR24-42).

The CCH is a small herd that occurs on the Klutan Plateau and near the headwaters of the White River in southwest Yukon Territory, Canada and east central Alaska in the southeastern portion of Unit 12. During the summer the CCH spends most of their time in Alaska primarily on Federal public lands within the WRST, although there is some overlap with Tetlin National Wildlife Refuge (NWR) and adjacent State lands. During the winter the CCH spends most of their time in the Yukon Territory, Canada on the Kluane Wildlife Sanctuary and the Asi Keyi Natural Environmental Park. Since this international herd ranges across multiple jurisdictions, multiple land agencies are involved and responsible for the management of the CCH.

The CCH is a genetically distinct population (Zittlau et al. 2000, Zittlau 2004). In Canada, the CCH is classified as woodland caribou, whereas in Alaska the CCH is classified a barren-ground caribou (Miller 2003). Genetic analysis of the CCH found large genetic distances between the CCH and the other five adjacent herds, which suggests that the herd has been unique for thousands of years (Zittlau et al. 2000). Behaviorally, the CCH is typical of other mountain herds, particularly with respect to calving females, where, rather than aggregating in certain areas like barren-ground caribou, they disperse up in elevation away from other calving females as an anti-predator strategy (Farnell and Gardner 2002). Occasionally the CCH mix with the Nelchina and Mentasta caribou herds during the winter in Alaska and in the vicinity of Beaver Creek, Yukon Territory, Canada. For example in 1989/1990, a large portion of the CCH shifted northeast into the upper and middle portions of Beaver Creek, where some mixing between the CCH, NCH, and MECH occurred (Lieb et al. 1994).

In Canada, the Canadian Wildlife Service (CWS) has designated the Northern Mountain Caribou population, which includes the CCH, as a species of “Special Concern” under the Canadian Federal Species at Risk Act (SARA). In 2002, the CCH was designated as “Specially Protected” under the Yukon Wildlife Act, which prohibits all licensed harvest of the CCH in Canada and requires a regulation change to initiate a harvest. A cooperative draft CCH Management Plan and Yukon CCH Recovery Plan were developed for the CCH in 2001 and 2002, respectively. In 2009, a working group consisting of members from the Government of Yukon, ADF&G, White River First Nation, Kluane First Nation, the NPS, and the USFWS developed a five-year Management Plan for the CCH (Chisana Caribou Herd Working Group 2012). The working group is now in the process of updating the plan (Cellarius 2022, pers. comm.).

The CCH Management Plan guidelines for harvest are as follows:

- A bull:cow ratio greater than 35 bulls: 100 cows.
- A calf:cow ratio greater than 15 calves: 100 cows based on a 3-year average, and
- A stable or increasing population trend.

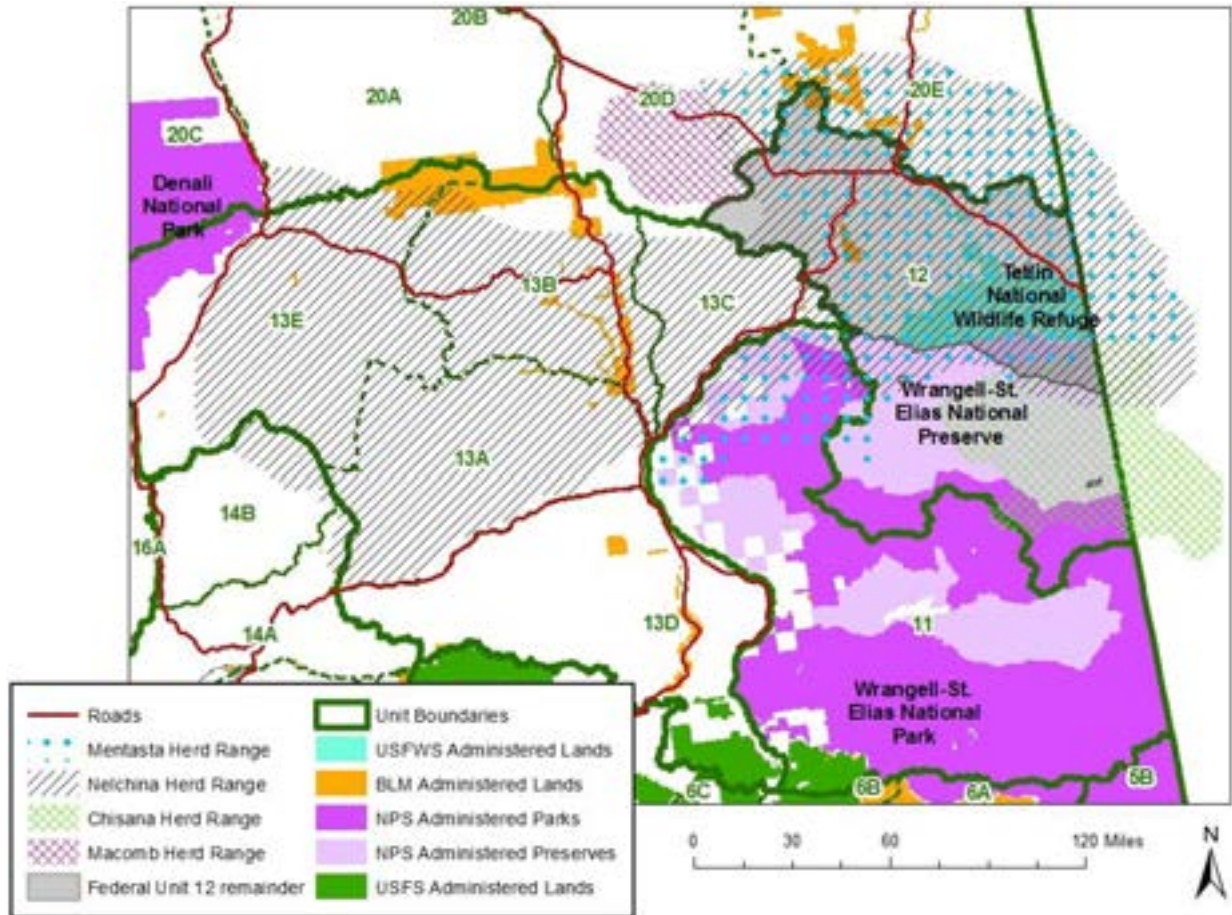
The CCH Management Plan guidelines for harvest include a maximum harvest allocation of 2% of the herd size, a bull-only harvest, and an allocation equally distributed between Yukon Territory and Alaska (Chisana Caribou Herd Working Group 2012).

Information about the CCH prior to 1970s is limited. The population estimate from the first survey conducted in 1977 was about 1,000 caribou (Kellyhouse 1990). In 1988, the CCH reached a peak of 1,900 caribou (Kellyhouse 1990) and then declined to an estimated low of 315 in 2002 (Farnell and Gardner 2002). Since 1988, a majority of the CCH have been located east of the Nabesna River (Bentzen 2011). Adverse weather conditions, poor habitat, predation, and harvest pressure were factors for the low calf recruitment and high adult mortality associated with the 1990s decline (Farnell and Gardiner 2002).

From 2003-2006, a recovery effort, which included an intensive captive rearing program to increase recruitment and calf survival, was conducted by the U.S. Geological Survey and CWS. The recovery effort involved capturing pregnant cows and enclosing them in holding pens during the last weeks of gestation and for a few weeks following calving. An intensive radio-collaring program was also initiated in 2003 along with the captive rearing program, which resulted in more reliable population and composition data. Therefore, sex and age composition and herd size estimates prior to 2003 are not directly comparable to those after 2003 (**Table 2**) (Bentzen 2011, 2013; Gross 2015, Putera 2017b).

In 2010, the CCH population was stable at 696 animals and the 3-year average for the bull:cow and calf:cow ratios were 45 bulls:100 cows and 20 calves:100 cows (Bentzen 2011, Gross 2015). 2010 was the last year a population estimate was determined, but composition sample sizes from 2011-2021 ranged from 373-631 caribou (**Table 2**). The 2017 bull:cow ratio of 32 bulls:100 cows was below the minimum threshold of 35 bulls:100 cows set by the CCH Management Plan, triggering a meeting of the management authorities. This occurred as part of the conversations regarding updating the plan, and the consensus of the group was that a 3-year running average was a more appropriate threshold vs the minimum yearly threshold set by the Management Plan, therefore the 2018 hunt could occur (Cellarius 2018a). From 2018-2021, the bull:cow ratio was above the threshold averaging 42 bulls:100 cows. However, the calf:cow ratio averaged 14 calves:100 cows, which was below the minimum threshold set by the Management Plan, resulting in the closure of the 2022 CCH hunt (Cellarius 2022, pers. comm., Chisana Caribou Herd Working Group, 2012).

In 2020, 11 GPS/Iridium and 17 VHF radio collars were deployed on the Alaska side of the CCH range, and Yukon Environment planned to deploy collars on the Yukon side in 2021 (Putera 2021). As of October 2022, there were 42 active collars in the herd, a mix of 17 GPS/Iridium collars and 25 VHF collars (Cameron 2022).



Map 2. Ranges of the Nelchina, Mentasta, Macomb, and Chisana caribou herds.

Table 2. Fall sex and age composition of the Chisana Caribou Herd, 2000-2021 (Chisana Caribou Herd Working Group 2012; Gross 2015; Putera 2014, 2017b, 2022; Taylor 2018; Cellarius 2022, pers. comm.; Cutting 2022 pers. comm.).

Regulatory Year	Total Bulls:100 Cows	Calves: 100 Cows	Calves (%)	Cows (%)	Bulls (%)	Composition Sample Size /Observed	Estimated Herd Size
2000 ^a	20	6	5	80	15	412	425
2001 ^a	23	4	3	79	18	356	375
2002 ^a	25	13	10	72	18	258	315
2003 ^b	37	25	15	62	23	603	720
2005 ^b	46	23	14	59	27	646	706
2006 ^b	48	21	13	59	28	628	- ^c
2007 ^b	50	13	8	61	30	719	766
2008	44	21	13	61	27	532	-
2009	48	15	9	61	30	505	-
2010	42	23	14	61	25	622	697
2011	38	16	14	66	25	542	-
2013	49	16	-	-	-	631	-
2014	40	23	-	-	-	528	-
2015	40	19	-	-	-	399	-
2016	46	28	-	-	-	534	-
2017	32	21	-	-	-	533	-
2018	39	13	9	65	25	373	-
2019	43	17	11	63	27	445	-
2020 ^d	-	-	-	-	-	-	-
2021	45	12	8	64	29	420	-

^a Surveys conducted by ADF&G based on a visual search of the herd range.

^b USGS survey results.

^c Not available.

^d No composition count

Harvest History

The CCH has historically been an important food source for the Athabascans of Alaska and the First Nations of the Yukon in Canada (Gross 2007). During the early to mid-1900s, the CCH was used as a subsistence food source by the Ahtna and Upper Tanana Athabascans. Although subsistence hunting has declined in recent years, the CCH continues to be an important aspect of Upper Tanana and Ahtna Athabaskan culture. Subsistence use of the CCH declined after 1929. For the last 60 years, few people in Alaska or the Yukon have depended on the CCH as a food source (Bentzen 2011), although First Nation members continued to harvest from the CCH in the Yukon through the 1990s.

In addition to providing an important subsistence resource, in the late 1920s, Chisana caribou became economically important to local hunters as guided hunting became common in the Chisana area.

Caribou from the Chisana herd were harvested by nonresident hunters guided by local guides until 1994, when the CCH closed under State and Federal regulations. Primarily five guide/outfitters hunted the herd (4 operated in Alaska and 1 in the Yukon). Bulls were desired by sport hunters, because of their large stature. In 1989 and 1990 the reported harvest of Chisana caribou in the Yukon was 18 and 11 animals, and in Alaska was 34 and 34 animals, respectively (Gross 2005). From 1990 to 1994, 43% of the hunters participating in the CCH hunt were nonresidents, who were responsible for 58% of the CCH harvest. Local subsistence users accounted for only 9% of the CCH harvest during that time period (Gross 2005).

Gross (2005) also reported that the estimated unreported harvest of Chisana caribou between 1989 and 2002 ranged from 1-20 in the Yukon and 1-3 caribou in Alaska each year. After 2001, Yukon First Nation members voluntarily stopped harvesting Chisana caribou and there continues to be no legal harvest of Chisana caribou in the Yukon. Additionally, no legal harvest of CCH occurred in Alaska between 1994 and 2012. The hunt was closed under State and Federal regulations between 1994 and 2010. The hunt remained closed under Federal regulations from 2010 and 2012 but limited harvest of the CCH consistent with the herd's management plan was authorized by the State in 2010. A concurrent proposal, WP10-104, was submitted to the Board but was deferred in 2010.

At its January 2012 meeting, the Board authorized a limited harvest of the CCH consistent with the CCH Management Plan. The Board delegated authority to the WRST Superintendent to open and close the season and to announce the harvest quota, the number of permits to be issued and the reporting period. Based on the estimated population size and the guidance in the management plan, the harvest quota for the 2012 hunt was set at seven animals.

The NPS met with participating communities, associated tribal governments and other stakeholders to ask for their input regarding permit distribution. As a result, a decision was made to allocate two permits to each of the four eligible communities with federally recognized tribal governments (Chistochina, Mentasta Lake, Northway, and Tetlin) with the understanding that all community residents, not just tribal members, would be considered for permit distribution. Any remaining permits would be made available to Tok and Chisana residents on a first come-first served basis. The number of permits was limited to fourteen and the reporting period requirement was set at within three days of harvest. However, after several years, WRST learned that the remote location for this hunt resulted in few permits being issued. Therefore, permits are issued on a first-come, first-served basis, and WRST has not exercised its authority to limit the number of permits issued (Celarius 2022, pers. comm.).

Between 2012 and 2021, only eight permits have been issued per year on average, a total of fourteen Chisana caribou have been taken, and success rates have averaged < 35% per year (**Table 3**, FWS 2022). For the 2022 season, the WRST superintendent issued an Emergency Special Action setting the harvest quota to zero due to the 3-year rolling calf:100 cow ratio dropping to 14 calves:100 cows (Bobowski 2022). The threshold set in the CCH Management Plan guidelines for harvest is 15 calves:100 cows.

Table 3. Summary of the Chisana caribou harvest in the southeast portion of Unit 12 (FC1205) (FWS 2022).

Year	Permits Issued (FC1205)	Individuals Hunting (Permits used)	Caribou Harvest	Success Rate (%) ^a
2012	9	8	2	25.0
2013	9	7	3	42.9
2014	11	8	2	25.0
2015	11	7	0	0
2016	8	8	1	12.5
2017	9	3	0	0
2018	6	2	2	100.0
2019	4	3	1	33.3
2020	7	4	3	75
2021	5	1	0	0
2022 ^b	0	0	0	0
2023	6			

^a Success rate is calculated based on the number of individuals hunting, not total permits issued.

^b Hunt was closed for the entire 2022 season.

Effects

The CCH population has remained low with poor composition metrics. In 2022 an emergency special action set the harvest quota at zero due to low calf:cow ratios, effectively closing the 2022 hunt. Sustainable harvest is already relatively low under the current closure to caribou harvest by non-federally qualified users. Rescinding the closure would increase harvest opportunities for non-federally qualified users, but could lead to unsustainable harvest levels if the State opened a drawing permit hunt.

Retaining status quo for this closure would continue to provide for subsistence harvest opportunity when herd metrics allow for a sustainable harvest. Retaining status quo would also protect the CCH from overharvest and continue to provide management flexibility and the ability to quickly respond to changing herd conditions by maintaining the WRST Superintendent's delegated authority to open and close the season, and to announce the harvest quota, the number of permits issued, and the reporting period.

The closure could be modified to include all user groups. This would eliminate all hunting pressure on the CCH within the closure area. However, this would also preclude subsistence harvest opportunity by removing the WRST Superintendent's ability to announce harvest quotas and issue permits to federally qualified subsistence users when the CCH meets the criteria outlined in the CCH Management Plan guidelines for harvest.

OSM CONCLUSION:

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

Justification

While the 2022 CCH hunt was closed due to conservation concerns, the WRST Superintendent has Delegated Authority to open and close the season, and to announce the harvest quota, the number of permits issued and the reporting period. Thus, allowing flexibility for in-season management based on the current status of the herd optimizes subsistence hunting opportunity and conservation of the CCH. This is also consistent with recommendations and management guidelines in the CCH Management Plan (Chisana Caribou Herd Working Group 2012).

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

The Council voted to **retain the status quo**. The Council stated that the closure is working well as it currently exists. There is no additional harvestable surplus right now that would support expanding the number of users eligible to harvest.

Eastern Interior Alaska Subsistence Regional Advisory Council

The Council voted to **retain the status quo**. The Council concurred with the justifications provided by the Wrangell-St. Elias Subsistence Resource Commission and noted that conservation concerns warrant maintaining the closure.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

No comment.

WRITTEN PUBLIC COMMENTS

Wrangell-St. Elias National Park Subsistence Resource Commission

P.O. Box 439
Mile 106.8 Richardson Hwy.
Copper Center, AK 99573

March 1, 2023

Anthony Christianson, Chair
Federal Subsistence Board
U.S. Fish and Wildlife Service
Office of Subsistence Management
1011 E. Tudor Road, MS-121
Anchorage, AK 99503

Subject: Comments on Wildlife Closure Reviews for Caribou in Unit 12

Dear Mr. Christianson:

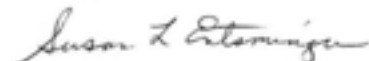
The Wrangell-St. Elias National Park Subsistence Resource Commission (SRC) met in Copper Center, Alaska, on February 23, 2023. The commission is a federal advisory committee that represents subsistence users of federal lands within Wrangell-St. Elias National Park and Preserve. At this meeting, the SRC reviewed two wildlife closure reviews for caribou in Unit 12 and would like to provide the following comments.

WCR24-35 Portion of Unit 12 closed to caribou hunting by non-federally qualified subsistence users (Chisana caribou). The Wrangell-St. Elias National Park Subsistence Resource Commission unanimously supported maintaining the closure. With the low calf population, there is justification for only having the area open to federal users. The Wrangell-St. Elias superintendent has a delegation of authority to manage the federal hunt if needed. Authorizing state harvest would increase competition.

WCR24-42 Portion of Unit 12 closed to caribou hunting by all users (Mentasta caribou). The Wrangell-St. Elias National Park Subsistence Resource Commission unanimously supported maintaining the closure. There is a conservation concern for the Mentasta caribou herd due to the low population numbers.

Thank you for the opportunity to comment.

Sincerely,



Susan L. Entsminger
Chair

Chair: Susan L. Entsminger; Members: Mike Christenson, Mike Cronk, Don Horrell, Suzanne McCarthy, Kaleb Rowland, Daniel E. Stevens, and Gloria Stickwan

cc: Superintendent, Wrangell-St. Elias National Park and Preserve
Eastern Interior Alaska Subsistence Regional Advisory Council
Southcentral Alaska Subsistence Regional Advisory Council

Chair: Susan L. Entsminger; Members: Mike Christenson, Mike Cronk, Don Horrell, Suzanne McCarthy, Kaleb Rowland, Daniel E. Stevens, and Gloria Stickwan



Ahtna Intertribal Resource Commission

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www.ahtnaitribal.org
connect@ahntnaitribal.org

June 30, 2023

Federal Subsistence Board
Office of Subsistence Management
Attn: Theo Matuskowitz
1011 E. Tudor Rd, MS-121
Anchorage, AK 99503-6199

Submitted to: subsistence@fws.gov

Re: Written comments on WP24-09 and Federal Wildlife Closure Reviews WCR24-35 and WCR 24-42

Dear Chairman Anthony Christianson:

The Ahtna Intertribal Resource Commission (AITRC) serves the eight Federally recognized Tribal governments and the two Alaska Native Corporations within the Ahtna Territory, including portions of Game Management Units 11, 12, and 13.

WP24-09 Nelchina Caribou Herd Delegation of Authority Changes and Changes in Harvest Limit

AITRC supports Wildlife Proposal 24-09 submitted by the Bureau of Land Management's Glennallen Field Office. This proposal would (1) relocate the current delegated authority found in unit-specific caribou hunting regulations to the Delegation of Authority Letter, (2) expand the Scope of Glennallen Field Office Manager's Delegated Authority, and (3) revise the harvest limit from "2 caribou" to "up to 2 caribou," given the ongoing conservation concerns associated with the Nelchina Caribou Herd.

Relocating the delegation authority language from harvest regulations to the Delegation Letter seems to be a matter of housekeeping and consistency, which AITRC supports. We also support AITRC being specifically listed in the Delegation of Authority Letter to further advance the cooperative federal management partnership between AITRC and the US Department of the Interior in 2016.

AITRC agrees with the proponent of WP24-09 that the scope of the Federal In-Season Manager should be expanded to including closing, opening, and adjusting season dates, as well as setting harvest limits, including any sex restrictions or to set any needed permit condition. These are important management tools that the BLM Field Office Manager should have available to

Titus

respond to fluctuating Nelchina Caribou Herd population dynamics and any potential conservation crisis. Existing authorities found in the harvest regulations are inadequate to support responsible conservation management and to ensure the continuation of Federal subsistence uses when possible, during periods of conservation concern.

AITRC also supports, albeit reluctantly, the requested revision of the harvest limits for Nelchina caribou from 2 caribou to "up to 2 caribou" for times of conservation concern given the reconnection that the population status may not support a bag limit of two animals and that in order to continue Federal subsistence uses, it may be necessary to limit the harvest limit to one bull caribou until such time that the herd's population is rebuilt to be within management objective.

Chisana Caribou Herd Wildlife Closure Review WCR24-35

Federal public lands are closed to the harvest of Chisana caribou except by Federally qualified subsistence users. Presently, the hunting of Chisana caribou is limited to the Federally qualified rural residents of Unit 12, Chistochina, Dot Lake, Healy Lake, and Mentasta Lake.

AITRC supports the continuation of the closure of caribou hunting of the Chisana Caribou Herd to all but federally qualified subsistence users. Given the small size of the Chisana caribou population and the negative customary and traditional use determination established by the Alaska Board of Game, it would be detrimental to Federal subsistence uses to open up caribou hunting to sport and recreational hunters at this time.

Mentasta Caribou Herd Wildlife Closure Review WCR24-42

All hunting of the Mentasta Caribou Herd is prohibited on Federal public lands. However, in 2022, the Federal Subsistence Board approved WP22-35, as amended, which established a may be announced Federal subsistence hunt in Game Management Unit 11 for bull caribou when Nelchina caribou are present in sufficient abundance to warrant an opportunity. While the present population status of the Nelchina Caribou Herd may be insufficient to support a limited federal subsistence hunt within the range of the Mentasta Caribou Herd at this time, AITRC supports a revision of the current Wildlife Closure of caribou hunting in Unit 11 to allow for this newly established "May be announced" hunt.

Sincerely,


Karen Linnell
Executive Director AITRC

WCR24-42 Executive Summary	
General Description	Wildlife Closure Review WCR24-42 reviews the closure to caribou hunting by all users in the southwestern portion of Unit 12. The closure targets the Mentasta Caribou Herd and applies to all users.
Current Regulation	<p style="text-align: center;">Unit 12–Caribou</p> <p style="text-align: center;"><i>Unit 12, remainder – Residents and Nonresidents.</i> <i>No Federal open season</i></p>
OSM Conclusion	Retain the Status Quo
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	Retain the Status Quo
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	Retain the Status Quo
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.
ADF&G Position	Retain the Status Quo
Written Public Comments	1 Support, 1 Modify the closure

FEDERAL WILDLIFE CLOSURE REVIEW WCR24-42

Issue: Wildlife Closure Review WCR24-42 reviews the closure to caribou hunting by all users in the southwestern portion of Unit 12. The closure targets the Mentasta Caribou Herd and applies to all users.

Closure Location and Species: Unit 12, that portion within the Wrangell-St. Elias National Park that lies west of the Nabesna River and the Nabesna Glacier – Caribou (**Map 1**).

Current Federal Regulation

Unit 12–Caribou

Unit 12—that portion within the Wrangell-St. Elias National Park and Preserve¹ that lies west of the Nabesna River and the Nabesna Glacier. *No Federal open season*

All hunting of caribou is prohibited on Federal public lands.

¹The Code of Federal Regulations (CFR) only includes Wrangell-St. Elias (WRST) National Park in this regulation and not WRST National Preserve. This is an error that will be corrected administratively as soon as possible.

Closure Dates: Year-round

Current State Regulation

Unit 12 –Caribou

Unit 12, remainder – Residents and Nonresidents *No open season*

Regulatory Year Initiated: 1993

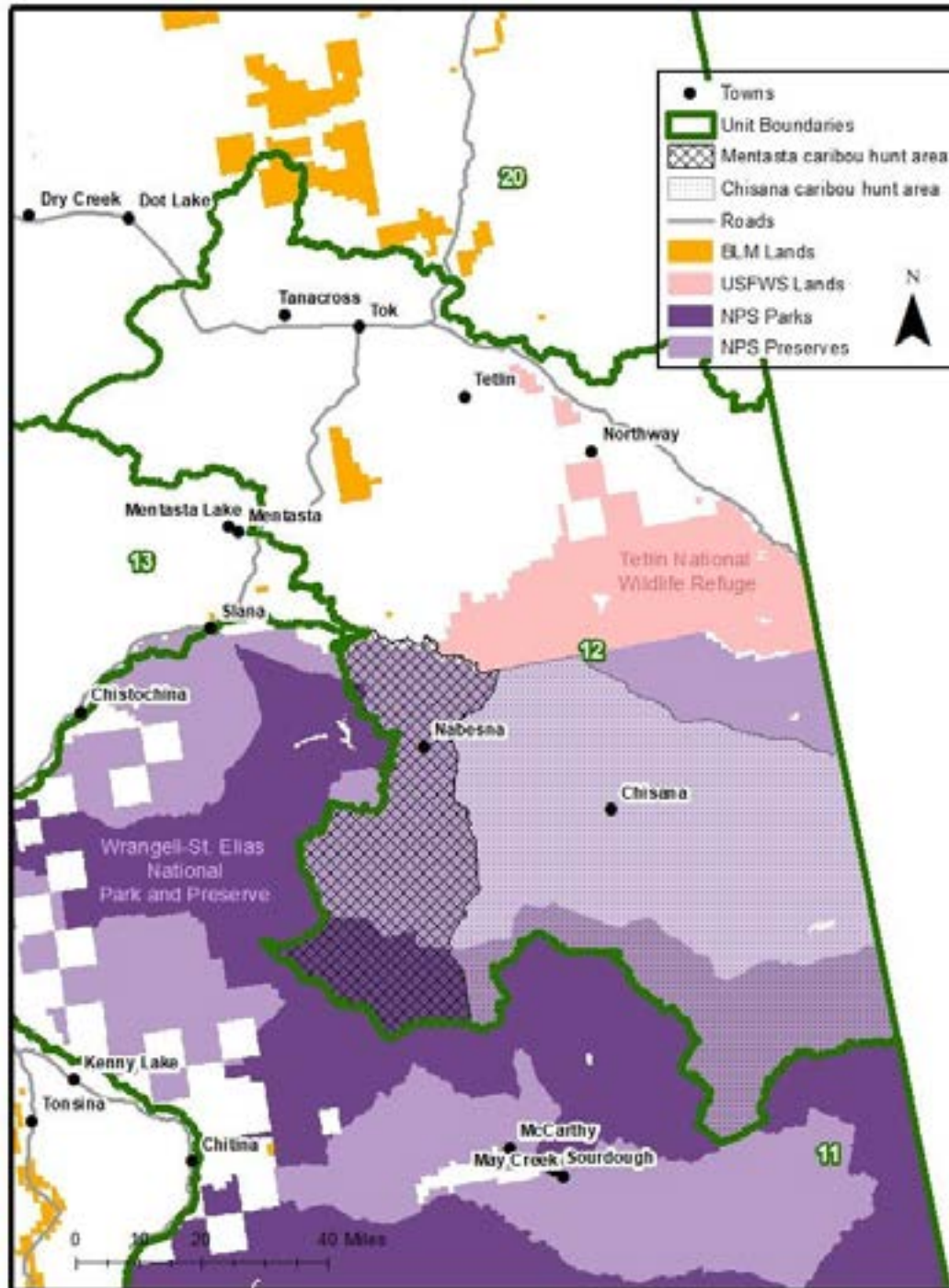
The original closure was for: *that portion west of the Nabesna River within the drainages of Jack Creek, Platinum Creek, and Totschunda Creek - The taking of caribou is prohibited on public lands.*

Extent of Federal Public Lands

Federal public lands comprise approximately 61% of Unit 12 and consists of 48% National Park Service (NPS) managed lands, 11% U.S. Fish and Wildlife Service managed lands (FWS), and 2%

Bureau of Land Management (BLM) managed lands.

Federal public lands comprise nearly 100% of the closure area and consist 100% of NPS managed lands (Map 1).



Map 1. Federal closure for caribou in Unit 12. The cross-hatched area targets the Mentasta caribou herd and is closed to all users. The stippled area targets the Chisana caribou herd and is closed to non-Federally qualified users.

Customary and Traditional Use Determination

Residents of Unit 12, Chistochina, Dot Lake, Healy Lake, and Mentasta Lake have a customary and traditional use determination for caribou in Unit 12.

Under the guidelines of Alaska National Interest Lands Conservation Act (ANILCA), National Park Service regulations identify qualified local rural subsistence users in National Parks and National Monuments by: (1) identifying Resident Zone Communities that include a significant concentration of people who have customarily and traditionally used subsistence resources on park lands; and (2) identifying and issuing subsistence use (13.440) permits to individuals residing outside of the Resident Zone Communities who have a personal or family history of subsistence use within the park or monument.

Wrangell-St. Elias National Park has 23 resident zone communities: Chisana, Chistochina, Chitina, Copper Center, Dot Lake, Gakona, Gakona Junction, Glennallen, Gulkana, Healy Lake, Kenny Lake, Lower Tonsina, McCarthy, Mentasta Lake, Nabesna, Northway, Slana, Tazlina, Tanacross, Tetlin, Tok, Tonsina, and Yakutat.

Regulatory History

In 1991, two hunt areas were identified in the Federal subsistence hunting regulations for caribou in Unit 12. For Unit 12 west the Nabesna River within the drainages of Jack Creek, Platinum Creek and Totschunda Creek, the regulations were one bull by Federal registration permit with a quota of up to 50 bulls in Units 11 and 12 combined and a season of Aug. 10 to Sept. 30. For Unit 12 remainder the regulations were one bull from Sept. 1-20 and one caribou during a to-be-announced winter season for residents of Tetlin and Northway only as they had a customary and traditional use determination for the Nelchina Caribou Herd (NCH) in Unit 12 (OSM 1991a). Dates for the September season in the remainder have remained unchanged since then; however, some of the area was subsequently closed to the harvest of caribou due to conservation concerns.

Also in 1991, the Federal Subsistence Board (Board) approved Special Action Requests S91-05 and S91-08. Special Action S91-05 opened the winter caribou hunt in Unit 12 remainder on Oct. 28 (OSM 1991b) and S91-08 closed it on Dec. 9 after subsistence needs had been met (OSM 1991c).

In 1992, the Board rejected Proposals P92-105 (OSM 1992a) and P92-106 (OSM 1992b) due to biological concerns. Proposal P92-105 requested eliminating the to-be-announced winter caribou season in Unit 12 remainder and Proposal P92-106 requested lengthening the fall caribou season in Unit 12 remainder from Sept. 1-20 to Aug. 20-Sept. 20. The Board determined that there was no biological reason to eliminate the winter hunt and that extending the September hunt could impact the declining Mentasta Caribou Herd (MECH) and jeopardize the more popular winter hunt.

Also in 1992, the Board adopted Proposal P92-107, which changed the harvest limit for the winter caribou season in Unit 12 remainder from one caribou to one bull in order to protect the declining MECH, which mixes with the NCH in Unit 12 during the winter (OSM 1992c).

In 1993, the Board adopted Proposal P93-034 to close all of Unit 11 and the area in Unit 12 west of the Nabesna River within the drainages of Jack Creek, Platinum Creek, and Totschunda Creek to caribou hunting to protect the declining MECH (OSM 1993). There has been no Federal open season and Federal public lands have remained closed to all users since 1993 for Unit 12 west of the Nabesna River and Nabesna Glacier.

In 1994, the caribou hunt areas in Unit 12 were split from two areas: 1) Unit 12, that portion lying west of the Nabesna River within the drainages of Jack, Platinum, and Totschunda creeks and 2) Unit 12-remainder, to three hunt areas: 1) Unit 12 west of the Nabesna River within the drainages of Jack, Platinum, and Totschunda creeks, 2) Unit 12, that portion lying east of the Nabesna River and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border, and 3) Unit 12-remainder (OSM 1994). In 1994, the Board also adopted Proposal P94-71, which closed the area east of the Nabesna River to the Canadian border to the harvest of caribou to protect the declining Chisana Caribou Herd (CCH) (OSM 1994). The closure for the MECH remained in effect for the area west of the Nabesna River.

In 2000, the areas previously designated west and east of the Nabesna River were combined into one hunt area via adoption of Proposal P00-59. This combination of hunt areas was because 1) the winter ranges of the Mentasta and Nelchina herds overlap and 2) with the popularity of the Nelchina herd, additional regulations prohibiting the taking of caribou in the proposal area are necessary to protect the Mentasta herd (OSM 2000):

The entire area remained closed to caribou hunting under Federal subsistence regulations until 2012. In 2012, the Board considered Proposals WP10-104 and WP12-65/66, which all requested establishing hunts for the CCH (OSM 2012a). WP12-66 requested restricting the hunt to Federal public lands in Unit 12 east of the Nabesna River and the Nabesna Glacier. OSM noted in its justification for WP12-66 that restricting the CCH hunt to this area would protect the MECH with minimal impact to subsistence hunters wanting to harvest caribou from the CCH (OSM 2012a). The Board took no action on WP10-104 and WP12-65 and adopted WP12-66 with modification, resulting in the areas west and east of the Nabesna River once again being divided into two hunt areas (OSM 2012a): 1)

Unit 12 – that portion within the Wrangell-St-Elias National Park and Preserve that lies west of the Nabesna River and the Nabesna Glacier, and 2)

Unit 12 – that portion east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border.

Also in 2012, the Board adopted Proposal WP12-68, submitted by the Cheesh'na Tribal Council, which requested the residents of Chistochina be added to the Unit 12 caribou customary and traditional use determination (OSM 2012b).

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

In 2020, the Board voted to maintain status quo for Closure Review WCR20-42 due to continued conservational concerns. This closure review was a combined review of the closure targeting the MECH in the southwestern portion of Unit 12 and the closure targeting the CCH in the southeastern portion of Unit 12.

In 2022, the Board adopted Proposal WP22-35 with modification. Proposal WP22-35 requested establishing a may-be-announced caribou season in Unit 11 with a harvest limit of one bull by Federal registration permit. The modification was to delegate authority to the Wrangell-St. Elias National Park and Preserve (WRST) Superintendent to announce season dates, harvest quotas, and the number of permits to be issued; to define harvest areas; and to open and close the season in Unit 11 via a delegation of authority letter only. The intent of this proposal was to increase hunting opportunities for Federally qualified subsistence users when Nelchina caribou migrate through Unit 11, while protecting the MECH. The modification provided for timely in-season management, mitigating impacts on the MECH while allowing for subsistence hunting when Nelchina caribou are present.

Closure last reviewed: 2020 – WCR20-42

Justification for Original Closure:

Section §816(b) of ANILCA states:

Except as specifically provided otherwise by this section, nothing in this title is intended to enlarge or diminish the authority of the Secretary to designate areas where, and establish periods when, no taking of fish and wildlife shall be permitted on the public lands for reasons of public safety, administration, or to assure the continued viability of a particular fish or wildlife population.

The Board adopted Proposal P93-034, which established the closure because it was necessary to assure the Mentasta herd's continued viability. The available biological data clearly demonstrated that the MECH was of great conservation concern due to severe population declines, poor calf survival, and potential overharvest. The Board stated that the regulation would clarify that public lands are closed to all caribou hunting in Unit 11 and a portion of Unit 12 (OSM 1993).

Council Recommendation for Original Closure:

This closure was initiated prior to the establishment of the Federal Subsistence Regional Advisory Councils.

State Recommendation for Original Closure:

ADF&G supported the closure because the State season for Mentasta caribou in this area had been closed for several years (OSM 1993). From 1985-1992, the MECH decreased from a peak population of 3,100 caribou to 1,300 and the fall calf:cow ratio had fallen below the threshold level required to balance the mortality of the adults ($\approx 15\%$) during the previous 2-3 years. The near total reproductive failure in 1991 and 1992 resulted in the population age structure being skewed towards the older age classes, which generally results in delayed recovery (OSM 1993).

The MECH is subject to unknown harvest when it mixes with the NCH during the winter. In addition, the extent of the illegal harvest is unknown, but considering the number of small rural communities they pass through during migration, it is likely high. Thus, the potential for over-harvest of this small herd is high. Thus, closing the subsistence hunt on the MECH was necessary to assure the herd's continued viability (OSM 1993).

Biological Background

The ranges of the Mentasta, Chisana, and Nelchina caribou herds overlap in Unit 12 (**Map 2**). The MECH occurs primarily in the western and northern portion of Unit 12 (Unit 12, remainder and Unit 12, southwest) and the northern portion of Unit 11 within WRST. The MECH disperses across Unit 12 and southern Unit 20E in winter, often intermingling with the NCH (MECH Mgmt. Plan 1995).

While the NCH and MECH are considered distinct herds because females calve in separate areas, the herds mix during some breeding seasons, resulting in male-mediated gene flow (Roffler et al. 2012). Therefore, the Nelchina and Mentasta herds function as a genetic metapopulation, although Nelchina and Mentasta cows have discrete mitochondrial DNA (Roffler et al. 2012).

The NCH was declining and at the lower end of the State population objectives in 2018 (ADF&G 2018, Hatcher 2018, pers. comm.). In 2022, the NCH population had dropped to 21,000 caribou, well below the lower end of the State's fall population objective of 35,000 to 40,000 Nelchina caribou. Multiple Nelchina caribou hunts were closed early by Emergency orders (04-02-22, 04-03-22, 04-06-22, and 04-08-22) due to harvest quotas being reached quickly (ADF&G 2022) However, since this closure targets the MECH and is not associated with the NCH, the NCH is not considered further in this analysis.

The CCH is a shared population between Alaska and Southern Yukon Territory, Canada. Since this international herd ranges across multiple jurisdictions, multiple land agencies are involved and responsible for the management of the CCH. In Alaska the CCH occurs primarily on Federal public

lands within the WRST, although there is some overlap with Tetlin National Wildlife Refuge (NWR) and adjacent State lands. In the Yukon Territory, the CCH ranges within the boundaries of Kluane Wildlife Sanctuary and Asi Keyi Natural Environmental Park. Since the overlap between the CCH and MECH is minimal, the CCH is considered in a separate analysis (WCR24-35).

The MECH calves and summers within the upper Copper River Basin and the northern and western flanks of the Wrangell Mountains (OSM 2018). The calving grounds for the MECH are located in northern Unit 11 within WRST (MECH Mgmt. Plan 1995, **Map 2**). Barten et al. (2001) found that parturient cows from the Mentasta herd used birth sites that lowered the risk of predation and traded-off forage abundance for increased safety. Minimizing risk of predation of neonates may result in ungulates selecting habitats that compromise their ability to optimize foraging (Bowyer et al. 1999, Barten et al. 2001). Female Mentasta herd caribou used sites at higher elevations with sub-optimal forage, presumably to avoid predators, and, when <10 day old neonates were lost, females descended from the higher elevations to join other non-parturient females. In addition, females with neonates >10 days old also descended to join the larger group of females, which coincides with moving out of the riskiest period of predation on ungulate neonates (Adams et al. 1995a).

In 1995, Federal and State biologists completed the Mentasta Herd Cooperative Management Plan, which specifies the following management objectives (MECH Mgmt. Plan 1995):

- To the extent possible, allow for human harvest that will have minimal effects on the production, composition, and abundance of Mentasta caribou.
- To provide harvest priority to Federally-eligible subsistence users and to allow State authorized hunting to occur whenever possible.
- To monitor the herd demographics and harvest such that all pertinent data on the health of the herd are collected and disseminated to all agencies and citizens concerned with their management.

The MECH Management Plan (1995) states “an annual fall harvest quota will be established between 15 and 20 percent of the previous 2-year mean calf recruitment as long as such recruitment is at least 80 calves. In addition, at population levels below 2,000 the harvest limit will be limited to “bulls only” and will be closed if the 2-year mean bull:cow ratio drops below 35 bulls:100 cows.” When fall annual quotas are greater than 70 both non-Federally and Federally qualified users are allowed to hunt the MECH during the fall season. When the fall annual quota falls below 70, only Federally qualified subsistence users are allowed to hunt the MECH during the fall season. If it is below 30, a §804 analysis will determine the allocation of permits among the Federally qualified subsistence users.

Since 2000, managers at Tetlin NWR have used a 20:1 mixing ratio of Nelchina caribou to Mentasta caribou as the minimum threshold for considering winter season openings. The Tetlin NWR monitors the location and movement of radio-collared Mentasta and Nelchina caribou through aerial surveys. This information is used to determine a reliable mixing ratio with the NCH. In 2016 and 2017 the number of active collars in the MECH declined to 10, which was too few to adequately determine a

reliable mixing ratio with the NCH. In 2018-19, staff from the WRST and ADF&G deployed an additional 20 GPS/Satellite radio-collars in the MECH (Putera 2021, pers. comm.). ADF&G has also deployed several GPS/Satellite collars in the NCH.

The MECH population declined from an estimated 3,160 caribou in 1987 to an estimated 495 caribou in 2021 (**Table 1**). The fall population estimate in 2020 was 1,150 caribou; however, the increase from 479 caribou in 2019 is not explained by calf production the previous year but may be due in part to Nelchina caribou returning late from their winter range. Some of these late returning caribou may have failed to migrate back to their traditional calving grounds, remaining within the Mentasta summer range. This theory is supported by the presence of three radio-collared Nelchina caribou in the Mentasta caribou summer range in 2020. The number of caribou observed during the Mentasta caribou survey in June 2021 dropped back to levels observed in 2019, further supporting the temporary presence of Nelchina caribou in the Mentasta caribou summer range in 2020. However, one radio collared Nelchina cow was present during the 2021 June census (Putera 2021, pers. comm.).

The extremely low calf:cow ratios of 2-6 calves: 100 cows from 1991-1993 (OSM 1992d) resulted in a complete failure of fall recruitment of young in the MECH (Jenkins and Barton 2005). Dale (2000) postulated that this may have been due to poor body condition from poor forage quality in the summer. Poor forage quality in the summer can cause cow caribou to skip a breeding season to regain body condition due to being nutritionally stressed. The resulting decrease in body condition in female caribou can have a negative effect on productivity by causing lower weight gain or survival in calves (Crete and Huot 1993, Dale 2000).

Between 1990 and 1997, Jenkins and Barten (2005) confirmed predation, particularly by gray wolves and grizzly bears, as the proximate cause of the MECH population decline. Grizzly bears were the most important predators of neonates, and gray wolves mostly preyed on older juvenile caribou in the MECH. The combined predation by bears and wolves was 86% during the neonate and summer periods. In comparison, predation of calves in the Denali Caribou Herd from 1984 to 1987 by wolves and bears was only 53% (Adams et al. 1995b). Factors such as the timing of birth and habitat at the birth site, particularly snow patterns, affected the vulnerability and survival of neonates, and birth mass affected the survival of juveniles through summer (Jenkins and Barten 2005). The MECH declined at the greatest rate from 1990-1993 compared to 1994-1997. Winter severity was postulated to decrease the birth mass of neonates and, thus, the survival and vulnerability of neonates and juveniles (Jenkins and Barton 2005).

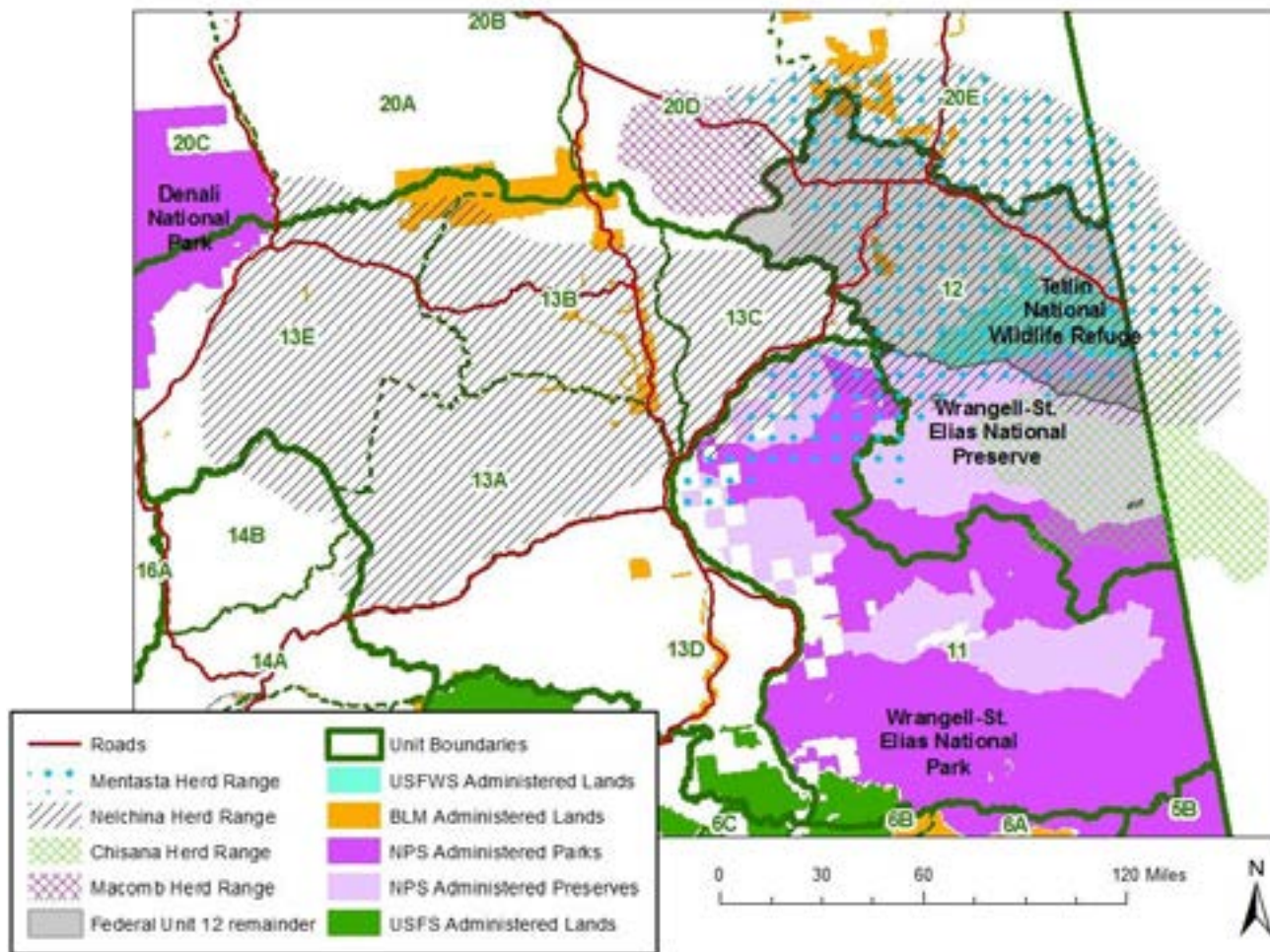
The MECH population has remained stable at relatively low levels since 2000 as evidenced by low calf productivity (barring the anomalous 2020 population estimate) (Putera 2021, pers. comm.). Between 2000 and 2022, June and fall calf:cow ratios fluctuated ranging from 1-38

calves:100 cows and 0-34 calves:100 cows, respectively (**Table 1**, OSM 2018). Low calf production and survival and high cow mortality from 1987-2009 were the primary causes for the population declines in the MECH. The number of cows observed during the fall surveys declined from 2,065 in 1987 to 54 in 2016 (OSM 2012b).

Between 1987 and 2021, the bull:cow ratio has fluctuated widely (Putera 2019, Putera 2021, pers. comm.), ranging from 35-142 bulls:100 cows and averaging 66 bulls:100 cows. Fall surveys conducted within the same 23-year period also revealed severe declines in total observed Mentasta bulls from 847 bulls in 1987 to 40 bulls in the fall 2011 survey. Since 2011, the number of Mentasta bulls has slightly rebounded to 78 bulls observed in the fall 2021 survey (**Table 1**). Although observed fall bull:cow ratios appear high, the number of cows observed is small and the bull component likely includes a significant number of Nelchina bulls. While Nelchina bulls have wintered within the range of the Mentasta herd (OSM 2018), the range of the Nelchina herd has varied widely due to burns and their effect on lichen availability within the Nelchina herd's traditional area (Collins et al. 2011). Thus, there is limited ability to predict the extent or frequency of mixing between Nelchina and Mentasta bulls, and it is impossible to discern whether the harvest of a bull would be from the Nelchina or Mentasta herd.

Higher numbers of adult bulls in the population are important as it helps maintain synchrony in parturition. Holand et al. (2003) showed that skewed sex ratios and an increased proportion of young bulls in populations of reindeer could result in fewer adult females conceiving during their first estrous cycle due to their hesitation to mate with young bulls. Maintaining synchrony in parturition also provides increased survival chances for calves since parturition is typically timed with the start of plant growth (Bergerud 2000). Late-born offsprings have been shown to have lower body mass than caribou offspring produced earlier in the season (Holand et al. 2003), which can lead to lower juvenile survival rates due to density dependent factors of winter food limitation (Skogland 1985) and deep snows (Bergerud 2000).

The term ecotype designates populations of the same species that evolved different demographic and behavioral adaptations to cope with specific ecological constraints. The MECH is considered a sedentary and low-density ecotype (Bergerud 1996, Hinkes et al. 2005) versus a migratory and high-density ecotype, such as the Nelchina herd, and is thus more susceptible to extreme random events. A key factor in distinguishing between two ecotypes is whether animals are dispersed or aggregated when young are born (Seip 1991, Bergerud 2000). The chronic low calf productivity and recruitment of the MECH could make random environmental events a primary driver for a more severe population decline (Tews et al. 2006). Increased winter mortality due to icing events may result in malnutrition and starvation for more susceptible calves as well as for bulls with depleted energy reserves following the rut (Dau 2011, Miller and Gunn 2003). Bull caribou die at a higher rate than cows due to greater energy demands during early winter rutting activities, which greatly reduce their body reserves (Russell et al. 1993, Miller and Gunn 2003).



Map 2. Ranges of the Nelchina, Mentasta, Macomb, and Chisana caribou herds.

Table 1. Population size and composition of the Mentasta caribou herd (OSM 2012b, 2018, 2020; FWS 2018, Putera 2019, Putera 2021, pers. comm.).

Year	June Calves: 100 Cows ^a	Fall Cows	Fall Calves	Fall Bulls	Fall Calves: 100 cows	Fall Bulls: 100 cows ^b	Fall Population Estimate ^c
1987	18	2065	248	847	12	41	3,160
1988	34	1540	277	662	18	43	2,480
1989	31	1615	727	258	16	45	2,600
1990	-	-	-	-	-	-	-
1991	3	1347	27	566	2	42	1,940
1992	16	973	58	399	6	41	1,430
1993	9	683	27	260	4	38	970
1994	19	591	65	224	11	38	880
1995	26	541	119	189	22	35	850
1996	16	534	59	187	11 ^d	35 ^d	780

Year	June Calves:100 Cows ^a	Fall Cows	Fall Calves	Fall Bulls	Fall Calves: 100 cows	Fall Bulls: 100 cows ^b	Fall Population Estimate ^c
1997	15	432	23	159	5	40	610
1998	13	350	35	150	10	42	540
1999	13	230	22	177	10	77	430
2000	1	297	0	175	0	59	470
2001	11	228	12	150	5	66	586 ^g
2002	21	190	55	86	29	45	410 ^g
2003	17	223	38	101	16	46	522 ^g
2004	8	-	-	-	5 ^e	-	293 ^f
2005	23	113	17	78	15	69	261
2006	-	66	20	51	30	77	-
2007	23	93	27	72	29	77	280
2008	14	89	18	65	20	73	319 ^h
2009	12	79	8	68	10	86	421 ^h
2010	25	88	22	106	25	120	336 ^h
2011	-	101	29	40	29	40	
2012	-	58	20	49	34	84	-
2013	38	88	20	68	23	77	512
2014	-	-	-		-	-	-
2015	-	60	20	44	33	73	-
2016	-	54	18	77	33	142	-
2017	11	91	18	79	18	87	389
2018		72	16	66	22	92	470
2019		113	29	100	26	95	479
2020	6	98	18	75	18	77	1150
2021	12	100	14	78	14	78	495

^a Includes small bulls that are indistinguishable from cows during fixed-wing flights.

^b Observed high bull:cow ratios likely due to presence of Nelchina bulls.

^c Population estimates between 2008 and 2017 are based on a June census of cows corrected for sightability, the fall calf:cow ratio, and a fall ratio of 30 bulls:100 cows.

^d 1996 fall composition count was not conducted, because of early mixing with the NCH. Fall calf/cow was estimated from postcalving calf/cow ratio and survival radio-collared cows (0.70; 30 June – 30 September).

^e 2004 Fall composition count was not conducted due to budget restraints. Fall calf/cow ratio estimated from post-calving calf:cow ratio and average (1987-2003) calf survivorship (0.63).

^f 2004 population estimate is based on extrapolation from June census, adjusted for average calf survivorship and average bull ratios.

^g September population estimates are adjusted based on sightability probabilities.

^h September population estimates are adjusted based on sightability probabilities and assuming a ratio of 30 bulls: 100 cows within the MECH to adjust for mixing with the NCH.

Harvest History

There has been no Federal open season since 1993 for the area west of the Nabesna River and Nabesna Glacier in Unit 12. In Unit 11, there was a small Federal subsistence harvest from 1996–1998 due to MECH management objectives being met for calf production and recruitment (MECH Cooperative Management Plan 1995). Harvest in the 1996/97 season was one caribou with 15 permits issued. In the 1997/98 season, 12 permits were issued but no caribou harvest was reported. There has been no reported harvest from the MECH since 1998 as both State and Federal seasons have remained closed. However, some incidental harvest of Mentasta caribou may take place during winter hunts targeting the Nelchina and Forty-mile Caribou Herds in Unit 12, remainder. While the MECH Management Plan does not specify an appropriate mixing ratio, the 20:1 ratio has been used as the minimum threshold for considering winter season openings by the Federal in-season managers since at least 2000 (OSM 2000). The MECH Management Plan suggests that incidental harvest of Mentasta caribou is usually minimal (MECH Management Plan 1995). In 2012, the Board excluded the area west of the Nabesna River and Nabesna Glacier to protect the MECH when it established a Federal registration hunt for the CCH in Unit 12 east of the Nabesna River and Nabesna Glacier and south of the Winter Trail (OSM 2012a). The caribou hunt established in 2022 in Unit 11 may also result in incidental harvest of Mentasta caribou, if announced, although the hunt was designed to mitigate harvest from the MECH.

Other Alternatives Considered

One alternative considered is to delegate authority to the WRST Superintendent to announce season dates, harvest quotas, and the number of permits to be issued; to define harvest areas; and to open and close the season for caribou on Federal public lands in the southeastern portion of Unit 12, similar to the may-be-announced caribou hunt just established in Unit 11 via adoption of Proposal WP22-35. The location, timing and numbers of the NCH mixing with the MECH varies year-to-year and in some years Nelchina caribou do not mix with the MECH. Granting delegated authority to the WRST Superintendent would allow harvest and seasons to reflect when the NCH is present and allow use of the most current biological data to minimize incidental harvest of Mentasta caribou, while providing for subsistence opportunity. This would also align the eastern portion of WRST in Unit 12 with the recent changes in the western portion of WRST in Unit 11.

Delegating authority to define harvest areas would facilitate opening areas of WRST to harvest where the caribou present are primarily from the Nelchina herd, while avoiding areas with concentrated numbers of Mentasta caribou.

However, this is outside of the scope of a closure review and would require a proposal be submitted.

Effects

The MECH remains at very low numbers and any harvest from the herd would be of conservation concern. If the closure is rescinded, then all users could hunt caribou in this area. However, proposals would need to be submitted and adopted to establish hunts as State and Federal seasons are both

currently closed. Similarly, if the closure were modified to open to Federally qualified subsistence users only, there'd be potential for increased harvest opportunity, but a proposal to the Board would be needed to establish a hunt. If the status quo is retained, then hunting pressure on the MECH, which is still of a great conservation concern, would continue to be minimized.

OSM CONCLUSION

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

Justification

The MECH population remains low despite a moratorium on hunting since 1993, and no harvestable surplus is available. The closure should be retained to protect the MECH and remains necessary to assure its continued viability.

Opportunity to harvest Nelchina caribou in this hunt area may be possible if reliable mixing ratios can be determined and authority is delegated to a Federal manager to allow for flexible and timely in-season hunt management. However, that option is beyond the scope of this closure review.

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SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

The Council voted to **retain the status quo**. The Council believes the closure should be maintained due to conservation concerns.

Eastern Interior Alaska Subsistence Regional Advisory Council

The Council voted to **retain the status quo**. The Council concurred with the justification provided by the Wrangell-St. Elias Subsistence Resource Commission who noted that low population numbers warrant maintaining the closure.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the closure and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Alaska Department of Fish and Game Comments

Wildlife Closure WCR 24-42

This is the routine review of the current closure to all users for the Mentasta caribou herd (MECH) in southwest Game Management Unit (Unit) 12.

Position

ADF&G SUPPORTS the closure remaining in place. The Mentasta caribou herd has not met the metrics required to allow harvest, per the inter-agency management plan developed in 1995.

Background

In 1993, the Board adopted Proposal P93-034 to close the area west of the Nabesna River within the drainages of Jack Creek, Platinum Creek, and Totschunda Creek to caribou hunting to protect the declining Mentasta Caribou Herd population (OSM 1993). There has been no federal open season since 1993 for Unit 12 west of the Nabesna River and Nabesna Glacier.

In 1995, federal and state biologists completed the Mentasta Herd Cooperative Management Plan which states "an annual fall harvest quota will be established between 15 and 20 percent of the previous 2-year mean calf recruitment as long as such recruitment is at least 80 calves. In addition, at population levels below 2,000 the harvest limit will be limited to "bulls only" and will be closed if the 2-year mean bull:cow ratio drops below 35 bulls:100 cows". When quotas are below 30, a Section 804 analysis will determine the allocation of permits among the federally qualified users (FQU). The MECH has not been large enough nor had sufficient calf:cow ratios to recruit 80 calves since the 1993 closure.

Impact on Subsistence Users

If the closure is rescinded very small numbers of caribou may be harvested to the detriment of the Mentasta and Nelchina caribou populations, having a negative impact on subsistence users in the future.

Impact on Other Users

If the closure is rescinded it will have no impact on NFQUs as there is still a closure under state regulations.

Opportunity Provided by State

State customary and traditional use findings: The Alaska Board of Game (BOG) has made positive customary and traditional use finding for the Mentasta Caribou herd in Unit 11, the Forty-Mile and Nelchina herds in Unit 12, and the Nelchina caribou herd in Unit 13.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The BOG does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the BOG with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for the Mentasta caribou herd in Unit 11 has not been determined. There are no state hunting seasons for caribou in Unit 11.

Conservation Issues

The Mentasta caribou herd and the Nelchina caribou herd cannot sustain harvest in this portion of Unit 12 at this time.

Enforcement Issues

There are no enforcement issues associated with this closure review.

WRITTEN PUBLIC COMMENTS

**Wrangell-St. Elias National Park
Subsistence Resource Commission**

P.O. Box 439
Mile 106.8 Richardson Hwy.
Copper Center, AK 99573

March 1, 2023

Anthony Christianson, Chair
Federal Subsistence Board
U.S. Fish and Wildlife Service
Office of Subsistence Management
1011 E. Tudor Road, MS-121
Anchorage, AK 99503

Subject: Comments on Wildlife Closure Reviews for Caribou in Unit 12

Dear Mr. Christianson:

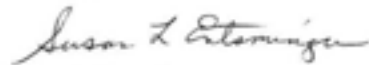
The Wrangell-St. Elias National Park Subsistence Resource Commission (SRC) met in Copper Center, Alaska, on February 23, 2023. The commission is a federal advisory committee that represents subsistence users of federal lands within Wrangell-St. Elias National Park and Preserve. At this meeting, the SRC reviewed two wildlife closure reviews for caribou in Unit 12 and would like to provide the following comments.

WCR24-35 Portion of Unit 12 closed to caribou hunting by non-federally qualified subsistence users (Chisana caribou). The Wrangell-St. Elias National Park Subsistence Resource Commission unanimously supported maintaining the closure. With the low calf population, there is justification for only having the area open to federal users. The Wrangell-St. Elias superintendent has a delegation of authority to manage the federal hunt if needed. Authorizing state harvest would increase competition.

WCR24-42 Portion of Unit 12 closed to caribou hunting by all users (Mentasta caribou). The Wrangell-St. Elias National Park Subsistence Resource Commission unanimously supported maintaining the closure. There is a conservation concern for the Mentasta caribou herd due to the low population numbers.

Thank you for the opportunity to comment.

Sincerely,



Susan L. Entsminger
Chair

Chair: Susan L. Entsminger, Members: Mike Christenson, Mike Cronk, Don Horrell, Suzanne McCarthy, Kaleb Rowland, Daniel E. Stevens, and Gloria Stickwan

cc: Superintendent, Wrangell-St. Elias National Park and Preserve
Eastern Interior Alaska Subsistence Regional Advisory Council
Southcentral Alaska Subsistence Regional Advisory Council

Chair: Susan L. Entsminger; Members: Mike Christenson, Mike Cronk, Don Horrell, Suzanne McCarthy, Kaleb Rowland, Daniel E. Stevens, and Gloria Stickwan



Ahtna Intertribal Resource Commission

PO Box 613 - Glennallen, Alaska 99588
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June 30, 2023

Federal Subsistence Board
Office of Subsistence Management
Attn: Theo Matuskowitz
1011 E. Tudor Rd, MS-121
Anchorage, AK 99503-6199

Submitted to: subsistence@fws.gov

Re: Written comments on WP24-09 and Federal Wildlife Closure Reviews WCR24-35 and WCR 24-42

Dear Chairman Anthony Christianson:

The Ahtna Intertribal Resource Commission (AITRC) serves the eight Federally recognized Tribal governments and the two Alaska Native Corporations within the Ahtna Territory, including portions of Game Management Units 11, 12, and 13.

WP24-09 Nelchina Caribou Herd Delegation of Authority Changes and Changes in Harvest Limit

AITRC supports Wildlife Proposal 24-09 submitted by the Bureau of Land Management's Glennallen Field Office. This proposal would (1) relocate the current delegated authority found in unit-specific caribou hunting regulations to the Delegation of Authority Letter, (2) expand the Scope of Glennallen Field Office Manager's Delegated Authority, and (3) revise the harvest limit from "2 caribou" to "up to 2 caribou," given the ongoing conservation concerns associated with the Nelchina Caribou Herd.

Relocating the delegation authority language from harvest regulations to the Delegation Letter seems to be a matter of housekeeping and consistency, which AITRC supports. We also support AITRC being specifically listed in the Delegation of Authority Letter to further advance the cooperative federal management partnership between AITRC and the US Department of the Interior in 2016.

AITRC agrees with the proponent of WP24-09 that the scope of the Federal In-Season Manager should be expanded to including closing, opening, and adjusting season dates, as well as setting harvest limits, including any sex restrictions or to set any needed permit condition. These are important management tools that the BLM Field Office Manager should have available to

Tina Jones

respond to fluctuating Nelchina Caribou Herd population dynamics and any potential conservation crisis. Existing authorities found in the harvest regulations are inadequate to support responsible conservation management and to ensure the continuation of Federal subsistence uses when possible, during periods of conservation concern.

AITRC also supports, albeit reluctantly, the requested revision of the harvest limits for Nelchina caribou from 2 caribou to "up to 2 caribou" for times of conservation concern given the reconnection that the population status may not support a bag limit of two animals and that in order to continue Federal subsistence uses, it may be necessary to limit the harvest limit to one bull caribou until such time that the herd's population is rebuilt to be within management objective.

Chisana Caribou Herd Wildlife Closure Review WCR24-35

Federal public lands are closed to the harvest of Chisana caribou except by Federally qualified subsistence users. Presently, the hunting of Chisana caribou is limited to the Federally qualified rural residents of Unit 12, Chistochina, Dot Lake, Healy Lake, and Mentasta Lake.

AITRC supports the continuation of the closure of caribou hunting of the Chisana Caribou Herd to all but federally qualified subsistence users. Given the small size of the Chisana caribou population and the negative customary and traditional use determination established by the Alaska Board of Game, it would be detrimental to Federal subsistence uses to open up caribou hunting to sport and recreational hunters at this time.

Mentasta Caribou Herd Wildlife Closure Review WCR24-42

All hunting of the Mentasta Caribou Herd is prohibited on Federal public lands. However, in 2022, the Federal Subsistence Board approved WP22-35, as amended, which established a may be announced Federal subsistence hunt in Game Management Unit 11 for bull caribou when Nelchina caribou are present in sufficient abundance to warrant an opportunity. While the present population status of the Nelchina Caribou Herd may be insufficient to support a limited federal subsistence hunt within the range of the Mentasta Caribou Herd at this time, AITRC supports a revision of the current Wildlife Closure of caribou hunting in Unit 11 to allow for this newly established "May be announced" hunt.

Sincerely,


Karen Linnell
Executive Director AITRC

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www.facebook.com/subsistencealaska

