



SOUTHCENTRAL ALASKA SUBSISTENCE
REGIONAL ADVISORY COUNCIL
Meeting Materials

March 15 - 16, 2023
Anchorage



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SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

Chesloknu Conference Room, Dimond Center Hotel

Anchorage, Alaska

March 15–16, 2023

Convening at 9:00 a.m. daily

TELECONFERENCE: call the toll free number: 1-866-617-1530, then when prompted enter the passcode: 93629472

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

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

AGENDA

*Asterisk identifies action item.

- 1. Invocation**
- 2. Call to Order** (*Chair*)
- 3. Roll Call and Establish Quorum** (*Secretary*) 4
- 4. Meeting Announcements** (*DFO*)
- 5. Welcome and Introductions** (*Chair*)
- 6. Review and Adopt Agenda*** (*Chair*)..... 1
- 7. Election of Officers***
 - Chair (*DFO*)
 - Vice-Chair (*New Chair*)
 - Secretary (*New Chair*)
- 8. Review and Approve Previous Meeting Minutes*** (*Chair*)..... 5
- 9. Reports**
 - Council Member Reports
 - Chair’s Report
- 10. Public and Tribal Comment on Non-Agenda Items** (available each morning)

11. Old Business (Chair)

- a. Follow up on May 2023 North American Caribou Workshop and Arctic Ungulate Conference 14

12. New Business (Chair)

- a. Wildlife Closure Reviews

Regional Reviews

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Crossover Reviews

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- b. Call for Federal Wildlife Proposals* (OSM)..... 74
- c. 2021 Council Charter Review* 132
- d. Review and approve FY2022 Draft Annual Report* 77
- e. Federal Subsistence Board Updated Draft Council Correspondence Policy* (OSM) 83
- f. Fisheries Resource Monitoring Program Update (OSM, Fisheries Division)
- g. Partners for Fisheries Monitoring Program Update (OSM, Fisheries Division)
 - 1. The System-wide Distribution and Stock Specific Run Timing of Copper River Chinook Salmon – Native Village of Eyak (Matt Piche, Native Village of Eyak)..... 85
- h. Regulatory Cycle Update (OSM, Fisheries Division)
- i. NPS seeks input on proposed changes to 2020 Hunting and Trapping regulations on national preserves in Alaska (NPS)..... 91
- j. Denali National Park and Preserve Individual C&T Analyses* (NPS)..... 99

13. Agency Reports

(Time limit of 15 minutes unless approved in advance)

Tribal Governments

- a. Ninilchik Traditional Council
- b. Native Village of Eyak

Native Organizations

- c. Ahtna InterTribal Resource Commission
- d. Chugach Regional Resources Commission

University of Alaska Fairbanks – Marine Biology

US Fish and Wildlife Service

- e. Office of Law Enforcement

US Forest Service

- f. Law Enforcement update

National Park Service

- g. Wrangell-St. Elias National Park and Preserve 101
- h. Denali National Park and Preserve 105

Bureau of Land Management 108

Alaska Department of Fish and Game

Office of Subsistence Management

14. Future Meeting Dates*

- Confirm Fall 2023 meeting date and location 111
- Select Winter 2024 meeting date and location 112
- Select Fall 2024 meeting date and location 113

15. Closing Comments

16. Adjourn (Chair)

To call into the meeting, dial the toll-free number: 1-866-617-1530, then when prompted enter the passcode: 93629472

Reasonable Accommodations

The Federal Subsistence Board is committed to providing access to this meeting for all participants. Please direct all requests for special accommodation needs to Jessica Gill, 907-310-6129, jessica_gill@fws.gov or 800-877-8339 (TTY), by close of business on March 6, 2023.

REGION 2
Southcentral Alaska Subsistence Regional Advisory Council

Seat	Year Appointed Term Expires	Member Name and Community
1	2016 2025	Edward H. Holston <i>Cooper Landing</i>
2	2011 2025	Michael V. Opheim <i>Seldovia</i>
3	2003 2025	Richard G. Encelewski Chair <i>Ninilchik</i>
4	2016 2025	Diane A. Selanoff <i>Valdez</i>
5	2017 2025	Dennis Zadra <i>Cordova</i>
6	2003 2023	Gloria Stickwan Vice Chair <i>Copper Center (Tazlina)</i>
7	2021 2023	Angela K. Totemoff <i>Anchorage</i>
8	2021 2023	Donna Claus <i>Chitina</i>
9	2021 2023	Andrew T. McLaughlin <i>Chenega Bay</i>
10	2021 2024	Donna Marie Faust Wilson <i>Sutton</i>
11	2019 2024	Hope L. Roberts Secretary <i>Valdez</i>
12	2019 2024	Heath Q. Kocan <i>Cordova</i>
13	2021 2024	Michael G. Rego <i>Glennallen</i>

SOUTHCENTRAL SUBSISTENCE REGIONAL ADVISORY COUNCIL

Meeting Minutes

BP Energy Center, Anchorage, Alaska
October 12–13, 2022

Invocation

Gloria Stickwan gave an invocation.

Call to Order, Roll Call and Quorum Establishment

The meeting was called to order Wednesday, October 12, 2022, at 9:02 a.m. Council members Greg Encelewski, Edward Holsten, Angela Totemoff, Dennis Zadra, Andy McLaughlin, Gloria Stickwan, Hope Roberts, Diane Selanoff, and Michael Opheim were present in person and Donna Claus and Donna Wilson were present on the teleconference line. Michael Rego was not present and was excused. Heath Kocan had difficulties calling into the teleconference line and was unable to join. A quorum was established with 11 of 13 seated Council members participating.

Attendees participating:

- Office of Subsistence Management (OSM): **Scott Ayers, Dr. Jason Roberts, Justin Koller, Orville Lind, Brian Ubelaker, Robbin La Vine, George Pappas, Katerina Wessels*, Kevin Foley**
- USDA - Forest Service (USFS): **Dave Schmid, DeAnna Perry, Greg Risdahl, Bret Christensen, Heather Thamm, Ruth D'Amico*, Steve Namitz*, Jeff Schramm**
- Ahtna Intertribal Resource Commission (AITRC): **Karen Linnell, Jim Simon, Dan Gorze, Sterling Spilinek, Kelsey Stanbro**
- Ahtna, Inc.: **Kathryn Martin***
- Chugach Regional Resources Commission (CRRC): **Christine Brummer**
- Kenai National Wildlife Refuge (NWR), U.S. Fish and Wildlife Service (USFWS): **Todd Eskelin, Ken Gates***
- U.S. Fish & Wildlife Service: **Jill Klein**
- Bureau of Land Management (BLM): **Chris McKee, Caroline Ketron, Leanne McDonald, Marnie Graham**
- National Park Service (NPS), Anchorage: **Victoria Florey, Eva Patton, Elizabeth Bella, Andee Sears, Grant Hilderbrand**
- Wrangell-St. Elias National Park and Preserve, NPS: **Barbara Cellarius, David Sarafin, Amber Cohen**
- Denali National Park and Preserve, NPS: **Amy Craver***
- Alaska Department of Fish and Game (ADF&G): **Jackie Keating, Jake Engelhoff, Matt Miller***
- Chickaloon Native Village: **Laura Pevins*, Amy James***

- Native Village of Eyak (NVE): **Matte Piche, Mark King***
- Ninilchik Traditional Council (NTC): **Darrell Williams**
- Ahtna Intertribal Resource Commission: **Karen Linnell, Jim Simon**
- Alutiiq Pride Marine Institute: **Annette Jarosz**
- National Weather Service: **Dr. Brian Brettschneider**
- Members of the Public: **Donald Mike, Judy Caminer, Milo Burcham***

*Indicates participation via teleconference.

Review and Adopt Agenda

Motion by Member Totemoff, seconded by Member Holsten, to adopt the agenda with the following addition:

11b, item 6: Add FCR23-05 as a crossover closure review

The motion passed unanimously.

Review and Approve Previous Meeting Minutes

Motion by Member McLaughlin, seconded by Member Zadra, to approve the winter 2022 meeting minutes as presented. The motion passed unanimously.

Motion by Member Totemoff, seconded by Member Holsten, to approve the joint Eastern Interior/Southcentral Councils meeting minutes as presented. The motion passed unanimously.

Council Member Reports

Edward Holsten of Cooper Landing reported on the warm spring and early summer, followed by rain. He noted an outbreak of spruce beetles killing trees and a good first and second run of Sockeye Salmon.

Angela Totemoff of Anchorage reported that the first half of summer was very warm. She noted seeing a herring spawn near Tatitlek, which has not happened in a long time. The Sockeye and Pink salmon runs were weak, but it was a good berry season.

Dennis Zadra of Cordova reported that the spring was late and cold, then unseasonably warm. There were good returns of Chinook and Sockeye salmon on the Copper River and the commercial fishery was managed conservatively. Hunting opportunities were challenging due to extreme rain. There were very poor Coho Salmon returns in Cordova.

Andrew McLaughlin of Chenega Bay reported that the summer started off hot, then quickly turned to consistent rain. The black bear population is doing well, but the moose he harvested from interior Alaska had no fat on them. There are concerns about Paralytic Shellfish Poisoning in the community, and people have not been clamming much yet. He has noticed decrease in size for halibut and noted lots of Sockeye Salmon being caught in the Chum Salmon fishery for Prince William Sound Aquaculture. Lowbush blueberries were fantastic.

Gloria Stickwan of Tazlina reported that the Subsistence Resource Commission for the Wrangell-St. Elias National Park and Preserve met on October 3-4 and discussed a variety of issues, including the fisheries proposals being discussed at the Council's meeting. She noted high water on the Copper River that delayed people from putting in their fishwheels and might have impacted peoples' ability to harvest fish. She noted that the Village of Tazlina lost their fishwheel due to the high water and the village was not able to provide fish for Tribal members. A house was also lost downriver due to the high water. Moose and caribou harvest has been low.

Michael Opheim of Seldovia reported that it was an average year for King (Chinook) Salmon, and it was nice to see folks getting fish, but the commercial harvest was low and slow going. Berries were good this year. Six to eight black bears were harvested this year, slightly larger than normal. He noted that there is a possible increase in population size and the bears he has seen have been looking good for the winter. Moose have been rebounding, and he has seen many cows with two calves making it through the winter. There have not been too many wolf sightings this year, possibly helping with the moose population. Rabbits and spruce hen have been good this year.

Diane Selanoff of Valdez reported that salmon have been extremely minimal this past summer and, in some places, desolate. Areas where she previously harvested Silvers had no fish or birds; that happened at multiple locations. Salmon have been smaller in size, but halibut have been normal with average sizes. Many bears have been around town, appearing hungry. A sea lion came into town, a way up from the harbor, but was pushed back with help of the Valdez Police Department. Berries were good, but harvest was minimal due to weather. The rain impacted the salmon returning upstream as well; the fish did not mill about in the bays, instead just went straight upriver. Shellfish and marine mammal numbers have been normal. In town, there have been lots of coyote sightings.

Hope Roberts of Valdez reported that she has been teaching a course for urban Alaska Natives to reconnect to marine mammal harvesting. She noted the sea lion found in town that Member Selanoff highlighted, adding that there was a bear cub picked up this morning by animal control. Marine mammals seem normal.

Donna Claus from 100 miles up the Chitina River reported that it has been dumping snow today and noted that normally her location sees up to 8 inches of moisture a year including snow, but this year, the rain gauge indicates 19.7 inches; it was a very rainy summer. There have been fewer fish in the Chitina River, and they have not seen fish in their usual spots. For the first time in 40 years, there are no fish in her freezer. Mountain goats appear fat and fluffy. Spruce hens have been around, and moose and buffalo seem to be doing fine. She has seen more bears and hearing more wolves around.

Greg Encelewski of Ninilchik reported that the subsistence fishery on the Kenai River went well, nearly all permits were filled, and some fish were distributed to elders. The commercial fishery seemed to be getting a fair number of halibut. The Kings (Chinook Salmon) have been a disaster, though. Late run escapement or early run escapement goals have not been met for a few years. Commercial set netters have

been shut down, and he only fished his setnet permit two days this year. Clam beds have been closed for four or five years, but the west side of Cook Inlet appear to be doing well. Tanner Crab in Kachemak Bay have been doing ok. Moose in Unit 15C are doing well, possibly due to thinning out the wolf population. There have been quite a few bears in the area. It was a warm spring, then a wet fall.

Service Award

Council Member McLaughlin and Member Opheim were acknowledged for serving on the Council for ten years and presented with an award by Federal Subsistence Board member Mr. Dave Schmid, U.S. Forest Service. Council Member Selanoff, Member Holsten, and Member Zadra were recognized for their five years of service to the Southcentral Council.

Old Business

The Council received presentations on the following topics:

- The Federal Subsistence Board (Board) 805(c) Report summary from Council Coordinator Ms. Jessica Gill
- Board FY-2021 Annual Report Replies summary from Ms. Gill
- Special Actions update from Fisheries Biologist Mr. Justin Koller (FSA 22-05)

New Business

Southcentral Federal Subsistence Fisheries Harvest Update

Mr. Dave Sarafin, fisheries biologist with Wrangell-St. Elias National Park and Preserve, presented information on the Tanada Creek weir counts and provided an update on the Federal subsistence fisheries that occurred on the Copper River in 2022.

Fisheries Proposals

Regional:

FP23-07: Revise Kenai River Chinook Salmon harvest regulations

Public Testimony: *Darrel Williams*, Ninilchik Traditional Council; *Dr. Jim Simon*, representing himself

Motion by Member Holsten, seconded by Member McLaughlin, to **support** FP23-07. The Council found no biological concern given the low harvest levels of Chinook Salmon in the Kenai River Federal subsistence fishery. The Council felt that this regulation would remove a meaningful subsistence priority for Federally qualified subsistence harvesters. The Council noted that the Federal fisheries regulations do not need to align with State regulations.

The motion **failed** on a unanimous vote.

FP23-08/09/12: Revise customary and traditional use determination for Kenai Peninsula District fish

Public Testimony: *Darrel Williams*, Ninilchik Traditional Council; *Karen Linnell*, representing herself, *Dr. Jim Simon*, representing himself

Motion by Member Holsten, seconded by Member Claus, to **support** FP23-08 and **take no action** on FP23-09/12 based on action on FP23-08. The Council supported in part because Moose Pass was recently granted rural status and customary and traditional use determinations for multiple wildlife species. The Council noted that residents of Moose Pass generally lead a rural lifestyle. One member of the Council also noted that the probability of conservation concerns was low due to the characteristics of the Russian River fishery and the low population of Moose Pass. The Council was happy to see Moose Pass continue with the customary and traditional use determination process.

The motion **passed** on a 6-5 vote.

FP23-19: Rescind Lower Copper River salmon fishery

Public Testimony: *Karen Linnell*, Ahtna InterTribal Resource Commission; *Mark King*, Native Village of Eyak; *Milo Burcham*, representing himself

Motion by Member Holsten, seconded by Member McLaughlin, to **support** FP23-19. The Council felt the Lower Copper River Area fishery needed more time to develop to assess harvest amounts and noted the very small estimated harvest in this fishery is not likely to cause conservation concerns. The Council highlighted the Federal subsistence priority on the Copper River and suggested limiting personal use and commercial fisheries before restricting access to Federally qualified subsistence users.

The motion **failed** on a 7-3 vote.

Crossover:

FP23-14: Revise customary and traditional use determination for Chitina Subdistrict salmon

Public Testimony: *Karen Linnell*, Ahtna InterTribal Resource Commission; *Dr. Jim Simon*, representing himself

Motion by Member Totemoff, seconded by Member Holsten, to **support** FP23-14. The Council felt that the residents of Serendipity did not fully demonstrate the criteria necessary to be granted customary and traditional use status for salmon in the Chitina Subdistrict, particularly with regard to long-term patterns of use. The Council wanted to see additional research conducted into this community before granting Customary and Traditional status for this resource. They also noted that none of the community members spoke in support of their proposal at the Council meeting. Separately, the Council voiced support for the Board to review and revise the Customary and Traditional use request process.

The motion **failed** on a unanimous vote.

FP23-15/16: Revise customary and traditional use determination for the Chitina Subdistrict salmon

Public Testimony: *Karen Linnell*, Ahtna InterTribal Resource Commission

Motion by Member Totemoff, seconded by Member Holsten, to **support** FP23-15. The Council had concerns over harvest of salmon resources by members of communities located outside the traditional harvest region. The Council expressed desire to hear testimony from the proponents of the proposal, as well as members of the communities that this customary and traditional use determination request might impact. The Council was also concerned about recent changes in the Customary and Traditional use determination process that were making the process too inclusive and allowing residents to gain Customary and Traditional use status without providing formal documentation of their subsistence practices.

The motion **failed** on a unanimous vote. Motion by Member Zadra, seconded by Member McLaughlin, to **take no action** on FP23-16 based on action for FP23-15. The motion **passed** on a unanimous vote.

FCR23-05: Reviews the closure to the harvest of all fish in the Delta River by Federally qualified subsistence users. The Council provided the following comment to the Board on FCR23-05:

The Southcentral Alaska Subsistence Regional Advisory Council recommends the Office of Subsistence Management removing the Federal subsistence fishing closure on the Delta River but delay opening the fishery until such time that OSM has conducted an analysis to determine which Federally qualified subsistence users should receive a customary and traditional use determination of the Delta River drainage and to recommend appropriate methods and means of harvest to ensure the fishery is sustainable. It is the Council's understanding that, as written, OSM's recommendation would make the Federal public waters of the Delta River drainage available to all Federally qualified subsistence users of the Yukon-Northern Area whereas Federally qualified subsistence users in the Ahtna Traditional Use Territory would not be eligible to subsistence fish under Federal regulations in an area that the Ahtna people have fished and stewarded for countless generations.

Council member Michael Rego was not present at the meeting; however, he reviewed the proposals on his own. His e-mailed comments and votes, which were read into the record. His votes were not tallied during the Council vote count.

Fisheries Request for Reconsideration FRFR22-01 update

Mr. Koller provided the Council an overview of the Request for Reconsideration process and the status of the Fisheries Request for Reconsideration submitted by Ahtna, Incorporated regarding the newly created Lower Copper River federal subsistence salmon fishery. This was not an action item.

2024 Fisheries Resource Monitoring Program Priority Information Needs

Mr. Koller presented the Council with the 2024 Fisheries Resource Monitoring Program (FRMP) Southcentral Region Priority Information Needs overviews. The following Priority Information Needs were developed: 1) Estimate abundance, run timing, spawning site fidelity, and age, sex, and length

composition for Chinook and Coho salmon that stage or spawn in waters of Kenai Peninsula drainages under Federal subsistence fishery jurisdiction; 2) Estimate Chinook, Coho, and Sockeye salmon escapements into the Copper River drainage and delta systems with a high degree of certainty (for example projects utilizing weir, sonar, and/or mark-recapture methods); 3) Develop, test, and implement methods for monitoring escapement and/or mortality of Sockeye Salmon in the Copper River drainage and delta systems, including assessment of predation; 4) Estimate “quality of escapement” measures such as fecundity, age, sex, and size to help inform salmon management in the Copper River and Kenai Peninsula drainages; 5) Understand effects of environmental and/or climate change on stock specific migration timing and abundance of adult salmon, as well as the implications for harvest management, in the Copper River and Kenai Peninsula drainages using sonars and tagging; and 6) Collect baseline information on juvenile Sockeye Salmon outmigration, timing, abundance, condition, and mortality across the unique sub-watersheds of the Copper River and the Kenai Peninsula drainages. Member McLaughlin motioned, seconded by Member Holsten, to **accept** the 2022-2024 Priority Information Needs. The motion passed unanimously.

2024–2027 Partners for Fisheries Monitoring Notice of Funding Opportunity

Mr. Matt Piche, Fisheries Biologist with Native Village of Eyak, presented projects funded through the Partners for Fisheries Monitoring (Partners) program. The funding has been used for Chinook Salmon escapement, a Klutina River sonar pilot project, and interns from the Alaska Native Science and Engineering Program and University of Alaska Fairbanks. Mr. Koller presented the Council with the 2024 Partners for Fisheries Monitoring notice of funding opportunity.

Harvest of Wildlife for Sport Purposes on National Preserves

Mr. Grant Hilderbrand and Ms. Andee Sears, National Park Service, provided background information on an upcoming proposed rule regarding the wildlife sport harvest rules on national preserves.

Identifying Issues for FY2022 Annual Report

The Council identified the following topics for inclusion into the FY22 Annual Report:

- The process of reporting anticipated needs of subsistence as stated in the Council Charter
- Customary and Traditional Use determination process review and competition for the Federally qualified subsistence users for Copper River Sockeye Salmon
- Climate change impacts on methods and means of use and the need for flexibility in seasons affected by climate change
- Climate change impacts on ocean resources, including Paralytic Shellfish Poisoning and ocean acidification impacts on clams and salmon ocean food webs
- Ahtna InterTribal Resource Commission Memorandum of Agreement on cooperative management of customary and traditional subsistence uses in the Ahtna Region
- Jurisdiction on subsistence shellfish resources in Prince William Sound and concern over the stock size and closure of subsistence shellfish seasons

Fall 2022 Council application/nomination open season

Ms. Gill provided information on the Regional Advisory Council application period, which closes on February 21, 2023.

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

Mr. Brian Ubelaker, OSM Wildlife Biologist, provided information on the North American Caribou Workshop and Arctic Ungulate Conference. The Council provided ideas for discussion topics during a symposium within the conference. Member Stickwan suggested looking at caribou feed and how the population surveys are done. Member Wilson suggested reviewing the opening dates for the various hunts. Member Stickwan encouraged the inclusion of traditional knowledge.

Member McLaughlin motioned, seconded by Member Roberts, to send Member Stickwan to the Conference to represent the Council. The motion **passed** unanimously. Member Selanoff motioned, seconded by Member Holsten, to nominate Member McLaughlin as an alternate to attend the Conference if Member Stickwan is unable to attend. The motion **passed** unanimously.

Telephonic/internet expenses related to the Council teleconference meetings

Ms. Gill informed the Council on how to get reimbursed for telephonic/internet expenses incurred during previous Council meetings held via teleconference.

Public Testimony (for complete testimony, please review transcripts for October 12-13, 2022)

Ms. Karen Linnell and Mr. Mark King provided testimony on non-agenda items.

Agency Reports:

- Ninilchik Traditional Council Subsistence Fishery report was presented by Mr. Darrel Williams, Resource and Environment Director
- Ahtna InterTribal Resource Commission report was presented by Ms. Karen Linnell, Executive Director
- Chugach Regional Resources Commission report was presented by Ms. Christine Brummer, Fish and Wildlife Coordinator
- Alutiiq Pride Marine Institute presentation on ocean acidification was presented by Ms. Annette Jarosz, Biologist
- A regional climate outlook produced by the National Weather Service was presented by Dr. Brian Brettschneider, Climatologist
- Kenai National Wildlife Refuge wildlife report was presented by Mr. Todd Eskelin, Wildlife Biologist, Kenai NWR
- Wrangell-St. Elias National Park and Preserve Subsistence Resource Commission and anthropology report presented by Dr. Barbara Cellarius, Anthropologist

- Denali National Park and Preserve Subsistence Resource Commission report presented by Ms. Amy Craver, Cultural Resource Historian
- Bureau of Land Management update presented by Ms. Caroline Ketron, Anthropologist
- Chugach National Forest report presented by Ms. Ruth D’Amico, District Ranger, Chugach NF
- Alaska Department of Fish and Game Division of Subsistence report presented by Subsistence Resource Specialists Ms. Jackie Keating and Mr. Jake Engelhoff
- Office of Subsistence Management report presented by Mr. Scott Ayers, Fisheries Division Supervisor

Future Meeting Dates:

Winter 2023 meeting to be held March 15-16, 2023, in Anchorage.

Fall 2023 meeting to be held October 2-3, 2023, in Kenai.

Jessica Gill, Council Coordinator, Designated Federal Officer
U.S. Fish and Wildlife Service Office of Subsistence Management

Greg Encelewski, Chair
Southcentral Subsistence Regional Advisory Council

These minutes will be formally considered by the Southcentral Subsistence Regional Advisory Council at its winter 2023 meeting, and any corrections or notations will be incorporated in the minutes at that meeting.

A more detailed report of this meeting, copies of the transcript, and meeting handouts are available upon request. Call Jessica Gill at 1-800-478-1456 or 907-310-6129, or email at jessica_gill@fws.gov.



2023 NORTH AMERICAN CARIBOU WORKSHOP & ARCTIC UNGULATE CONFERENCE

Anchorage, Alaska ▪ May 8-12, 2023

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

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

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





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

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

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

Potential Topics

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

FEDERAL WILDLIFE CLOSURE REVIEW

WCR24-03

Issue: Wildlife Closure Review WCR24-03 reviews the moose hunting closure, except by residents of Chenega Bay 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 Bay, 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

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 Bay, Cooper Landing, Hope, Moose Pass and Tatitlek have a customary and traditional use determination for moose in Unit 7.

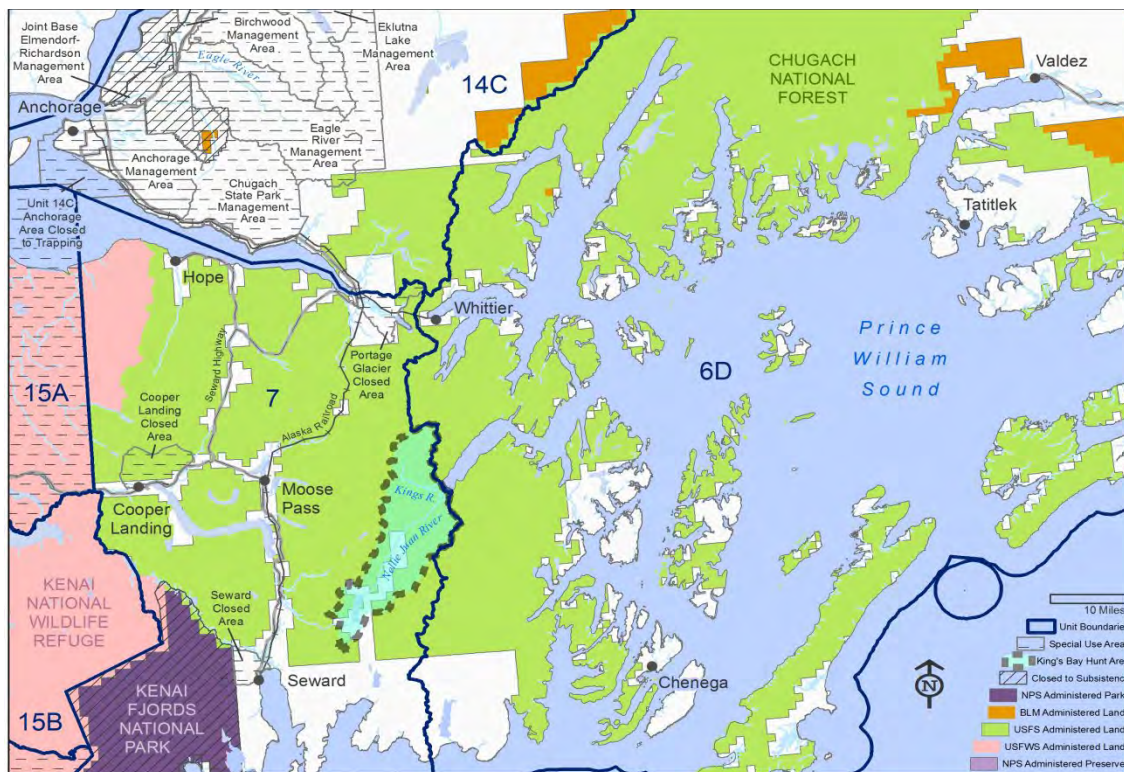


Figure 1. Location of closure in Kings Bay drainage area.

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 Bay 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 Bay 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 Bay 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 Bay 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 Bay 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 Bay informally discussed this hunt in 2001, concluding that they knew of no one from Chenega Bay 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 Bay 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 PRELIMINARY 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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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 (FQSU).

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

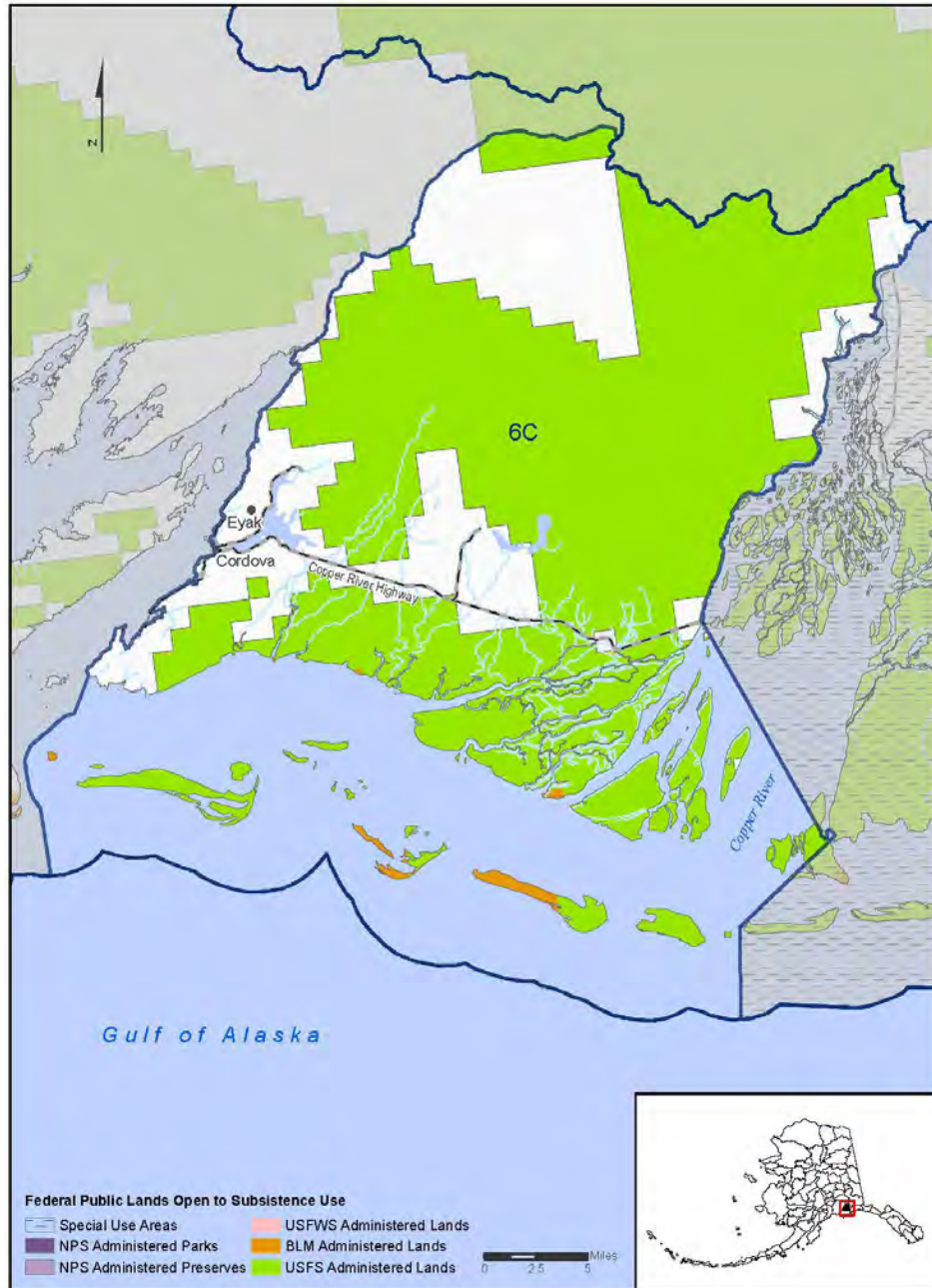
Unit 6C—Moose

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 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. The dual management system, between the USFS Cordova Ranger District and ADF&G for moose in Unit 6C is currently meeting the long-term needs of local users in Cordova, maximizes hunting opportunity, addresses 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 requests 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 will consider this proposal in March 2023.

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 2017 (**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). 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 been growing or remaining stable 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 2005-2017 (Crowley 2006, 2010, 2012; 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

^a Population data not collected

Table 2. Moose composition estimates in Unit 6C 2005-2013 (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 are often 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 1985 subsistence resource use study conducted in the Cordova area by ADF&G, surveyed households reported harvesting an average of approximately 403 pounds of wild resources (152 pounds per capita) (Stratton 1989). Salmon composed 39% of this harvest (156 pounds per household), while land mammals composed approximately 26% (107 pounds per household), non-salmon fish accounted for 23% (91 pounds per household), and marine invertebrates accounted for 6% (25 pounds per household) (Stratton 1989). During this study year, moose and deer accounted for the vast majority of the land mammal harvest (Stratton 1989). Moose provided about 51% (55 pounds per household) of the land mammal harvest, while deer provided another 39% (42 pounds per household) of this harvest (Stratton 1989). Overall, an average of approximately 30 moose were reported harvested from Unit 6C every year between 1960 and 1986 (Stratton 1989).

In 2003, households in the Cordova area reported harvesting an average of 469 pounds of wild resources (176 pounds per capita) (Simeone 2006). The top resources harvested in terms of usable weight during this study year were salmon, moose, deer, and non-salmon fish, respectively (Simeone 2006). Furthermore, the overall amount of wild resources harvested and the composition of resources harvested in 2003 was quite similar to that reported for the Cordova area in 1997 and 1998 (Fall and Utermohle 1999). Similarly, in 2014, households in the Cordova area harvested an average of 318 pounds of wild resources (118 pounds per capita) (Kukkonen and Johnson 2016). During this study year, salmon composed approximately 38% (120 pounds per household) of the harvest, while land mammals accounted for 35% (111 pounds per household), non-salmon fish composed 15% (49 pounds per household), and vegetation composed 9% (29 pounds per household) of the harvest (Kukkonen and Johnson 2016). In 2014, moose accounted for roughly 74% (82 pounds per household) of the land mammal harvest, while deer accounted for another 19% (22 pounds per household) of the land mammal harvest (Kukkonen and Johnson 2016).

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 household income in Cordova was \$91,422 between 2016 and 2020 (State of Alaska 2021). 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).

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 3**). Reduced permit numbers beginning in 2008 have allowed the population to grow to current levels (**Tables 1 and 3**).

Over 90% of the moose taken in Unit 6C are by residents of Cordova (Crowley 2012). Harvest in 2021 was 62 moose, which is below the annual average of 78 moose 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 3. 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, is currently 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 Federal subsistence priority.

Rescinding the closure would make it possible for the State moose season to occur in Unit 6C on Federal public lands during November and December. The BOG will consider Proposal 62 in March 2023 (see **Regulatory History** section). As this proposed hunt is by registration permit, it is unclear how adoption of Proposal 62 may affect the management of the Unit 6C moose population.

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 hunters 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 likely not pose any conservation concerns since the Unit 6C moose population is closely managed by limiting the number of permits and is currently at high density (~3-5 moose/mi²), although the effects of adopting State Proposal 62 is uncertain. The Federal subsistence priority would still be maintained as the majority of the moose permits are allocated to FQSUs. In recent years, some permits have remained unfilled, suggesting there are additional moose that could be harvested under State regulations in November and December on Federal public lands.

OSM PRELIMINARY CONCLUSION:

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

Justification

Since 2011, the moose population in Unit 6C has been above 600 animals, appears to be stable at high density and meets the management objectives of the cooperative moose management plan. There is no conservation concern to justify the closure to hunting moose on Federal public lands to non-Federally qualified users from Nov 1 – Dec. 31 in Unit 6C. The Federal subsistence priority would still be maintained if this closure were rescinded as most of the moose permits are allocated to Federally qualified subsistence users.

However, whether or not this closure is still necessary for the continuation of subsistence uses is unclear. However, the high harvest success rates coupled with the unharvested allocations, and the high moose population indicate that subsistence needs are likely being met. A conservative approach would be to rescind the closure for a limited (e.g. 2-4 years) to evaluate any changes in the moose population, harvest, and subsistence uses.

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**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

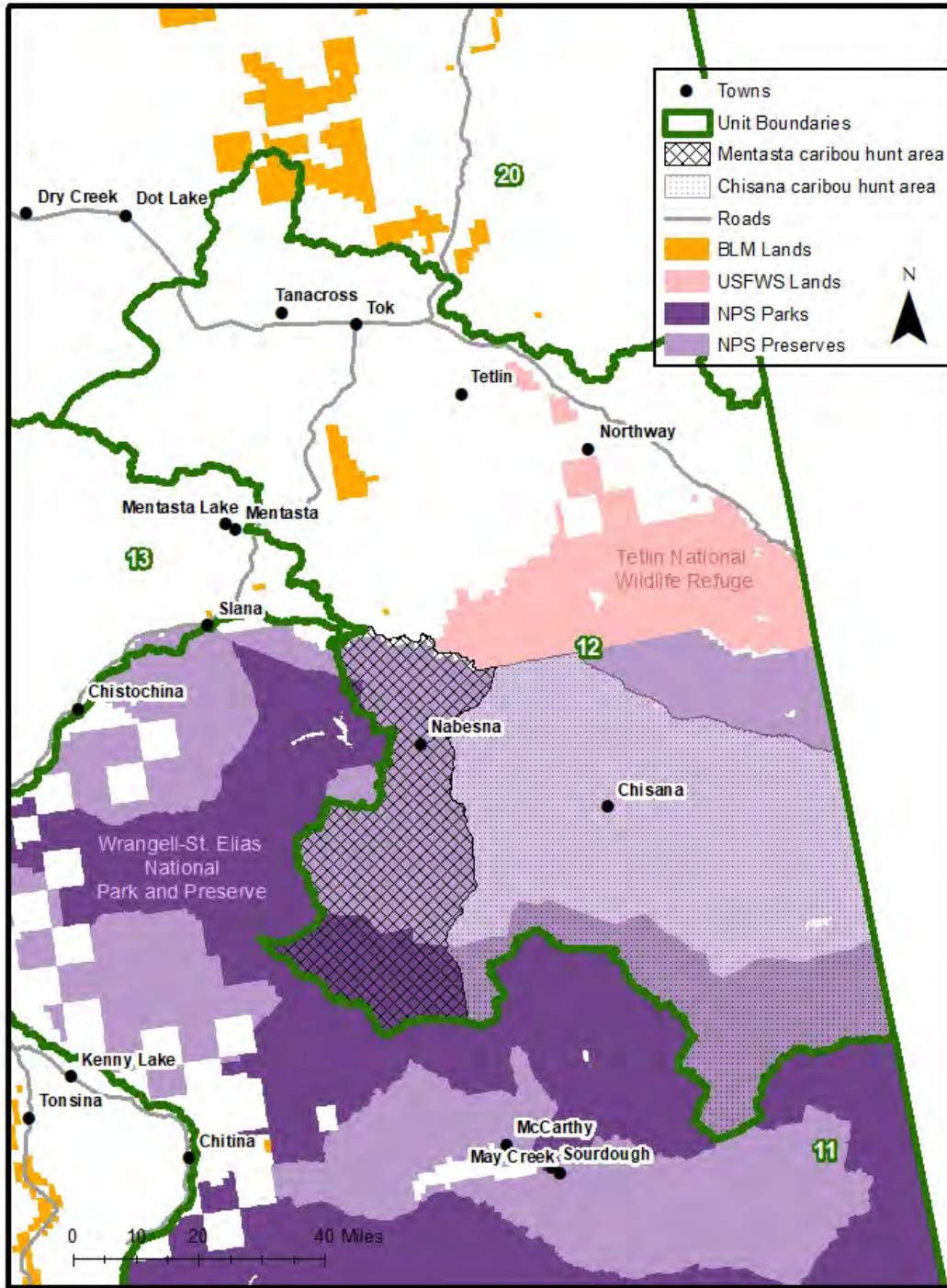
Residents and Nonresidents: Unit 12, remainder No open season

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

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.

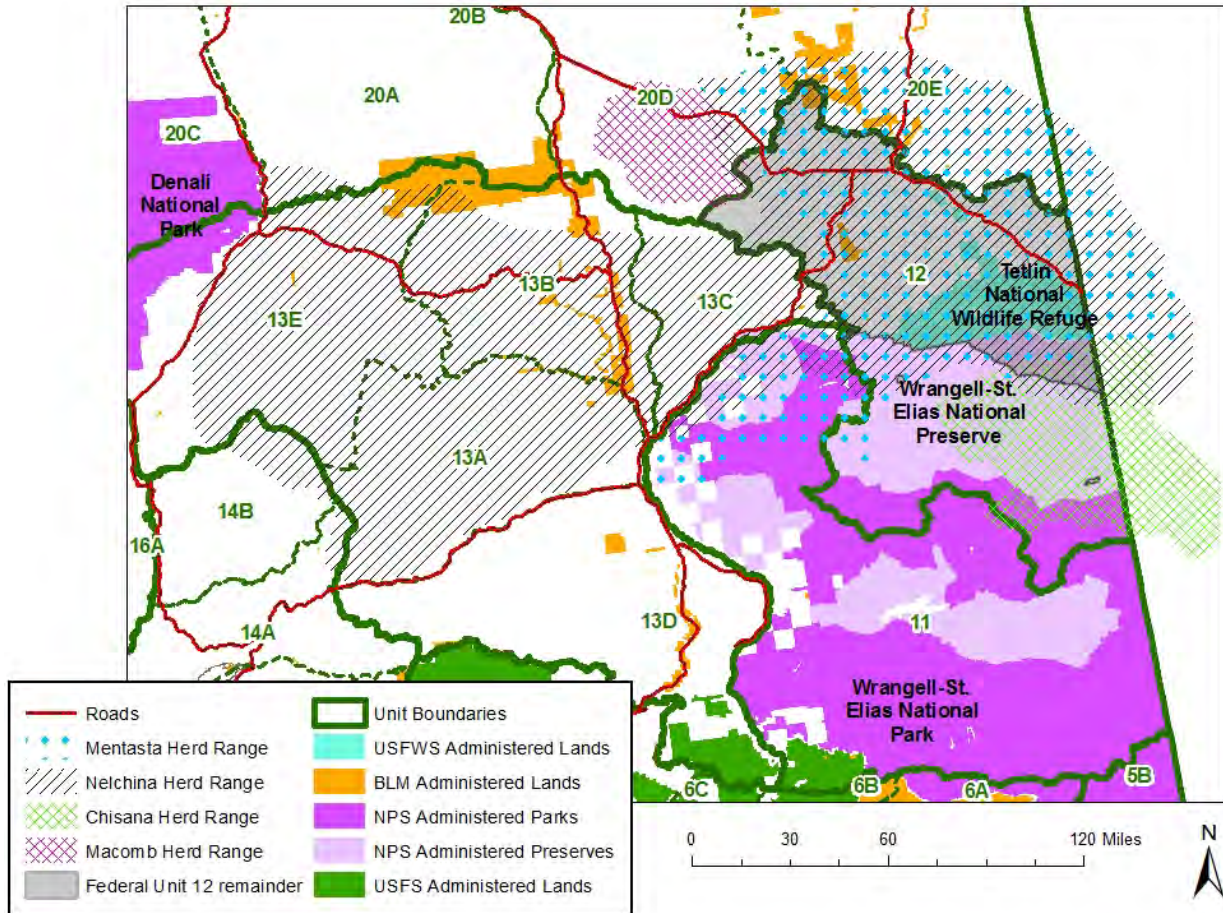
The CCH Management Plan guidelines for harvest include a maximum harvest allocation of 2% of the herd size, a bull-only harvest, and an allocation equally distributed between Yukon Territory and Alaska (Chisana Caribou Herd Working Group 2012).

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

^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 PRELIMINARY 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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FEDERAL WILDLIFE CLOSURE REVIEW
WCR24-42

Issue: Wildlife Closure Review WCR22-42 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

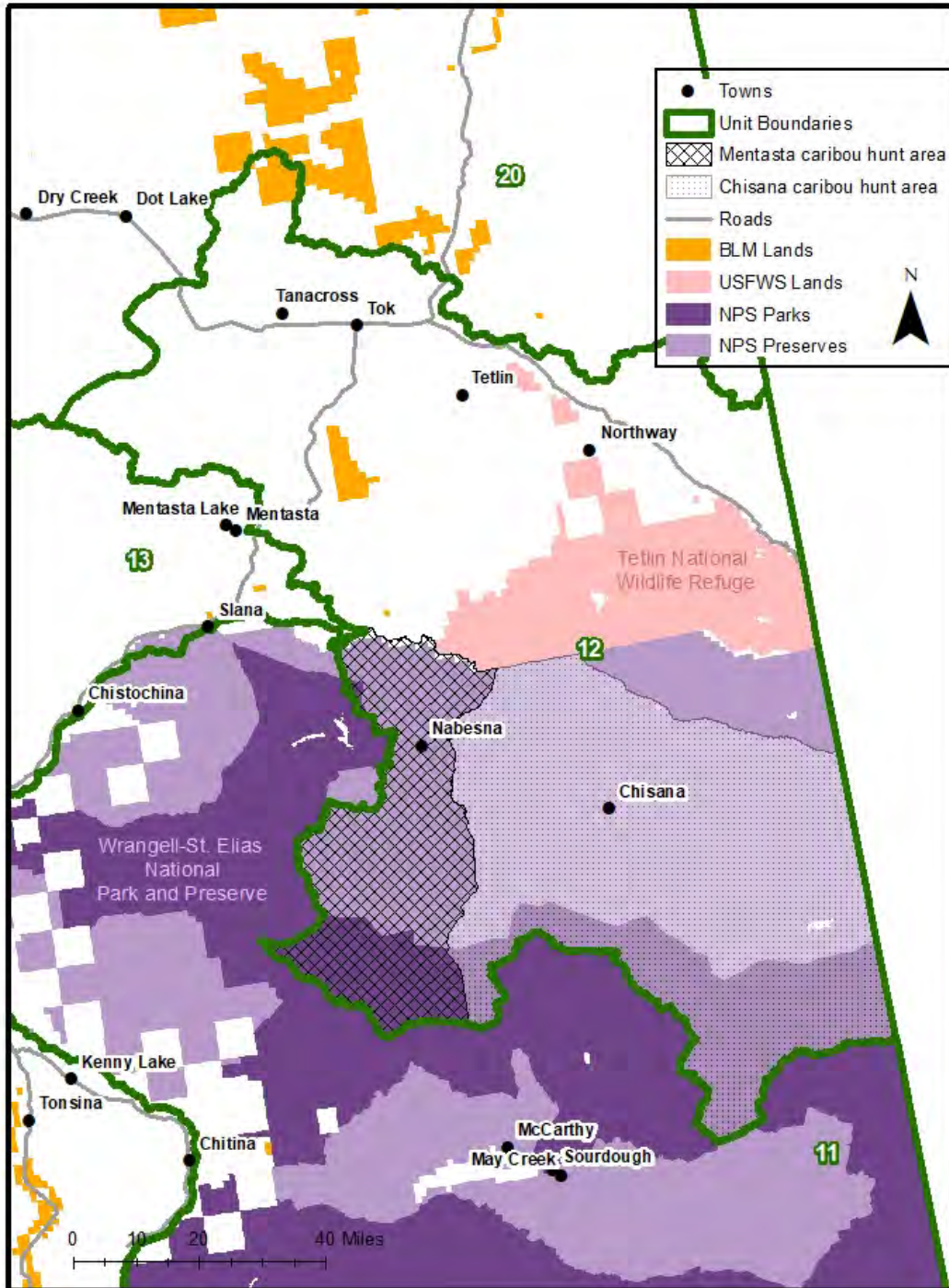
Unit 12, remainder – Residents and Nonresidents No open season

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).

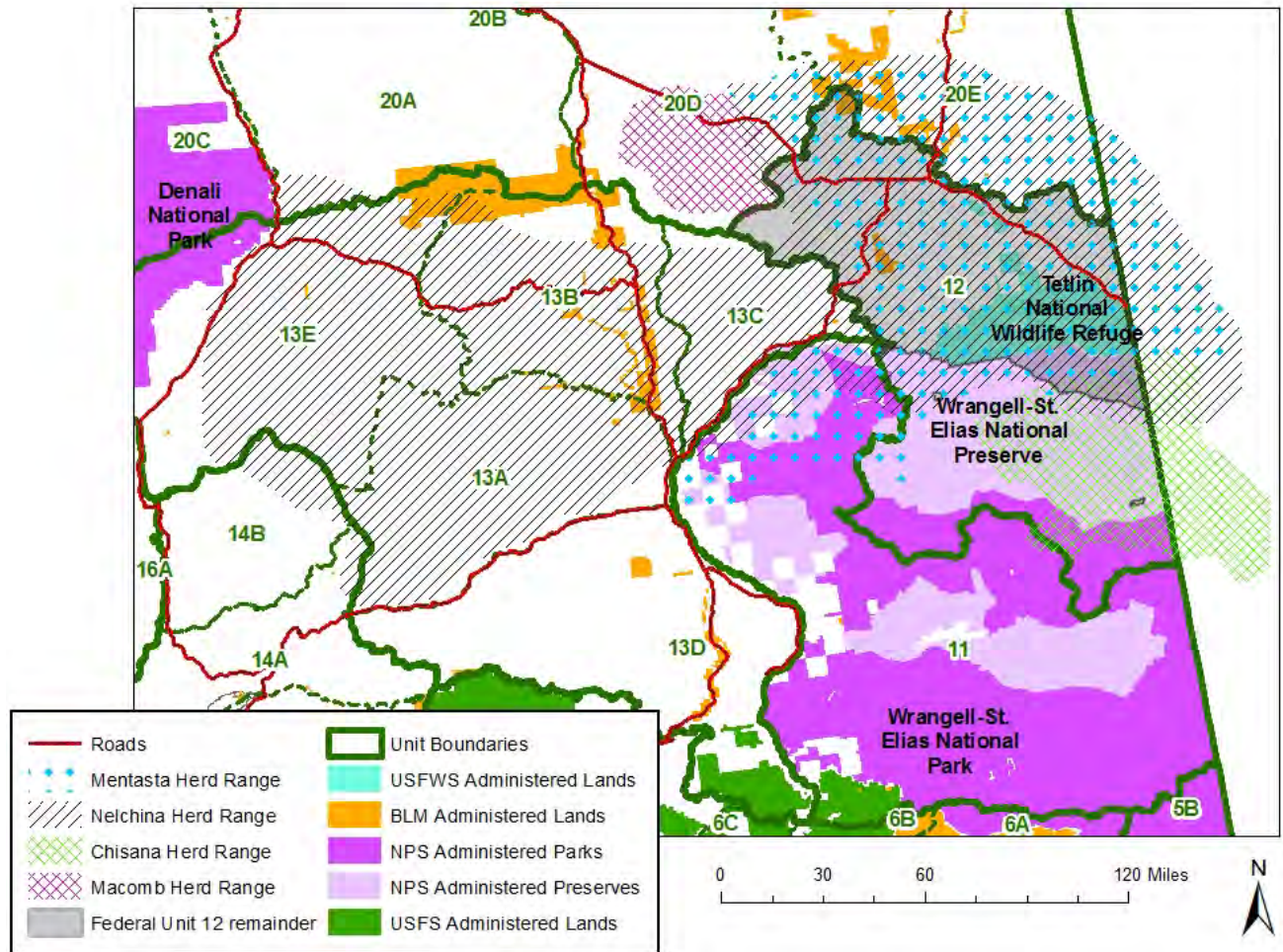
Between 1990 and 1997, Jenkins and Barten (2005) confirmed predation, particularly by gray wolves and grizzly bears, as the proximate cause of the MECH population decline. Grizzly bears were the most important predators of neonates, and gray wolves mostly preyed on older juvenile caribou in the MECH. 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 PRELIMINARY 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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U.S. Fish and Wildlife Service
Bureau of Land Management
National Park Service
Bureau of Indian Affairs

Federal Subsistence Board Informational Flyer



U.S. Forest Service

Contact:

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

How to Submit a Proposal to Change Federal Subsistence Regulations

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

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

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

What your proposal should contain:

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

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

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

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

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

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

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

How a proposal to change Federal subsistence regulations is processed:

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

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

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

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

ANNUAL REPORTS

Background

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

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

Report Content

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

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

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

Report Clarity

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

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

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

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

Report Format

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

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

Southcentral Alaska Subsistence Regional Advisory Council

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In Reply Refer to:
RAC/SC.23003.JG

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

Dear Chairman Christianson:

The Southcentral Alaska Subsistence Regional Advisory Council (Council) appreciates the opportunity to submit its FY-2022 Annual Report to the Federal Subsistence Board (Board) under the provisions of Section 805(a)(3)(D) of the Alaska National Interest Lands Conservation Act (ANILCA). At its public meeting held on October 12-13, 2022, the Council identified concerns and recommendations for this report. The Council approved this Annual Report at its March 15-16, 2023 meeting. The Council wishes to share the following information and concerns dealing with the implementation of Title VIII of ANILCA and the continuation of subsistence uses in the Southcentral Region:

1. The process of reporting anticipated needs of subsistence as stated in the Council Charter

In Section 4(d)(1) and (2), the Council's charter states, "Prepare an annual report to the Secretary containing the following: (1) An identification of current and anticipated subsistence uses of fish and wildlife populations within the Region; (2) An evaluation of current and anticipated subsistence needs for fish and wildlife populations within the Region;" The Council requested clarification on reporting anticipated needs of subsistence and how to conduct an analysis of subsistence use amounts for fish and wildlife in the Southcentral Region. The Council is concerned about increasing competition for resources harvested by Federally qualified subsistence users.

2. Customary and Traditional Use determination process review and competition for the Federally qualified subsistence users for Copper River Salmon

The Council expressed interest in reviewing and updating the process for Customary and Traditional Use (C&T) determinations. The Council is aware of the eight factors for C&T (listed below) and understands that not all factors need to be met to grant C&T to a community. The

Chairman Christianson

Council is also aware that in 2010, the Regional Advisory Councils were asked by the Secretary of the Interior to provide input on the process to make it broader and more inclusive. The Council noted that the input provided into the process by the Councils was to be broad and inclusive of *resources* harvested, not for those requesting C&T use determination. The Council is concerned about competition with other users for subsistence resources available to rural residents, especially for Copper River Salmon. The Council worries about increased competition from an increasing rural resident population and the establishment of new rural communities by non-rural residents who then request C&T. The Council noted requiring communities meet all factors of C&T could alleviate some issues with the C&T request process. Also, the process could be improved by setting some criteria thresholds. For example, the factors that incorporate time (e.g., the phrases “long-term”, “many years”, “passing knowledge from generation to generation”) are not clearly defined.

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.

3. Climate change impacts on methods and means of use and the need for flexibility in seasons affected by climate change

The Council expressed concerns about climate change impacting the methods and means of harvest of subsistence resources. For example, high water levels from intense precipitation are impacting the use and efficacy of traditional fishwheels. Sites that are good for fish wheels which are often not suitable during high water events, and increased precipitation results in more debris (trees, root wads, etc.) in the river when the water is really high that can impact or break the wheels. This example, among others documented in previous annual reports and Council reports during Council meetings, make it difficult to reliably depend on traditional resources. Another major impact from climate change is a change in species migration timing, which results in a mismatch between regulated season timing and resource availability. Additionally, methods and means of harvest used by generations have become inefficient for harvest of traditional resources. The Council encourages the Board to review harvest seasons and methods of harvest and be ready to adapt to changing situations.

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4. Climate change impacts on ocean resources, including paralytic shellfish poisoning and ocean acidification impacts on clams, salmon, and ocean food webs

The Council is interested in continuing to receive information about the impacts of climate change on ocean resources. This has been a topic of interest to the Council for the last few years, and the staff at OSM has invited guest speakers to speak about climate impacts. The Council is particularly interested in how climate change is impacting marine food webs. Subsistence resources such as clams and salmon are critical to the people that call the Southcentral region home, and impacts to marine food webs will have profound impacts on species utilized as subsistence resources. Understanding the impacts of climate change on salmon and clams will allow State and Federal subsistence managers to respond more readily to changing population sizes. The Council noted they would be interested in learning more about the causes and impacts of paralytic shellfish poisoning (PSP). The seasonality of PSP has changed, and as a result, clams have not been safe to eat during the winter months.

5. Ahtna Intertribal Resource Commission Memorandum of Agreement on cooperative management of customary and traditional subsistence uses in the Ahtna region

The Council expressed interest in receiving an update on the Memorandum of Agreement (MOA) between the Department of Interior and Ahtna Intertribal Resource Commission. The purpose of this MOA was to formalize subsistence wildlife management partnership for the allocation and harvest of moose and caribou by rural residents of the Native villages in the Ahtna region on Federal public lands. The MOA was established in 2017 to create a new Federal advisory committee that covers the Ahtna Traditional Use territory. The Council would like to know the status of the MOA.

6. Jurisdiction on subsistence shellfish resources in Prince William Sound and concern over the stock size and closure of subsistence shellfish seasons

The Council expressed concerns over subsistence crabbing opportunities within Prince William Sound. The Council acknowledged that the Board does not have jurisdiction here and that the waters of Prince William Sound are State-managed. Subsistence harvesters have been utilizing the intertidal area to collect food for thousands of years, and it is a disservice to Federally qualified subsistence users to not have authority over the resources contained in the intertidal zone. State regulations have been much more stringent than Federal for peoples' ease of getting food. With the recent closure of the commercial Tanner and King Crab fisheries, there is concern that subsistence closures could be on the way.

The Southcentral Alaska Subsistence Regional Advisory Council appreciates the Board's attention to these matters and the opportunity to assist the Federal Subsistence Management Program in meeting its charge of protecting subsistence resources and uses of these resources on Federal public lands and waters. The Council looks forward to continuing discussions about the issues and concerns of subsistence users in the Southcentral Region. If you have any questions regarding this report, please contact me via Jessica Gill, Subsistence Council Coordinator, Office of Subsistence Management, at jessica_gill@fws.gov, or 1-800-478-1456 or 907-310-6129.

Chairman Christianson

Sincerely,

Richard (Greg) Encelewski
Chair Regional Advisory Council
Southcentral Region

Enclosure

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

Subsistence Regional Advisory Council Correspondence Policy

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

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

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

Policy

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

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

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

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

Revised by the Federal Subsistence Board on XXXXXXXX.

Partners for Fisheries Monitoring Program Report
 Copper River Salmon Monitoring Program
 Matt Piché - Native Village of Eyak
 Department of the Environment and Natural Resources



Table 1. Copper River Chinook salmon run size, abundance, harvest, and spawning escapement.

Year	Returning Run Size Estimate	ADFG Data	NVE Data		ADFG & NPS	Spawning Escapement Estimate
		Copper River Delta Harvest (commercial, subsistence)	In-river Abundance Estimate	Standard Error (SE) of Abundance	In-river Harvest (subsistence, sport, personal use)	
2003	92,485	47,721	44,764	12,506	10,721	34,043
2004	81,098	40,534	40,564	4,650	9,919	30,645
2005	67,117	36,784	30,333	1,529	8,805	21,528
2006	100,656	32,867	67,789	4,779	9,335	58,454
2007	88,787	42,438	46,349	3,283	11,784	34,565
2008	54,417	13,074	41,343	2,166	8,858	32,485
2009	43,887	11,486	32,401	2,365	4,620	27,781
2010	33,150	10,827	22,323	2,492	5,552	16,771
2011	53,883	19,994	33,889	3,329	5,896	27,993
2012	44,306	12,854	31,452	5,242	3,541	27,911
2013	42,825	10,244	32,581	4,425	3,854	28,727
2014	35,286	11,128	24,158	2,100	3,449	20,709
2015	56,124	23,818	32,306	3,977	5,699	26,607
2016	29,157	13,148	16,009	1,193	3,524	12,485
2017	56,081	15,356	40,725	4,187	7,070	33,655
2018	61,583	9,059	52,524	4,034	10,322	42,202
2019	64,412	20,698	43,714	3,143	8,636	35,078
2020	33,055	6,762	26,293	2,863	4,693	21,600
2021	28,611	6,955	21,656	1,919	3135	18,521
2022	50,105	*11,625	34,480	2,960	tbd	tbd
Copper River Sustainable fisheries Escapement Goal (SEG) = 21,000-31,000 Chinook salmon						
* Point estimate or range based on preliminary data only						

The 2003-2022 In-river abundance estimate is determined through a mark recapture study conducted by Native Village of Eyak Department of the Environment and Natural Resources (NVE-DENR) and LGL Alaska Environmental Research Associates, LLC. Harvest data is obtained by the Wrangell St. Elias National Park Service (Federal Subsistence) and Alaska Department of Fish and Game (Commercial, State Subsistence, Personal Use, and Sport Fishing) through harvest permit reporting and mail out harvest surveys.

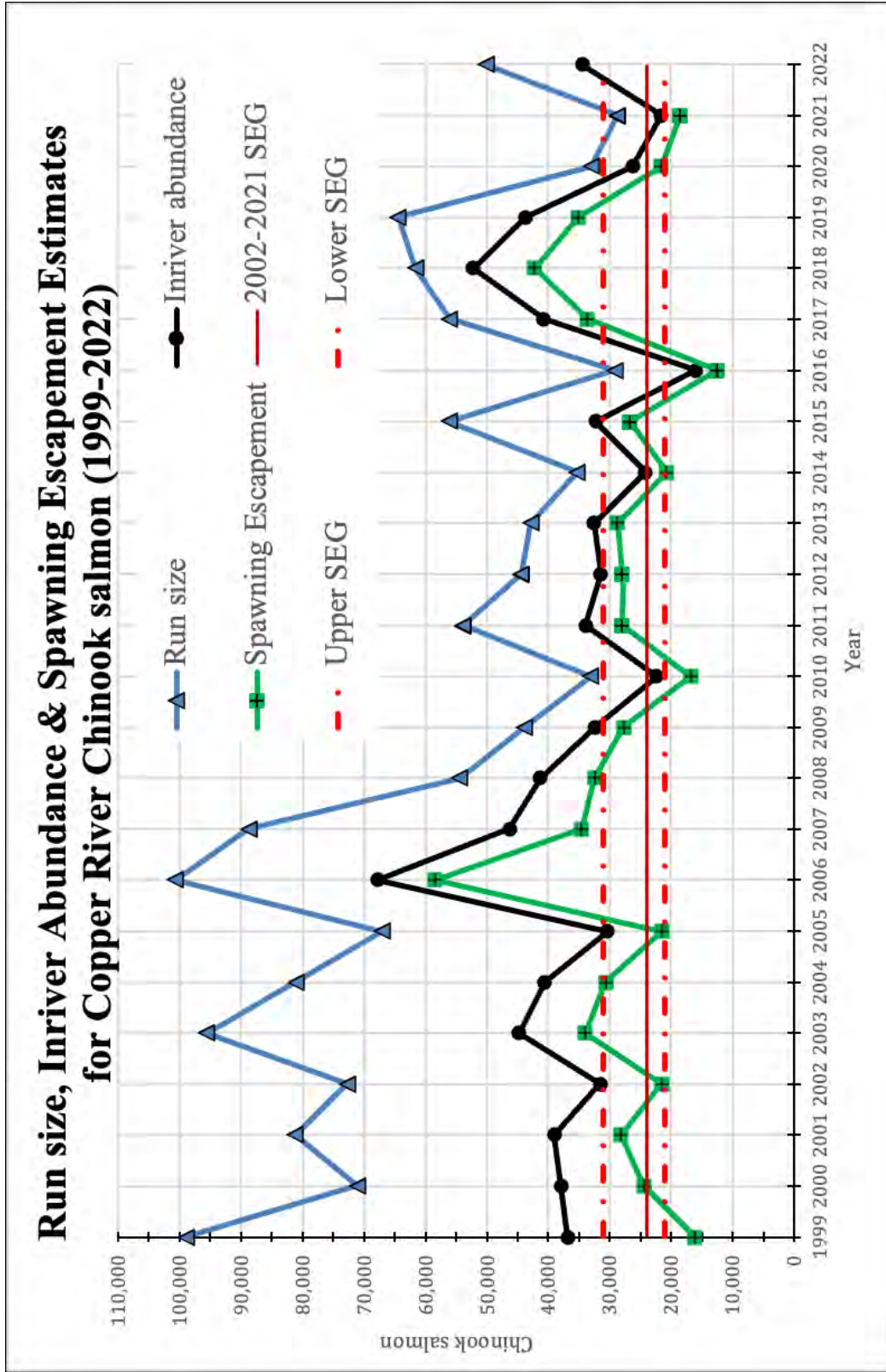


Figure 1. Estimates of Run Size, Inriver Abundance, and Spawning Escapement of Copper River Chinook salmon; 1999-2002 ADF&G Mark-recapture data; 2003-2022 NVE Mark-recapture data; 1999-2022 harvest data from NPS & ADF&G. (a, b, c) 2021 spawning escapement is based on available preliminary data and does not include sport fish harvest as mail out harvest surveys are currently being assessed.

Table 2. NVE Copper River Chinook salmon mark recapture project results summary 2003-2022.

Year	Period (m/d)		Length (mm FL)	Marked (M)	Examined (c)	Recaptured (r)	Abundance (N)	Standard Error (SE)	Lower 95% CL	Upper 95% CI	CV	Mark Rate
	From	To										
2003	5/17	7/1	810-1,070	1,723	1,630	97	44,764	12,506	20,490	69,040	27.9%	6.0%
2004	5/22	6/22	> 600	2,477	3,101	185	40,564	4,650	31,450	49,677	11.5%	6.0%
2005	5/9	7/14	> 600	3,379	3,150	315	30,333	1,529	27,336	33,330	5.0%	10.0%
2006	5/21	7/31	> 500	4,035	5,224	377	67,789	4,779	58,422	77,157	7.0%	7.2%
2007	5/18	8/6	> 500	4,456	4,192	459	46,349	3,283	39,914	52,784	7.1%	10.9%
2008	5/19	8/4	> 500	3,931	3,509	342	41,343	2,166	37,098	45,588	5.2%	9.7%
2009	5/13	8/2	> 500	2,484	2,224	171	32,401	2,365	27,766	37,036	7.3%	7.7%
2010	5/15	7/5	> 500	1,745	894	69	22,323	2,492	17,438	27,207	11.2%	7.7%
2011	5/15	7/9	> 500	2,135	2,832	178	33,889	3,329	27,364	40,415	9.8%	6.3%
2012	5/20	7/7	> 500	2,570	1,816	150	31,452	5,242	21,179	41,726	16.7%	8.3%
2013	6/5	7/9	> 500	1,029	1,549	48	32,581	4,425	23,907	41,254	13.6%	3.1%
2014	5/14	7/9	> 500	1,871	2,507	177	24,158	2,100	20,043	28,273	8.7%	7.1%
2015	5/15	7/10	> 500	2,504	2,082	127	32,306	3,977	24,511	40,101	12.3%	6.1%
2016	5/9	7/10	> 500	2,404	1,248	171	16,009	1,193	13,671	18,347	7.5%	13.7%
2017	5/15	7/11	> 500	3,819	1,645	180	40,725	4,187	32,520	48,931	10.3%	10.9%
2018	5/19	7/8	> 500	5,218	4,789	513	52,524	3,935	44,811	60,236	7.5%	10.7%
2019	5/12	7/2	> 500	4,685	2,646	297	43,714	3,143	37,553	49,875	7.2%	11.2%
2020	5/10	7/13	> 500	2,337	1,182	116	26,293	2,863	20,680	31,905	10.9%	9.8%
2021	5/16	7/17	> 500	1,961	1,373	116	21,656	1,919	17,894	25,417	8.9%	8.4%
2022	5/15	7/11	> 500	*3,261	*1,719	*139	34,480	2,960	32,679	44,281	7.7%	8.1%

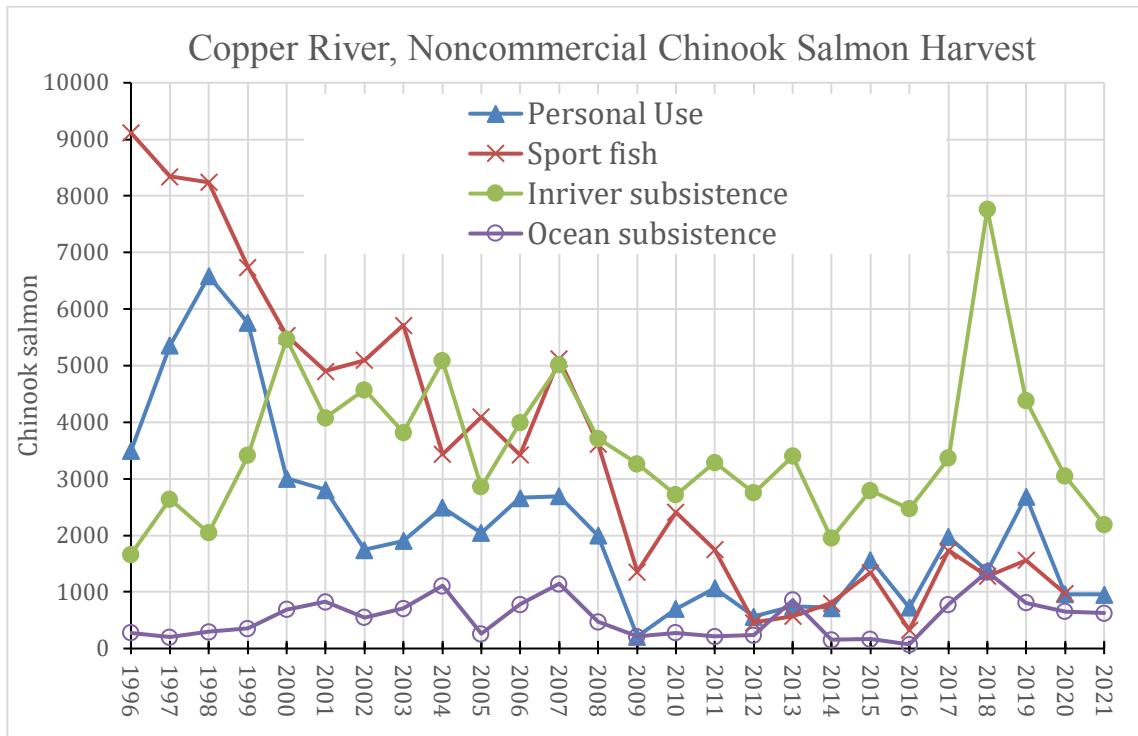


Figure 2. In-river harvest of Copper River Chinook salmon, 1996-2020. (c)

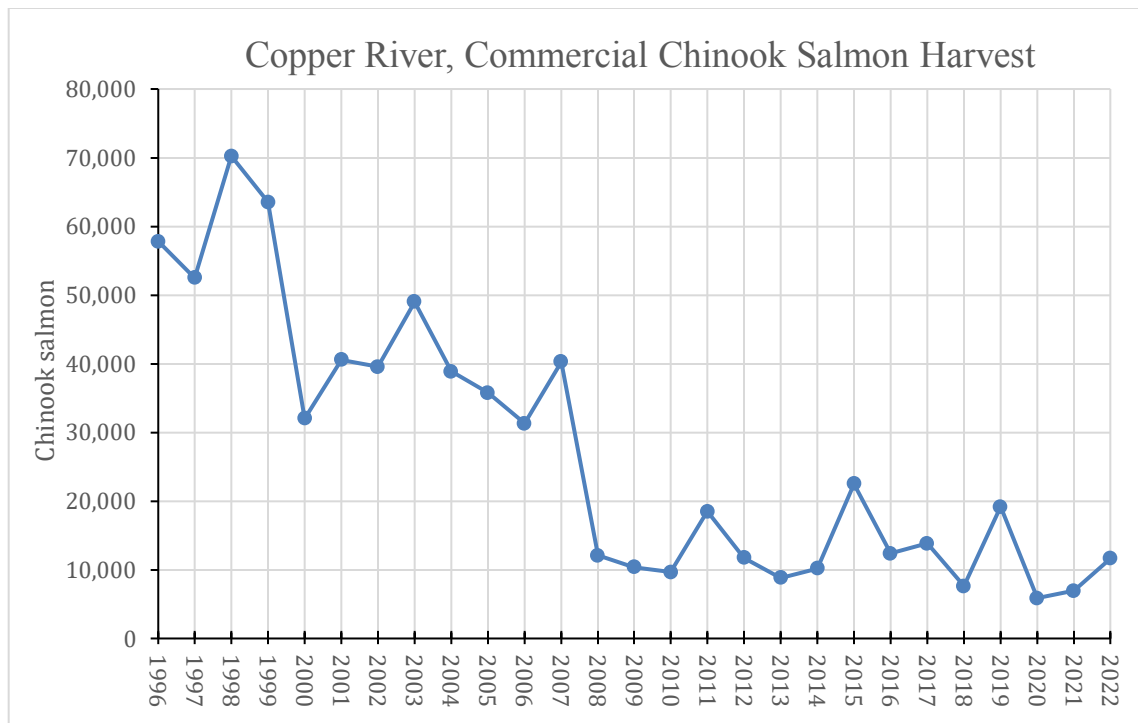


Figure 3. Commercial harvest of Copper River Chinook salmon, 1996-2021. (c)*2022-preliminary

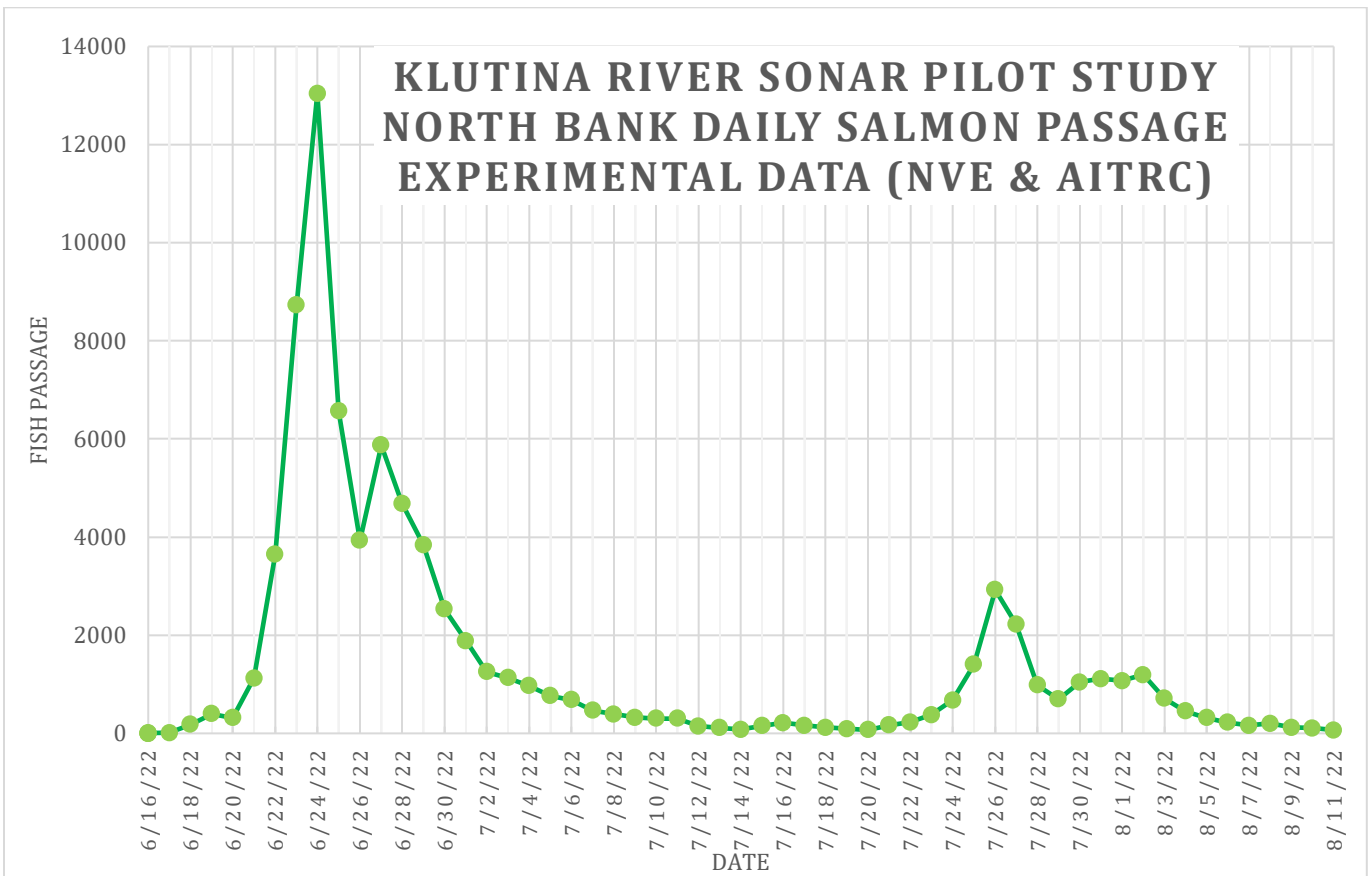


Figure 4. Klutina River daily salmon passage for north bank sonar at 5-mile (experimental data), 2022.

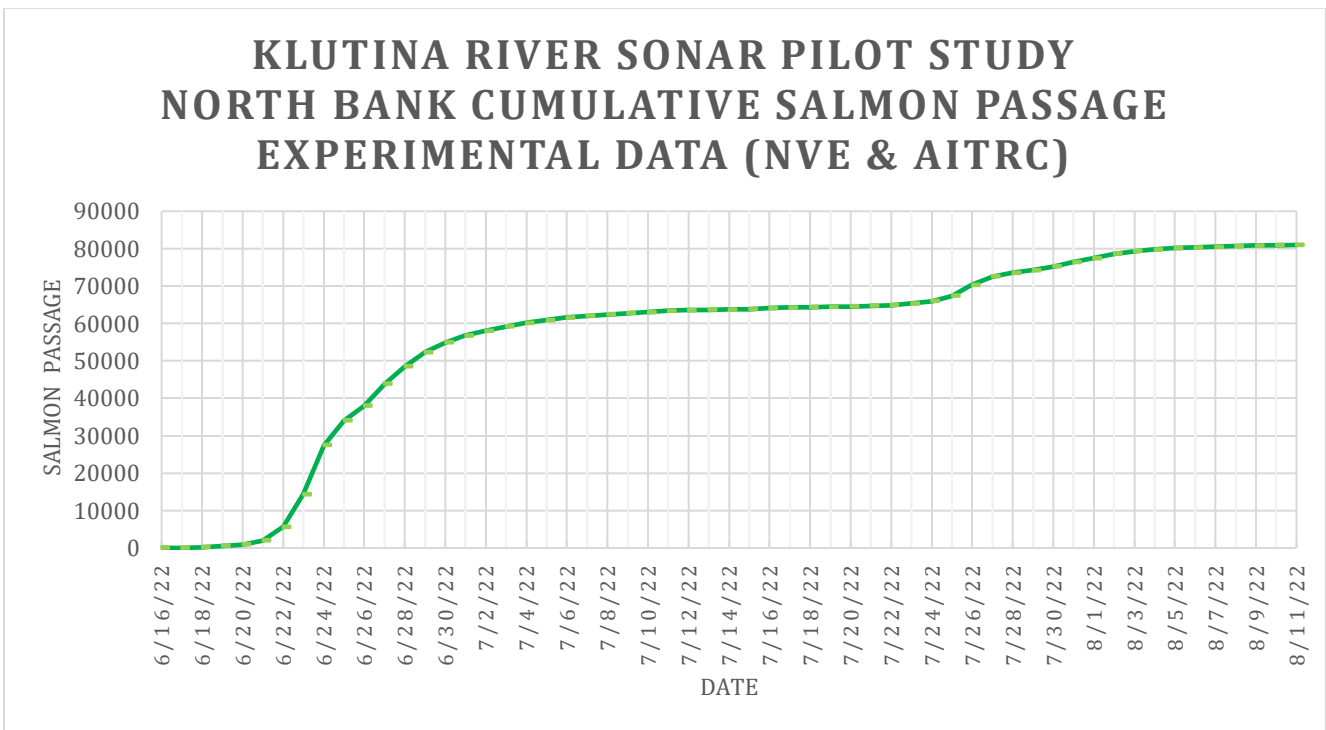


Figure 5. Klutina River cumulative salmon passage for north bank sonar at 5-mile (experimental data), 2022.

Data source (Tables and Figures):

Botz, J., C.W. Russell, J. Morella, and S. Haught. 2021. 2020 Prince William Sound area finfish management report. Alaska Department of Fish and Game, Fishery Management Report No. 21-18, Anchorage.

Piche, M.J., J.C. Whissel, and J.J. Smith. 2021. Estimating the in-river abundance of Copper River Chinook salmon, 2020 Annual Report. U.S. Fish and Wildlife Service - Office of Subsistence Management, Fisheries Resource Monitoring Program (Study No. 18-504), Anchorage, Alaska.

Somerville, M.A. and T.R. Hansen 2021. Fishery management report for the recreational fisheries of the Upper Copper/Upper Susitna River management area, 2019. Alaska Department of Fish and Game, Fishery Management Report No. 21-07, Anchorage.

Funding for the 2022 Copper River Salmon Monitoring Program has been generously provided by the USFWS-Fisheries Resource Monitoring Program & Partners for Fisheries Monitoring Program; USFWS-Tribal Wildlife Grant; The Alaska Sustainable Salmon Fund; U.S. Department of Commerce, National Oceanic and Atmospheric Administration, The Alaska Department of Fish and Game, The Copper River Prince William Sound Marketing Association; and the Native Village of Eyak.



TABLE 1—COMPARISON OF CURRENT¹ AND PROPOSED FEES—Continued

I-407	Record of Abandonment of Lawful Permanent Resident Status	No Fee	No Fee	N/A	N/A
I-485J	Confirmation of Bona Fide Job Offer or Request for Job Portability Under INA Section 204(j).	No Fee	No Fee	N/A	N/A
I-508	Request for Waiver of Certain Rights, Privileges, Exemptions, and Immunities.	No Fee	No Fee	N/A	N/A
I-566	Interagency Record of Request—A, G, or NATO Dependent Employment Authorization or Change/Adjustment To/From A, G, or NATO Status.	No Fee	No Fee	N/A	N/A
I-693	Report of Medical Examination and Vaccination Record	No Fee	No Fee	N/A	N/A
I-854	Inter-Agency Alien Witness and Informant Record	No Fee	No Fee	N/A	N/A
I-864	Affidavit of Support Under Section 213A of the INA	No Fee	No Fee	N/A	N/A
I-864A	Contract Between Sponsor and Household Member	No Fee	No Fee	N/A	N/A
I-864EZ	Affidavit of Support Under Section 213A of the INA	No Fee	No Fee	N/A	N/A
I-864W	Request for Exemption for Intending Immigrant's Affidavit of Support.	No Fee	No Fee	N/A	N/A
I-865	Sponsor's Notice of Change of Address	No Fee	No Fee	N/A	N/A
I-912	Request for Fee Waiver	No Fee	No Fee	N/A	N/A
I-942	Request for Reduced Fee	No Fee	No Fee	N/A	N/A

¹ These are fees that USCIS is currently charging and not those codified by the 2020 fee rule.

Christina E. McDonald,

Federal Register Liaison, U.S. Department of Homeland Security.

[FR Doc. 2023-00274 Filed 1-6-23; 8:45 am]

BILLING CODE 9111-97-P

DEPARTMENT OF THE INTERIOR

National Park Service

36 CFR Part 13

[NPS-AKRO-33913; PPAKAKROZ5, PPMRLE1Y.L00000]

RIN 1024-AE70

Alaska; Hunting and Trapping in National Preserves

AGENCY: National Park Service, Interior.

ACTION: Proposed rule.

SUMMARY: The National Park Service (NPS) proposes to amend its regulations for sport hunting and trapping in national preserves in Alaska. This proposed rule would prohibit certain harvest practices, including bear baiting; and prohibit predator control or predator reduction on national preserves.

DATES: Comments on the proposed rule must be received by 11:59 p.m. ET on March 10, 2023.

ADDRESSES: You may submit comments, identified by Regulation Identifier Number (RIN) 1024-AE70, by either of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *Mail or Hand Deliver to:* National Park Service, Regional Director, Alaska Regional Office, 240 West 5th Ave., Anchorage, AK 99501. *Comments delivered on external electronic storage devices (flash drives, compact discs, etc.) will not be accepted.*

- *Instructions:* Comments will not be accepted by fax, email, or in any way other than those specified above. Comments delivered on external electronic storage devices (flash drives, compact discs, etc.) will not be accepted. All submissions received must include the words “National Park Service” or “NPS” and must include the docket number or RIN (1024-AE70) for this rulemaking. Comments received will be posted without change to <https://www.regulations.gov>, including any personal information provided.

- *Docket:* For access to the docket to read background documents or comments received, go to <https://www.regulations.gov> and search for “1024-AE70.”

FOR FURTHER INFORMATION CONTACT:

Regional Director, Alaska Regional Office, 240 West 5th Ave., Anchorage, AK 99501; phone (907) 644-3510; email: AKR_Regulations@nps.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:

Background

The Alaska National Interest Lands Conservation Act (ANILCA) allows harvest of wildlife in national preserves in Alaska for subsistence purposes by local rural residents under Federal regulations. ANILCA also allows harvest of wildlife for sport purposes by any individual under laws of the State of Alaska (referred to as the State) that do not conflict with federal laws. ANILCA requires the National Park Service (NPS) to manage national preserves consistent

with the NPS Organic Act of 1916, which directs the NPS “to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” 54 U.S.C. 100101(a).

On June 9, 2020, the NPS published a final rule (2020 Rule; 85 FR 35181) that removed restrictions on sport hunting and trapping in national preserves in Alaska that were implemented by the NPS in 2015 (2015 Rule; 80 FR 64325). These included restrictions on the following methods of taking wildlife that were and continue to be authorized by the State in certain locations: taking black bear cubs, and sows with cubs, with artificial light at den sites; harvesting bears over bait; taking wolves and coyotes (including pups) during the denning season (between May 1 and August 9); taking swimming caribou; taking caribou from motorboats under power; and using dogs to hunt black bears. The 2015 Rule prohibited other harvest practices that were and continue to be similarly prohibited by the State. These prohibitions were also removed by the 2020 Rule. The 2020 Rule also removed a statement in the 2015 Rule that State laws or management actions that seek to, or have the potential to, alter or manipulate natural predator populations or processes in order to increase harvest of ungulates by humans are not allowed in national preserves in Alaska. The NPS based the 2020 Rule in part on direction from the Department of the Interior (DOI) to expand recreational hunting opportunities and align hunting opportunities with those established by states. Secretarial Orders 3347 and 3356. The 2020 Rule also responded to direction from the

Secretary of the Interior to review and reconsider regulations that were more restrictive than state provisions, and specifically the restrictions on harvesting wildlife found in the 2015 Rule.

The harvest practices at issue in both the 2015 and 2020 Rules are specific to harvest under the authorization for sport hunting and trapping in ANILCA. Neither rule addressed subsistence harvest by rural residents under title VIII of ANILCA.

The 2015 Rule

Some of the harvest methods prohibited by the 2015 Rule targeted predators. When the NPS restricted these harvest methods in the 2015 Rule, it concluded that these methods were allowed by the State for the purpose of reducing predation by bears and wolves to increase populations of prey species (ungulates) for harvest by human hunters. The State's hunting regulations are driven by proposals from members of the public, fish and game advisory entities, and State and Federal government agencies. The State, through the State of Alaska Board of Game (BOG), deliberates on the various proposals publicly. Many of the comments made in the proposals and BOG deliberations on specific hunting practices showed that they were intended to reduce predator populations for the purpose of increasing prey populations. Though the State objected to this conclusion in its comments on the 2015 Rule, the NPS's conclusion was based on State law and policies;¹ BOG proposals, deliberations, and decisions;² and Alaska Department of Fish and Game actions, statements, and publications leading up to the 2015 Rule.³ Because NPS Management

¹ Alaska Statutes (AS) section 16.05.255(k) (definition of sustained yield); Findings of the Alaska Board of Game, 2006–164–BOG, Board of Game Bear Conservation and Management Policy (May 14, 2006) (rescinded in 2012).

² See, e.g., Alaska Board of Game Proposal Book for March 2012, proposals 146, 167, 232.

³ See, e.g., AS section 16.05.255(e); State of Alaska Department of Fish and Game Emergency Order on Hunting and Trapping 04–01–11 (Mar. 31, 2011) (available at Administrative Record for Alaska v. Jewell et al., No. 3:17–cv–00013–JWS, D. Alaska pp. NPS0164632–35); State of Alaska Department of Fish and Game Agenda Change 11 Request to State Board of Game to increase brown bear harvest in game management unit 22 (2015); Alaska Department of Fish and Game Wildlife Conservation Director Corey Rossi, "Abundance Based Fish, Game Management Can Benefit All," Anchorage Daily News (Feb. 21, 2009); ADFG News Release—Wolf Hunting and Trapping Season extended in Unit 9 and 10 in response to caribou population declines (3/31/2011); Alaska Department of Fish and Game Craig Fleener, Testimony to U.S. Senate Committee on Energy and Natural Resources re: Abundance Based Wildlife Management (Sept. 23, 2013); Alaska Department of

Policies state that the NPS will manage park lands for natural processes (including natural wildlife fluctuations, abundances, and behaviors) and explicitly prohibit predator control, the NPS determined that these harvest methods authorized by the State were in conflict with NPS mandates. NPS Management Policies (4.4.1, 4.4.3) (2006). For these reasons and because the State refused to exempt national preserves from these authorized practices, the NPS prohibited them in the 2015 Rule and adopted a regulatory provision consistent with NPS policy direction on predator control related to harvest. The 2015 Rule further provided that the Regional Director would compile, annually update, and post on the NPS website a list of any State predator control laws or actions prohibited by the NPS on national preserves in Alaska.

As stated above, the 2015 Rule only restricted harvest for "sport purposes." Although this phrase is used in ANILCA, the statute does not define the term "sport." In the 2015 Rule, the NPS reasoned that harvest for subsistence is for the purpose of feeding oneself and family and maintaining cultural practices, and that "sport" or recreational hunting invokes Western concepts of fairness which do not necessarily apply to subsistence practices. Therefore, the 2015 Rule prohibited the practices of harvesting swimming caribou and taking caribou from motorboats under power which the NPS concluded were not consistent with generally accepted notions of "sport" hunting. This conclusion also supported restrictions in the 2015 Rule on the practices of taking bear cubs and sows with cubs; and using a vehicle to chase, drive, herd, molest, or otherwise disturb wildlife. To illustrate how the 2015 Rule worked in practice, a federally qualified local rural resident could harvest bear cubs and sows with cubs, or could harvest swimming caribou (where authorized under federal subsistence regulations), but a hunter from Anchorage, Fairbanks, Juneau or other nonrural areas in Alaska, or a hunter from outside Alaska, could not.

In the 2015 Rule, the NPS also concluded that the practice of putting out bait to attract bears for harvest poses an unacceptable safety risk to the visiting public and leads to unnatural wildlife behavior by attracting bears to a food source that would not normally

Fish and Game, Hunting and Trapping Emergency Order 4–01–11 to Extend Wolf Hunting and Trapping Seasons in GMU [Game Management Unit] 9 and 10 (LACL and KATM) (Nov. 25, 2014); ADFG Presentation Intensive Management of Wolves, Bears, and Ungulates in Alaska (Feb. 2009).

be there. The NPS based this conclusion on the understanding that bears are more likely to attack when defending a food source and therefore visitors who encountered a bait station would be at risk from bear attacks. In addition, the NPS concluded that baiting could cause more bears to become conditioned to human food, creating unacceptable public safety risks. The NPS based this conclusion on the fact that not all bears that visit bait stations are harvested; for example, a hunter may not be present when the bear visits the station, or a hunter may decide not to harvest a particular bear for a variety of reasons. Additionally, other animals are attracted to bait stations. Because bait often includes dog food and human food, including items like bacon grease and pancake syrup, which are not a natural component of animal diets, the NPS was concerned that baiting could lead to bears and other animals associating these foods with people, which would create a variety of risks to people, bears, and property. For these reasons, the 2015 Rule prohibited bear baiting in national preserves in Alaska.

The NPS received approximately 70,000 comments during the public comment period for the 2015 Rule. These included unique comment letters, form letters, and signed petitions. Approximately 65,000 comments were form letters. The NPS also received three petitions with a combined total of approximately 75,000 signatures. The NPS counted a letter or petition as a single comment, regardless of the number of signatories. More than 99% of the public comments supported the 2015 Rule. Comments on the 2015 Rule can be viewed on *regulations.gov* by searching for "RIN 1024-AE21".

The 2020 Rule

The 2020 Rule reconsidered the conclusions in the 2015 Rule regarding predator control, sport hunting, and bear baiting. First, the 2020 Rule reversed the 2015 Rule's conclusion that the State intended to reduce predator populations through its hunting regulations. As explained above, the NPS's conclusion in the 2015 Rule was based on BOG proposals, deliberations, and decisions; and Alaska Department of Fish and Game actions, statements, and publications that preceded the 2015 Rule. However, in their written comments on the 2015 and 2020 Rules, the State denied that the harvest

practices for predators were part of their predator control or intensive management programs and therefore were not efforts to reduce predators. In its written comments, the State argued that the liberalized predator harvest

rules were simply a means to provide new opportunities for hunters to harvest predators, in response to requests received by the BOG. The State argued that it provided these new opportunities under a “sustained yield” management framework, which is distinct from what the State considers “predator control.” The State asserted that it has a separate, formal predator control program which is not considered “hunting” by the State. According to the State, predator control occurs only through its “intensive management” program.

The NPS afforded the State’s written comments on the 2020 Rule more weight than it did on the State’s similar comments on the 2015 Rule, both of which were in conflict with other contemporaneous public State positions on the matter. The NPS took into account the analysis in the environmental assessment supporting the 2020 Rule, which concluded that the hunting practices in question would not likely alter natural predator-prey dynamics at the population level or have a significant foreseeable adverse impact to wildlife populations, or otherwise impair park resources. The NPS also considered what it viewed as the legislative requirements of ANILCA with respect to hunting. Based upon these considerations, the NPS concluded the hunting practices did not run afoul of NPS Management Policies section 4.4.3, which prohibits predator reduction to increase numbers of harvested prey species. This led the NPS to remove two provisions that were implemented in the 2015 Rule: (1) the statement that State laws or management actions intended to reduce predators are not allowed in NPS units in Alaska, and (2) prohibitions on several methods of harvesting predators. With prohibitions on harvest methods removed, the 2020 Rule went back to deferring to authorizations under State law for harvesting predators. To illustrate how the 2020 Rule works in practice, Alaska residents, including rural and nonrural residents, and out-of-state hunters may take wolves and coyotes (including pups) for sport purposes in national preserves during the denning season in accordance with State law.

The 2020 Rule also relied upon a different interpretation of the term “sport” in ANILCA’s authorization for harvest of wildlife for sport purposes in national preserves in Alaska. As explained above, the 2015 Rule gave the term “sport” its common meaning associated with standards of fairness, and prohibited certain practices that were not compatible with these standards. In the 2020 Rule, the NPS

stated that in the absence of a statutory definition, the term “sport” merely served to distinguish sport hunting from harvest under federal subsistence regulations. Consequently, under the 2020 Rule, practices that may not be generally compatible with notions of “sport”—such as harvesting swimming caribou or taking cubs and pups or mothers with their young—may be used by anyone in national preserves in accordance with State law.

Finally, the 2020 Rule reconsidered the risk of bear baiting to the visiting public. The NPS noted that peer-reviewed data are limited on the specific topic of hunting bears over bait. Additionally, the NPS concluded that human-bear interactions are likely to be rare, other than for hunters seeking bears, due to a lack of observed bear conditioning to associate bait stations with humans and the relatively few people in such remote areas to interact with bears. In making this risk assessment, the NPS took into account state regulations on baiting that are intended to mitigate safety concerns, and NPS authority to enact local closures if and where necessary. For these reasons and because of policy direction from the DOI and the Secretary of the Interior requiring maximum deference to state laws on harvest that did not exist in 2015, the 2020 Rule rescinded the prohibition on bear baiting that was implemented in the 2015 Rule. As a result, any Alaska resident, including rural and nonrural residents, or out-of-state hunter may take bears over bait in national preserves in Alaska in accordance with State law, including with the use of human and dog foods.

The NPS received approximately 211,780 pieces of correspondence, with a total of 489,101 signatures, during the public comment period for the 2020 Rule. Of the 211,780 pieces of correspondence, approximately 176,000 were form letters and approximately 35,000 were unique comments. More than 99% of the public comments opposed the 2020 Rule. Comments on the 2020 Rule can be viewed on *regulations.gov* by searching for “RIN 1024-AE38”.

Proposed Rule

In this proposed rule, the NPS reconsiders the conclusions that supported the 2020 Rule. This proposed rule addresses three topics that were considered in the 2015 and 2020 Rules: (1) bear baiting; (2) the meaning and scope of hunting for “sport purposes” under ANILCA; and (3) State law addressing predator harvest. After reconsidering these topics, the NPS

proposes in this rule to prohibit the same harvest methods that were prohibited in the 2015 Rule. The proposed rule also would prohibit predator control or predator reduction on national preserves. Finally, the proposed rule would clarify the regulatory definition of trapping for reasons explained below. The NPS has begun consulting and communicating with Tribes and Alaska Native Claims Settlement Act (ANCSA) Corporations that would be most affected by this proposed rule and the feedback provided to date has been incorporated by the NPS in this proposed rule as discussed below.

Bear Baiting

The NPS proposes to prohibit bear baiting in national preserves in Alaska. Bait that hunters typically use to attract bears includes processed foods like bread, pastries, dog food, and bacon grease. As explained below, this proposal would lower the risk that bears will associate food at bait stations with humans and become conditioned to eating human-produced foods, thereby creating a public safety concern. This proposal would also lower the probability of visitors encountering a bait station where bears may attack to defend a food source. The proposal to prohibit baiting is supported by two primary risk factors and other considerations that are discussed below.

Risk of Bears Defending a Food Source

The risks caused by humans feeding bears (including baiting them with food) are widely recognized.⁴ Bears are more likely to attack when defending a food source, putting visitors who encounter a bear at or near a bait station or a kill site

⁴Herrero, S. 2018. Bear attacks: their causes and avoidance. Lyons Press, Guilford, Connecticut, USA at p. 22; Glitzenstein, E., Fritschie, J. The Forest Service’s Bait and Switch: A Case Study on Bear Baiting and the Service’s Struggle to Adopt a Reasoned Policy on a Controversial Hunting Practice within the National Forests. 1 *Animal Law* 47, 55–56 (1995). See also, Denali State Park Management Plan, 69 (2006) (“The practice has the potential for creating serious human-bear conflicts, by encouraging bears to associate campgrounds and other human congregation points with food sources.”); City and Borough of Juneau, Living with Bears: How to Avoid Conflict (available at https://juneau.org/wp-content/uploads/2017/03/2004_living_w_pamphlet_finaljustified.pdf), City and Borough of Juneau, Living in Bear Country (available at https://juneau.org/wp-content/uploads/2017/03/living_in_bear_country_color.pdf) (“It is well known that garbage kills bears—that is, once bears associate people with a food reward, a chain of events is set into motion and the end result, very often, is a dead bear.”); Biologists say trash bears in Eagle River will be killed—but people are the problem, Anchorage Daily News (available at www.adn.com/alaska-news/wildlife/2018/06/18/biologists-say-trash-bears-in-eagle-river-will-be-killed-but-people-are-the-problem/).

at significant risk.⁵ Visitors to national preserves in Alaska may inadvertently encounter bears and bait stations while engaging in sightseeing, hiking, boating, hunting, photography, fishing, and a range of other activities. This is because despite the vast, relatively undeveloped nature of these national preserves, most visitation occurs near roads, trails, waterways, or other encampments (e.g., cabins, residences, communities). Establishing and maintaining a bait station requires the transport of supplies, including bait, barrels, tree stands, and game cameras. The same roads, trails, and waterways used by visitors are, therefore, also used by those setting up a bait station. Thus, despite the vast landscapes, bear baiting and many other visitor activities are concentrated around the same limited access points. Processed foods are most commonly used for bait because they are convenient to obtain and are attractive to bears. Processed foods do not degrade quickly nor are they rapidly or easily broken down by insects and microbes. As a result, they persist on the landscape along with the public safety risk of bears defending a food source.

The NPS recognizes that there are restrictions in State law intended to mitigate the risks described above. Bait stations are prohibited within ¼ mile of a road or trail and within one mile of a dwelling, cabin, campground, or other recreational facility. State regulations also require bait station areas to be signed so that the public is aware that a bait station exists. Although these mitigation measures may reduce the immediate risk of park visitors approaching a bear defending bait, NPS records indicate that bait stations established at Wrangell-St. Elias National Park and Preserve often do not comply with the State's minimum distance requirements. Further, as discussed below, these requirements do not mitigate the risk of other adverse outcomes associated with baiting that are discussed below.

Risk of Habituated and Food-Conditioned Bears

Another aspect of bear baiting that poses a public safety and property risk is the possibility that bears become habituated to humans through exposure to human scents at bait stations and then become food conditioned, meaning

⁵Herrero, S. 2018. Bear attacks: their causes and avoidance. Lyons Press, Guilford, Connecticut, USA. at p. 22; Glitzenstein, E., Fritschie, J. The Forest Service's Bait and Switch: A Case Study on Bear Baiting and the Service's Struggle to Adopt a Reasoned Policy on a Controversial Hunting Practice within the National Forests. 1 Animal Law 47, 55–56 (1995).

they learn to associate humans with a food reward (bait). This is particularly true of processed foods that are not part of a bear's natural diet because virtually all encounters with processed foods include exposure to human scent.

It is well understood that habituated and food-conditioned bears pose a heightened public safety risk.⁶ The published works of Stephen Herrero, a recognized authority on human-bear conflicts and bear attacks explain the dangers from bears that are habituated to people or have learned to feed on human food, highlight that habituation combined with food-conditioning has been associated with a large number of injuries to humans, and indicate food-conditioning of bears may result from exposure to human food at bait stations.

The State's mitigation measures mentioned above, including requirements for buffers and signage, do not adequately address the risk associated with habituated and food-conditioned bears because bears range widely, having home ranges of tens to hundreds of square miles.⁷ The buffers around roads, trails, and dwellings are therefore inconsequential for bears that feed at bait stations but are not harvested there. These bears have the potential to become habituated to humans and conditioned to human-produced foods, resulting in increased likelihood of incidents that compromise public safety, result in property damage and threaten the lives of bears who are killed in defense of human life and property.

In the 2020 Rule, the NPS determined that the lack of conclusive evidence that bear baiting poses safety concerns justified allowing bear baiting. While the NPS acknowledges the lack of peer-reviewed data demonstrating that bear baiting poses a public safety risk, this data gap exists primarily because rigorous studies specific to this point are logistically and ethically infeasible. The determination made by the NPS in the 2020 Rule did not fully consider the vast experience and knowledge of recognized experts and professional resource managers. In April 2022, the NPS queried 14 NPS resource managers

⁶Herrero, S. 2018. Bear attacks: their causes and avoidance. Lyons Press, Guilford, Connecticut, USA. at p. 22; Glitzenstein, E., Fritschie, J. The Forest Service's Bait and Switch: A Case Study on Bear Baiting and the Service's Struggle to Adopt a Reasoned Policy on a Controversial Hunting Practice within the National Forests. 1 Animal Law 47, 55–56 (1995).

⁷See, e.g., Glitzenstein, E., Fritschie, J. The Forest Service's Bait and Switch: A Case Study on Bear Baiting and the Service's Struggle to Adopt a Reasoned Policy on a Controversial Hunting Practice within the National Forests. 1 Animal Law 52–53 (1995).

and wildlife biologists from 12 different National Park System units in Alaska about bear baiting. These technical experts' unanimous opinion was that bear baiting will increase the likelihood of defense of life and property kills of bears and will alter the natural processes and behaviors of bears and other wildlife. Considering the potential for significant human injury or even death, these experts considered the overall risk of bear baiting to the visiting public to be moderate to high. These findings generally agree with the universal recognition in the field of bear management that food conditioned bears result in increased bear mortality and heightened risk to public safety and property, and that baiting, by its very design and intent, alters bear behavior. The findings also are consistent with the State's management plan for Denali State Park. The management plan expresses concern that bear baiting "teaches bears to associate humans with food sources" and states that bear baiting is in direct conflict with recreational, non-hunting uses of the park. The plan further notes that bear baiting has "the potential for creating serious human-bear conflicts, by encouraging bears to associate campgrounds and other human congregation points with food sources."⁸

Other Considerations

In addition to the risks explained above, there are other considerations that support the proposal to prohibit all bear baiting. The NPS is guided by its mandates under the NPS Organic Act to conserve wildlife and under ANILCA to protect wildlife populations. Food-conditioned bears are more likely to be killed by authorities or by the public in defense of life or property.⁹ While the NPS supports wildlife harvest as authorized in ANILCA, it cannot

⁸Denali State Park Management Plan, 69 (2006).

⁹See e.g., City and Borough of Juneau, Living with Bears: How to Avoid Conflict (available at https://juneau.org/wp-content/uploads/2017/03/2004_living_w_pamphlet_finaljustified.pdf), and Borough of Juneau, Living in Bear Country (available at https://juneau.org/wp-content/uploads/2011/03/living_in_bear_country_color.pdf)

("It is well known that garbage kills bears—that is, once bears associate people with a food reward, a chain of events is set into motion and the end result, very often, is a dead bear."); Biologists say trash bears in Eagle River will be killed—but people are the problem, Anchorage Daily News (available at www.adn.com/alaska-news/wildlife/2018/06/18/biologists-say-trash-bears-in-eagle-river-will-be-killed-but-people-are-the-problem/); Glitzenstein, E., Fritschie, J. The Forest Service's Bait and Switch: A Case Study on Bear Baiting and the Service's Struggle to Adopt a Reasoned Policy on a Controversial Hunting Practice within the National Forests. 1 Animal Law 52–53 (1995).

promote activities that increase non-harvest mortalities of bears.

Feedback From Tribes and ANCSA Corporations on Bear Baiting

Feedback received to date from Tribes and ANCSA Corporations indicates baiting bears is not a common activity in or near national preserves and not something done commonly by local rural residents. Many of the entities voiced support for prohibiting baiting altogether, limiting bait to natural items, increasing buffer zones around developments, or requiring a permit. On the other hand, a minority—mostly entities affiliated with the Wrangell-St. Elias area—recommended continuing to allow sport hunters to harvest bears over bait, including with use of processed foods like donuts and dog food. Consultation and communication with Tribes and ANCSA Corporations is ongoing and feedback will continue to be considered by the NPS throughout the rulemaking process.

The Meaning and Scope of Hunting for “Sport Purposes” Under ANILCA

Hunting is prohibited in National Park System units except as specifically authorized by Congress. 36 CFR 2.2(b). Title VIII of ANILCA allows local rural residents to harvest wildlife for subsistence in most, but not all, lands administered by the NPS in Alaska. Title VIII also created a priority for federal subsistence harvest over other consumptive uses of fish and wildlife. Separate from subsistence harvest, ANILCA authorized anyone to harvest wildlife for “sport purposes.” When first authorized under ANILCA, the State managed subsistence harvest by local rural residents under Title VIII as well as harvest for sport purposes by anyone. After a ruling from the State Supreme Court that the State Constitution barred the State from implementing the rural subsistence provisions of ANILCA, the Federal government assumed management of subsistence harvest under title VIII. Following this decision, the State only regulates harvest for sport purposes under ANILCA.¹⁰ Under the State’s current framework, Alaska residents have a priority over nonresidents but there is no prioritization based upon where one resides in Alaska.

¹⁰ The State of Alaska also uses the term “subsistence” when referencing harvest of fish and wildlife by state residents. It is important to recognize, however, that state subsistence harvest is not the same as federal subsistence under title VIII of ANILCA, which is limited to only local rural residents. When the term “subsistence” is used in this document, it refers to subsistence under title VIII of ANILCA and harvest of fish and wildlife under federal regulations.

Accordingly, all residents of Alaska have an equal opportunity to harvest wildlife for “sport purposes” in national preserves under State law.

The NPS is re-evaluating whether it was appropriate for the 2020 Rule to change its interpretation of the term “sport” in the 2015 Rule. An important implication of that change is that the 2020 Rule expanded sport hunting opportunities for nonlocal residents who are not qualified to harvest wildlife under federal subsistence laws. As mentioned above, in the spring of 2022 the NPS reached out to Tribes and ANCSA Corporations that are most likely to be impacted by this proposed rule. In these discussions, most of these entities expressed concern that increasing harvest opportunities under ANILCA’s authorization for sport hunting and trapping could result in increased competition from individuals that are not local to the area. In addition, most of these entities do not believe there is a demand to engage in these harvest practices in national preserves (other than limited demand to bait bears in Wrangell-St. Elias) and expressed a preference that the NPS not authorize practices that could encourage more nonlocal hunters to visit the area and compete for wildlife resources.

This feedback from Tribes and ANCSA Corporations illustrates a tension between the interests conveyed and the outcome of the 2020 Rule which increased harvest opportunities for nonlocal rural residents. In the 2015 Rule, the NPS said harvest of wildlife for “sport purposes” carries with it concepts of fairness or fair chase. These constructs do not necessarily apply to subsistence practices which emphasize cultural traditions and acquisition of calories for sustenance. In the 2020 Rule, the NPS changed its interpretation by saying the term “sport” only serves to differentiate harvest under State regulations from harvest under federal subsistence regulations. As a result, practices that some might consider only appropriate for subsistence harvest by local rural residents now may be used by anyone harvesting for “sport purposes” under State law. As conveyed by the Tribes and ANCSA Corporations, this increases competition between federal subsistence hunters and sport hunters by expanding hunting opportunities to those who are not local rural residents. It also allows for sport hunters to engage in practices that are not considered sporting under notions of the term as described above. The examples below illustrate how this issue plays out in national preserves in Alaska today:

- *Swimming caribou.* Under the 2015 Rule, only qualified rural residents could harvest swimming caribou in national preserves in accordance with federal subsistence regulations, which recognize the practice as part of a customary and traditional subsistence lifestyle. Individuals from Anchorage, Fairbanks, Juneau and other nonrural areas in Alaska, as well as out-of-state hunters, could not harvest swimming caribou in national preserves. Under the 2020 Rule, residents of nonrural areas in Alaska (including Anchorage, Fairbanks, and Juneau) and out-of-state hunters can harvest swimming caribou in national preserves in accordance with State law under ANILCA’s authorization for harvest for “sport purposes.”

- *Black bear cubs and sows with cubs.* Under the 2015 Rule, only a qualified rural resident could harvest bear cubs and sows with cubs in accordance with federal subsistence regulations, which recognize this practice as an uncommon but customary and traditional harvest practice by some Native cultures in northern Alaska. Accordingly, while the NPS supported the activity under federal subsistence regulations, the NPS did not support it under ANILCA’s authorization for “sport” hunting.” Under the 2020 Rule which deferred to State law, harvest of bear cubs and sows with cubs is not limited based on where one resides. Accordingly, under the 2020 Rule individuals who are not local to the area can harvest bear cubs and sows with cubs at den sites in national preserves under ANILCA’s authorization for harvest for “sport” purposes.

- *Take of wolves and coyotes, including pups, during the denning season.* The 2015 Rule prohibited sport hunters from taking wolves and coyotes during the denning season, a time when their pelts are not in prime condition, which can leave pups and cubs orphaned and left to starve. Under the 2020 Rule, any hunter (including those from out of state) can harvest wolves and coyotes year-round, including pups during the denning season. This reduces the number of wolves and coyotes available to harvest when their pelts are fuller and therefore more desirable to subsistence users and other trappers.

These examples demonstrate that the NPS’s interpretation of the term “sport” under the 2015 Rule created a result that is more in line with the majority of feedback received to date from Tribes and ANCSA Corporations. The NPS Organic Act directs the NPS to conserve wildlife. Based upon this conservation mandate, hunting is prohibited in National Park System units except as authorized by Congress. 36 CFR 2.2(b).

ANILCA authorizes harvest for Federal subsistence and “sport purposes” in national preserves in Alaska. The NPS interprets the term “sport” to include the concept of fair chase as articulated by some hunting organizations,¹¹ as not providing an unfair advantage to the hunter and allowing the game to have a reasonable chance of escape. This involves avoiding the targeting of animals that are particularly vulnerable, such as while swimming, while young, or while caring for their young. While the NPS understands that the exact boundaries of this concept involve some level of ambiguity, the NPS believes the practices addressed in this proposed rule fall outside the norms of “sport” hunting.

The NPS requests comment on this concept of “sport” and whether the practices described in these examples should be allowed as a “sport” hunt in national preserves in Alaska. Giving meaning of the term “sport” also prioritizes harvest for subsistence by local rural residents by avoiding competition with nonlocal residents who are hunting for sport purposes under ANILCA. This is consistent with the priority that Congress placed on the customary and traditional uses of wild renewable resources by local rural residents under ANILCA (*see* Sec. 101(c)). For these reasons, the proposed rule would reinstate the prohibitions in the 2015 Rule on methods of harvest that are not compatible with generally accepted notions of “sport” hunting. The proposed rule would define the terms “big game,” “cub bear,” “fur animal,” and “furbearer,” which are used in the table of prohibited harvest methods, in the same way they were defined in the 2015 Rule.

State Law Addressing Predator Harvest

The proposed rule also would address opportunities to harvest predators that are authorized by the State. NPS policy interprets and implements the NPS Organic Act. NPS Management Policies require the NPS to manage National Park System units for natural processes, including natural wildlife fluctuations, abundances, and behaviors, and specifically prohibit the NPS from engaging in predator reduction efforts to benefit one harvested species over another or allowing others to do so on NPS lands. (NPS Management Policies 2006, Ch. 4). These activities are prohibited by policy even if they do not actually reduce predator populations or

increase the number of prey species available to hunters. The NPS believes the 2020 Rule is in tension with these policies based upon the information it collected over a period of years before the publication of the 2015 Rule. This information indicates that the predator harvest practices that were allowed by the State were allowed for the purpose of benefited prey species over predators. For this reason, the proposed rule would reinstate the prohibitions in the 2015 Rule on methods of harvest that target predators for the purpose of increasing populations of prey species for human harvest. In addition, the proposed rule would add the following statement to its regulations to clarify that predator control is not allowed on NPS lands: “Actions to reduce the numbers of native species for the purpose of increasing the numbers of harvested species (*e.g.*, predator control or predator reduction) are not allowed.”

Trapping Clarification

Finally, the proposed rule would revise the definition of “trapping” in part 13 to clarify that trapping only includes activities that use a “trap” as that term is defined in part 13. The definition of “trapping” promulgated in the 2015 Rule inadvertently omitted reference to the use of traps, instead referring only to “taking furbearers under a trapping license.” The proposed revision would resolve any question about whether trapping can include any method of taking furbearers under a trapping license, which could include the use of firearms depending upon the terms of the license. This change would more closely align the definition of “trapping” in part 13 with the definition that applies to System units outside of Alaska in part 1.

Compliance With Other Laws, Executive Orders and Department Policy

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs in the OMB will review all significant rules. The Office of Information and Regulatory Affairs has determined that this proposed rule is significant because it raises novel legal or policy issues. The NPS has assessed the potential costs and benefits of this proposed rule in the report entitled “Cost-Benefit and Regulatory Flexibility Analyses: Alaska Hunting and Trapping Regulations in National Preserves” which can be viewed online at <https://www.regulations.gov> by searching for “1024-AE70.” Executive Order 13563

reaffirms the principles of Executive Order 12866 while calling for improvements in the nation’s regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. Executive Order 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. The NPS has developed this proposed rule in a manner consistent with these requirements.

Regulatory Flexibility Act

This proposed rule will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). This certification is based on the cost-benefit and regulatory flexibility analyses found in the report entitled “Cost-Benefit and Regulatory Flexibility Analyses: Alaska Hunting and Trapping Regulations in National Preserves” which can be viewed online at <https://www.regulations.gov> by searching for “1024-AE70.”

Unfunded Mandates Reform Act

This proposed rule does not impose an unfunded mandate on Tribal, State, or local governments or the private sector of more than \$100 million per year. The proposed rule does not have a significant or unique effect on Tribal, State, or local governments or the private sector. It addresses public use of national park lands and imposes no requirements on other agencies or governments. A statement containing the information required by the Unfunded Mandates Reform Act (2 U.S.C. 1531 *et seq.*) is not required.

Takings (Executive Order 12630)

This proposed rule does not effect a taking of private property or otherwise have takings implications under Executive Order 12630. A takings implication assessment is not required.

Federalism (Executive Order 13132)

Under the criteria in section 1 of Executive Order 13132, the proposed rule does not have sufficient federalism implications to warrant the preparation of a Federalism summary impact statement. This proposed rule only affects use of federally administered

¹¹ The Hunting Heritage Foundation, www.huntingheritagefoundation.com (last visited July 25, 2022); Boone and Crockett Club, www.boone-crockett.org/principles-fair-chase (last visited July 25, 2022).

lands and waters. It has no outside effects on other areas. A Federalism summary impact statement is not required.

Civil Justice Reform (Executive Order 12988)

This proposed rule complies with the requirements of Executive Order 12988. This proposed rule:

(a) Meets the criteria of section 3(a) requiring that all regulations be reviewed to eliminate errors and ambiguity and be written to minimize litigation; and

(b) Meets the criteria of section 3(b)(2) requiring that all regulations be written in clear language and contain clear legal standards.

Consultation With Indian Tribes and ANCSA Corporations (Executive Order 13175 and Department Policy)

The DOI strives to strengthen its government-to-government relationship with Indian Tribes through a commitment to consultation with Indian Tribes and recognition of their right to self-governance and Tribal sovereignty. The NPS has begun consulting and communicating with Tribes and ANCSA Corporations that would be most affected by this proposed rule and the feedback provided to date has been incorporated by the NPS in this proposed rule. The NPS has evaluated this proposed rule under the criteria in Executive Order 13175 and under the Department's Tribal consultation and ANCSA Corporation policies. This proposed rule would restrict harvest methods for sport hunting only; it would not affect subsistence harvest under Title VIII of ANILCA. Feedback from Tribes and ANCSA Corporations indicates that these harvest methods are not common or allowed in many areas by the State. For these reasons, the NPS does not believe the proposed rule will have a substantial direct effect on federally recognized Tribes or ANCSA Corporation lands, water areas, or resources. Consultation and communication with Tribes and ANCSA Corporations is ongoing and feedback will continue to be considered by the NPS throughout the rulemaking process.

Paperwork Reduction Act

This proposed rule does not contain information collection requirements, and a submission to the Office of Management and Budget under the Paperwork Reduction Act is not required. The NPS may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act

The NPS will prepare an environmental assessment of this proposed rule to determine whether this proposed rule will have a significant impact on the quality of the human environment under the National Environmental Policy Act of 1969. The environmental assessment will include new information, as appropriate, as well as an impact analysis similar to what was provided in the environmental assessments prepared for the 2015 Rule and the 2020 Rule, both of which resulted in a finding of no significant impact.

Effects on the Energy Supply (Executive Order 13211)

This proposed rule is not a significant energy action under the definition in Executive Order 13211; the proposed rule is not likely to have a significant adverse effect on the supply, distribution, or use of energy, and the proposed rule has not otherwise been designated by the Administrator of Office of Information and Regulatory Affairs as a significant energy action. A Statement of Energy Effects is not required.

Clarity of This Rule

The NPS is required by Executive Orders 12866 (section 1(b)(12)) and 12988 (section 3(b)(1)(B)), and 13563 (section 1(a)), and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule the NPS publishes must:

- (a) Be logically organized;
- (b) Use the active voice to address readers directly;
- (c) Use common, everyday words and clear language rather than jargon;
- (d) Be divided into short sections and sentences; and
- (e) Use lists and tables wherever possible.

If you feel that the NPS has not met these requirements, send the NPS comments by one of the methods listed in the ADDRESSES section. To better help the NPS revise the rule, your comments should be as specific as possible. For example, you should identify the numbers of the sections or paragraphs that you find unclear, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

Public Participation

It is the policy of the DOI, whenever practicable, to afford the public an opportunity to participate in the rulemaking process. Accordingly, interested persons may submit written comments regarding this proposed rule

by one of the methods listed in the ADDRESSES section of this document.

Public Availability of Comments

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask the NPS in your comment to withhold your personal identifying information from public review, the NPS cannot guarantee that it will be able to do so.

List of Subjects in 36 CFR Part 13

Alaska, National Parks, Reporting and recordkeeping requirements.

In consideration of the foregoing, the National Park Service proposes to amend 36 CFR part 13 as set forth below:

PART 13—NATIONAL PARK SYSTEM UNITS IN ALASKA

1. The authority citation for part B continues to read as follows:

Authority: 16 U.S.C. 3101 *et seq.*; 54 U.S.C. 100101, 100751, 320102; Sec. 13.1204 also issued under Pub. L. 104-333, Sec. 1035, 110 Stat. 4240, November 12, 1996.

2. In § 13.1:

- a. Add in alphabetical order the definitions for “Big game”, “Cub bear”, “Fur animal”, and “Furbearer”.
- b. Revise the definition of “Trapping”.

The additions and revision read as follows:

§ 13.1 Definitions.

* * * * *

Big game means black bear, brown bear, bison, caribou, Sitka black-tailed deer, elk, mountain goat, moose, muskox, Dall's sheep, wolf, and wolverine.

* * * * *

Cub bear means a brown (grizzly) bear in its first or second year of life, or a black bear (including the cinnamon and blue phases) in its first year of life.

* * * * *

Fur animal means a classification of animals subject to taking with a hunting license, consisting of beaver, coyote, arctic fox, red fox, lynx, flying squirrel, ground squirrel, or red squirrel that have not been domestically raised.

Furbearer means a beaver, coyote, arctic fox, red fox, lynx, marten, mink, least weasel, short-tailed weasel, muskrat, land otter, red squirrel, flying squirrel, ground squirrel, Alaskan marmot, hoary marmot, woodchuck, wolf and wolverine.

* * * * *

Trapping means taking furbearers with a trap under a trapping license.

* * * * *

3. In § 13.42, add paragraphs (f) and (k) to read as follows:

§ 13.42 Taking of wildlife in national preserves.

* * * * *

(f) Actions to reduce the numbers of native species for the purpose of increasing the numbers of harvested species (e.g., predator control or predator reduction) are prohibited.

* * * * *

(k) This paragraph applies to the taking of wildlife in park areas

administered as national preserves except for subsistence uses by local rural residents pursuant to applicable Federal law and regulation. The following are prohibited:

TABLE 1 TO PARAGRAPH (k)

Prohibited acts	Any exceptions?
(1) Shooting from, on, or across a park road or highway	None.
(2) Using any poison or other substance that kills or temporarily incapacitates wildlife.	None.
(3) Taking wildlife from an aircraft, off-road vehicle, motorboat, motor vehicle, or snowmachine.	If the motor has been completely shut off and progress from the motor's power has ceased.
(4) Using an aircraft, snowmachine, off-road vehicle, motorboat, or other motor vehicle to harass wildlife, including chasing, driving, herding, molesting, or otherwise disturbing wildlife.	None.
(5) Taking big game while the animal is swimming	None.
(6) Using a machine gun, a set gun, or a shotgun larger than 10 gauge	None.
(7) Using the aid of a pit, fire, artificial salt lick, explosive, expanding gas arrow, bomb, smoke, chemical, or a conventional steel trap with an inside jaw spread over nine inches.	Killer style traps with an inside jaw spread less than 13 inches may be used for trapping, except to take any species of bear or ungulate.
(8) Using any electronic device to take, harass, chase, drive, herd, or molest wildlife, including but not limited to: artificial light; laser sights; electronically enhanced night vision scope; any device that has been airborne, controlled remotely, and used to spot or locate game with the use of a camera, video, or other sensing device; radio or satellite communication; cellular or satellite telephone; or motion detector.	(i) Rangefinders may be used. (ii) Electronic calls may be used for game animals except moose. (iii) Artificial light may be used for the purpose of taking furbearers under a trapping license during an open season from Nov. 1 through March 31 where authorized by the State. (iv) Artificial light may be used by a tracking dog handler with one leashed dog to aid in tracking and dispatching a wounded big game animal. (v) Electronic devices approved in writing by the Regional Director.
(9) Using snares, nets, or traps to take any species of bear or ungulate	None.
(10) Using bait	Using bait to trap furbearers.
(11) Taking big game with the aid or use of a dog	Leashed dog for tracking wounded big game.
(12) Taking wolves and coyotes from May 1 through August 9	None.
(13) Taking cub bears or female bears with cubs	None.
(14) Taking a fur animal or furbearer by disturbing or destroying a den	Muskrat pushups or feeding houses.

Shannon Estenoz,
Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2023-00142 Filed 1-6-23; 8:45 am]

BILLING CODE 4312-52-P

Characterizing the interaction of shell developmental strategy and ocean acidification on larval Pacific razor clams (*Siliqua patula*)

Marina Alcantar*, Jeff Hetrick, Jacqueline Ramsay, and Amanda Kelley

Increases in anthropogenic carbon dioxide emissions are forcing chemical changes within the ocean, resulting in a long-term decrease in global oceanic pH, colloquially termed ocean acidification (OA). Previous studies have demonstrated that this decrease in pH can have negative physiological consequences on biocalcifying organisms, particularly during early life stages. Here, we examine the impact of ocean acidification (increased $p\text{CO}_2$ /reduced pH) on the larval Pacific razor clam, *Siliqua patula*. This study was conducted in July of 2018 at the Alutiiq Pride Marine Institute in Seward, Alaska. Larvae were spawned and cultured for one month under three different $p\text{CO}_2$ treatments. The treatments included a static high $p\text{CO}_2$ of 867 μatm /7.7 pH units, a variable $p\text{CO}_2$ of 357 μatm /8.0 pH units to 867 μatm /7.7 pH units, and a current ambient $p\text{CO}_2$ of 357 μatm /8.0 pH units. The variable treatment fluctuated between the current ambient treatment condition and the high treatment condition on a diurnal cycle. As a precursor to the experiment, the first developmental time series was assembled for *S. patula*. Our experimental response variables include the analysis of shell composition, growth, and mineralization, as well as changes in gene expression for both HSP-70 and calmodulin. These are two genes identified as bioindicators of OA stress. In addition to assessing the impact of OA on *S. patula* development, this study also led to the discovery that *S. patula* utilizes a relatively unique shell developmental technique, more commonly found in gastropods, called a concretion. Understanding exactly how this unique shell developmental technique manifests in *S. patula* is critical to both assessing the response of *S. patula* to elevated $p\text{CO}_2$ and informing management decisions in the future. Additionally, this study underscores the importance of comprehensive developmental assessment of a study species as a precursor to future climate change research.

Characterizing the direct and indirect effects of ocean acidification on juvenile pink salmon (*Oncorhynchus gorbuscha*)

Marina Alcantar*, Shelby Bacus, Amanda Kelley

The increase in anthropogenic carbon dioxide expelled into the atmosphere is driving a long-term decrease in ocean pH, a process known as ocean acidification (OA). Previous research has shown that OA can have direct, negative impacts on marine organisms, notably during early life stages. Additionally, food web dynamics can be altered as a consequence of OA, as lower trophic level organisms are affected which subsequently influence higher trophic level species who rely on them. This study is a fully factorial, multi-stressor experiment assessing the direct effect of elevated $p\text{CO}_2$, and the indirect effect of reduced food availability, on newly osmocompetent juvenile pink salmon (*Oncorhynchus gorbuscha*). Juvenile pink salmon were exposed to ambient $p\text{CO}_2$ (400 μatm)/ambient food availability (3% body mass), elevated $p\text{CO}_2$ (1,100 μatm)/ambient

food availability, ambient $p\text{CO}_2$ /reduced food availability (1.5% body mass) or ambient $p\text{CO}_2$ /reduced food availability treatments for six weeks in 2021. This study detected a significant, negative effect of elevated $p\text{CO}_2$ on conditional index and mass. Further, assessment of the endocrine response in juvenile pink salmon showed a significant increase in cortisol expression under elevated $p\text{CO}_2$ conditions, an increase that appears to correlate with the onset of experimental mortality. Additionally, otolith analysis revealed a relationship between time in culture vessels and the amount of the calcium carbonate polymorph vaterite present in otoliths, as well as a correlation between otolith vaterite presence and mortality in juvenile pink salmon. Routine metabolic rate (RMR) was also assessed, with a significant, positive effect on RMR correlated with elevated $p\text{CO}_2$ exposure. These noted effects of elevated $p\text{CO}_2$ exposure establish pink salmon juveniles as a species vulnerable to the direct and indirect effects of OA, potentially resulting in population level impacts to this valuable Alaskan species.



United States Department of the Interior

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WRANGELL-ST. ELIAS NATIONAL PARK AND PRESERVE SUBSISTENCE AND ANTHROPOLOGY REPORT WINTER/SPRING 2023

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Federal subsistence hunting permits issued for Wrangell-St. Elias in 2022

In 2022, Wrangell-St. Elias and Tetlin National Wildlife Refuge staff issued a total of 193 federal subsistence hunting permits for moose, goat, and sheep for Wrangell-St. Elias lands in Units 11 and 12. The most frequently issued permit was for the fall moose hunt in Unit 11 Remainder (FM1106). A total of 139 permits were issued for this hunt in 2022, 65 people hunted, and 15 moose were harvested. The second most frequently issued permit was for the Unit 11 sheep hunt for hunters 60 years of age and older (FS1104). A total of 25 permits were issued for this hunt in 2022, 10 people hunted, and 2 sheep were harvested. (See Table 1 for additional details.)

Wrangell-St. Elias staff and the Alaska Department of Fish and Game both issue a joint state/federal permit (RM291) for the moose hunt for portions of Units 11 and 12 in the northern part of the park. For the 2022 season, a total of 340 permits were issued, 197 people hunted, and 16 moose were harvested, including 10 moose by federally qualified subsistence users (see Table 2).

Upper Copper River communities to be surveyed about subsistence harvests

Chistochina and Mentasta residents will be surveyed in March 2023 about their harvest and use of wild fish, wildlife and plant resources, and Slana and Nabesna Road residents will be surveyed in early 2024. These surveys are a cooperative project in collaboration with the Alaska Department of Fish and Game and the Ahtna Intertribal Resource Commission.

Why this matters: Concern has been expressed about whether up-river communities are meeting their subsistence needs, especially for salmon.

Table 1. Federal Subsistence Registration Permits in Wrangell-St. Elias NPP, 2012-2022

Unit 11 Goat (FG1101)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	42	30	31	29	22	26	30	27	27	20	8
Individuals Hunting	6	7	10	6	4	3	8	8	4	2	0
Animals Harvested	0	0	0	0	0	0	0	1	0	0	0
Success Rate (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	-

Unit 11 Remainder Moose -- Fall Hunt in part of unit outside of the RM291 hunt area (FM1106)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	189	146	123	128	138	132	144	107	156	140	139
Individuals Hunting	75	78	70	70	75	72	85	45	68	71	65
Animals Harvested	9	12	10	13	16	13	12	10	15	11	15
Success Rate (%)	12.0	15.4	14.3	18.6	21.3	18.1	14.1	22.2	22.1	15.5	23.1

Unit 11 Moose -- Winter Hunt in southern part of unit (FM1107) (Began in 2014)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	n/a	n/a	32	17	20	14	11	8	8	7	10
Individuals Hunting	n/a	n/a	3	3	4	4	2	2	1	2	0
Animals Harvested	n/a	n/a	0	0	1	0	0	0	1	0	0
Success Rate (%)	n/a	n/a	0.0	0.0	25.0	0.0	0.0	0.0	100.0	0	-

Unit 11 Elder Sheep (FS1104)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	32	20	25	25	32	34	38	34	38	26	25
Individuals Hunting	11	5	10	8	12	13	18	14	12	12	10
Animals Harvested	1	0	1	3	3	4	1	1	1	3	2
Success Rate (%)	9.1	0.0	10.0	37.5	25.0	30.8	5.6	7.1	8.3	25.0	20.0

Unit 11 Elder/Junior Sheep (FS1103)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	1	0	0	0	1	2	1	0	1	1	2
Individuals Hunting	0	-	-	-	1	2	0	-	0	0	0
Animals Harvested	-	-	-	-	0	0	-	-	-	-	-
Success Rate (%)	-	-	-	-	0.0	0.0	-	-	-	-	-

Unit 12 Caribou -- Chisana (FC1205) -- Closed in 2022 due to conservation concerns

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Permits Issued	9	9	11	11	8	8	6	4	7	5	n/a
Individuals Hunting	8	7	8	7	8	3	3	3	4	1	n/a
Animals Harvested	2	3	2	0	1	0	2	1	3	0	n/a
Success Rate (%)	25.0	42.9	25.0	0.0	12.5	0.0	66.7	33.3	75.0	0.0	n/a

Table 1. Federal Subsistence Registration Permits in Wrangell-St. Elias NPP, 2012-2022 (cont.)

Unit 12 Elder Sheep (FS1201)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	13	9	9	7	11	12	14	14	12	13	8
Individuals Hunting	3	3	5	3	6	4	8	6	4	6	4
Animals Harvested	0	0	1	0	1	1	0	0	1	0	0
Success Rate (%)	0.0	0.0	20.0	0.0	16.7	25.0	0.0	0.0	25.0	0.0	0.0

Unit 12 Elder/Junior Sheep (FS1204)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	1	0	0	0	0	0	0	0	0	0	1
Individuals Hunting	0	-	-	-	-	-	-	-	-	-	0
Animals Harvested	-	-	-	-	-	-	-	-	-	-	-
Success Rate (%)	-	-	-	-	-	-	-	-	-	-	-

Source: Federal Subsistence Permit Database.

* 2022 data are as of 1/5/2023.

Note: Success rate is calculated based on the number of individuals hunting, not total permits issued.

Table 2. Joint State-Federal Permits for the Fall Moose Hunt in Portions of Units 11 and 12 (RM291), 2012-2022

All Hunters

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Permits Issued	253	246	296	250	277	244	250	277	314	282	340
Individuals Hunting	164	151	191	142	179	145	155	158	187	162	197
Moose Harvested	23	19	20	20	23	19	23	21	27	24	16
<i>Unit 11 Harvest</i>	16	10	11	9	17	15	17	14	12	16	12
<i>Unit 12 Harvest</i>	7	9	9	11	6	4	6	7	15	8	4
Success Rate (%)	14.0	12.6	10.5	14.1	12.8	13.1	14.8	13.3	14.4	14.8	8.1

Federally Qualified Subsistence Users

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Permits Issued	158	135	154	168	176	155	171	173	173	167	175
Individuals Hunting	94	74	92	89	106	88	108	102	107	93	88
Moose Harvested	19	15	15	14	18	15	19	21	14	16	10
Success Rate (%)	20.2	20.3	16.3	15.7	17.0	17.0	17.6	20.6	13.1	17.2	11.4

Source: Email from ADF&G Tok on 1/9/2023.

Notes: (1) 2022 figures are as of 1/9/2023.

(2) Success rate is based on the number of individuals hunting, not the number of permits issued.

(3) Data for Federally Qualified Subsistence Users excludes records with ambiguous residency (e.g., urban mailing address and rural resident community or local mailing address and non-local resident community).

Traditional Knowledge, Ethnographic, and Subsistence Projects:

Work is underway on several traditional knowledge, ethnographic and subsistence projects, with most of the work being carried out by project partners through cooperative agreements.

Ahtna Ethnographic Overview and Assessment (EOA): This baseline cultural anthropology study includes an annotated inventory of ethnographic and related materials relevant to the Ahtna Athabascans; a narrative synopsis of our current understanding of these materials, with a focus on connections to Wrangell-St. Elias; and an analysis of data gaps and additional research needs. It is being carried out through a cooperative agreement with the Ahtna Intertribal Resource Commission and is scheduled for completion in fall 2023.

Documenting Traditional Ecological Knowledge about Historic Dynamics of Caribou Herds Associated with Wrangell-St. Elias: This project includes a literature review/data mining regarding traditional ecological knowledge (TEK) and historic information (e.g., seasonal movement patterns; and herd sizes, interactions, and habitat relations) of the three caribou herds (Chisana, Mentasta and Nelchina) that spend time in Wrangell-St. Elias as well along with new traditional knowledge interviews about caribou with knowledgeable long-term residents. Topics covered in the new interviews include long-term knowledge about seasonal movement patterns, herd sizes, and observations regarding caribou in relation to the larger ecosystem and the other caribou herds. The information will be summarized in a report designed to inform management decisions about caribou. This project is being carried out through a cooperative agreement with the Ahtna Intertribal Resource Commission and is scheduled for completion in late 2023.

Local Knowledge of Winter Environmental Conditions and their Impacts on Subsistence Access: This project documents local knowledge of winter environmental conditions through interviews with trappers and other Copper Basin residents who are out on the landscape during the winter about environmental conditions (e.g., temperatures, snow and ice conditions), how conditions have changed over their lifetimes/careers, other traditional ecological knowledge about winter environmental conditions, and the way in which these conditions have impacted access to subsistence resources. The information gathered during the interviews is being summarized in a technical report. This project is being carried out through a cooperative agreement with the Ahtna Intertribal Resource Commission and is scheduled for completion in mid-2023.

Quantify Changing Environmental Conditions to Inform Decisions about Allowed Means of Winter Access to Subsistence Resources: This project quantifies temporal and spatial patterns of river freeze-up, winter ice conditions, and break-up using remote sensing data and evaluates the implications of changing environmental conditions for temporal and spatial patterns of winter subsistence access in the park. The analysis focuses on the Copper and Chitina Rivers. In addition to a peer-reviewed journal publication, interpretive products for the general public will be produced. This project is being completed through a cooperative agreement with the University of Alaska Fairbanks (UAF) and is scheduled for completion in in late 2023.

Assessing Subsistence Harvests in Upper Copper River Communities: Chistochina and Mentasta residents will be surveyed in early 2023 about their harvest and use of wild fish, wildlife and plant resources, and Slana and Nabesna Road residents will be surveyed in early 2024. This is a cooperative project being carried out in collaboration with the Alaska Department of Fish and Game and the Ahtna Intertribal Resource Commission.

Report updated 1/16/2023

Denali National Park and Preserve Wildlife Updates January 2023

Bear Monitoring – The long running bear movements study is winding down. There are currently no functioning collars deployed on bears at this time. Data will continue to be analyzed and work on the final report will begin.

The park road will be closed for at least the next two years due to a landslide at approximately mile 45. In an effort to determine the effect of no traffic/traffic on bears, a project has been proposed to radio collar up to 20 bears along the closed portion of the park road corridor for the next four years. The project is currently pending final plans and scheduled to begin in Spring 2023.

Bear Management - Denali's Wildlife Management program strives to educate visitors about how to recreate in areas where bears are present. Tracking interactions between bears and people is organized in the Bear Human Incident Management System (BHIMS). This system provides a way for people to report their interactions with bears and for wildlife staff to rate the severity of those interactions and track patterns. Interactions are divided into back- and front-country locations and fall into three basic categories: observation (seeing a bear), encounter (close proximity, bear aware of people), and incident (bear charge, physical contact with person or property, bear getting human food).

During the 2022 season, Denali's wildlife management team responded to numerous human-wildlife conflict situations. A total of 136 BHIMS forms were filled out and turned in, describing 141 separate human-bear incidents, encounters, and observations. Tolerant bear behavior was described more often than any other bear behavior at 53%. Intolerant and curious behavior were described in 13% and 8% of BHIMS forms, respectively. The majority (74%) of all BHIMS reports were rated as encounters. There were no bear-caused human injuries in Denali National Park in the 2022 season.

The full 2022 Denali National Park & Preserve Wildlife Management Report is available upon request.

Moose Monitoring - Moose monitoring surveys are on hold indefinitely. Evaluation of protocol is ongoing.

Due to extraordinary snow and rain fall in the area in late December 2021, over-winter mortality seemed high and spring calf survival seemed low.

Caribou Monitoring – The preliminary herd size estimate for September 2022 was 1,510 caribou, a decrease from the 2021 estimate of 2,060. Productivity of cows ≥ 1 year old was estimated at 83.7% in mid-May 2022, based on 43 radio-collared females in the age-structured sample, greater than the long-term average from 1987-2021 of 77.8%. During the mid-June 2022 post-calving surveys, we noted 22 calves:100 cows; by the late September composition count that ratio had declined to 8:100. Based on these measures of calf production and survival, and accounting for adult female survival between mid-May and late September, fall calf survival was estimated at 10% for 2022 calves. For comparison, fall calf survival has averaged ~25% from

1986 - 2016, calf survival has been below average since 2018. For the third year in a row, cow mortality was notably high. During October 2021-September 2022, we estimated an annual mortality rate of 22% for adult females, notably greater than the long-term study average from 1986-2016 of 11%.

Sheep Surveys –Ground based surveys were conducted in June as was an informal aerial overflight assessing lamb:ewe ratios. Data from the overflight counted 141 ewes and 13 lambs for a lamb:ewe ratio of 9 lambs:100 ewes. Data from the ground-based survey counted 12 groups with 34 ewe-like and 10 lambs for a lamb:ewe ratio of 29 lambs:100 ewes. There is considerable variation between these two estimates and a more rigorous aerial survey was planned to be conducted in August 2022 to provide a more reliable estimate of productivity. Unfortunately, due to weather and pilot availability, the survey did not occur.

Wolf Monitoring – Den activity and pup productivity have been monitored through radio tracking flights as well as data received remotely from Iridium radio collars all season. As pups begin to become more active and move away from den sites, pup numbers are determined.

Highlights from 2022 research on wolves on include:

Captures were conducted in November (n=7 wolves) and March (n=11 wolves) for a total of 18 new radio collars deployed. We collected and archived genetic and immunological data, managed GPS tracking database, and conducted 18 aerial tracking flights throughout year to obtain reproduction, denning, recruitment, pack composition and kill data. We observed the production of 38 pups in 13 packs, with 37 pups recruited to the population by October.

Visit Denali's wolf webpage for the full report and more data and information.

Alpine Wildlife Project - Field work continued in 2022 with a graduate student and 3 technicians. The Denali Alpine Wildlife Crew conducted field research in the eastern section of the park between June 1st and August 12th, hiking over 250 km in the backcountry. Researchers placed 10 motion-triggered cameras and 20 temperature loggers in talus patches to record collared pika activity patterns. Additionally, they visited 30 sites, conducted 23 field surveys (9 in tundra and 14 in talus), and recorded 233 additional visual and acoustic observations of key alpine wildlife- Arctic ground squirrels, collared pika, and hoary marmots-throughout Denali National Park and Preserve. Graduate student, Jennifer Wall, presented on the project for the Denali Summer Speaker Series at the Murie Science and Learning Center on August 5th, 2022.

Researchers also continued the Denali Alpine Wildlife citizen science project this year, maintaining the Denali Alpine Wildlife Instagram account (@denalialpinewildlife, >65 posts, >140 followers, started in November 2020) and posting over 20 posters throughout Denali National Park and Preserve (i.e. Denali Visitor Center, Backcountry Information Desk, and the Murie Science and Learning Center, among others). To date, 53 people submitted observations in 2022, including a total of 84 submissions through iNaturalist: 45 Arctic ground squirrel, 11 collared pika, 11 hoary marmots, and 17 Dall sheep.

Field work for this project is complete. Data analysis and reporting are ongoing.

Avian Projects –

- Golden eagles – Nest occupancy surveys were conducted in April and productivity surveys were conducted in July. Occupancy of known nesting territories was high. Reproductive success in terms of females that laid eggs or pairs that raised young was low. This is a factor of low prey abundance and lack of snowshoe hares due to a low in their cycle. Surveys will continue in 2023.
- On-road Breeding Bird surveys were conducted in June. The number of bird species as well as number of individuals detected was as expected. Anecdotal reports from areas to the south (particularly Cantwell) indicate an influx of woodpecker species, nuthatches, and brown creepers. This is very likely due to the spread of spruce bark beetles. Surveys will continue in 2023.
- The nest predation study conducted by a crew from USGS did not occur in 2022. In this study, camera traps and site visits were utilized to detect nest predation rates and document nest predation events in a wide variety of avian species. Field work is expected to resume in 2023.

Please contact Carol McIntyre, Denali wildlife biologist, if you have any questions about any avian programs, projects, or studies. 907-455-0671.

Please contact Pat Owen, Denali wildlife biologist, if you have any questions about any wildlife programs, projects, or studies. 907-683-9547.

Southcentral Alaska Subsistence Regional Advisory Council
March 15-16, 2023

Bureau of Land Management, Glennallen Field Office Agency Report

Caroline Ketron, Anthropologist/Subsistence Coordinator

LeeAnn McDonald, Wildlife Biologist

I. General Updates

- Bureau of Land Management (BLM) continues to work collaboratively with Alaska Department of Fish and Game (ADF&G) to monitor subsistence resource populations among BLM and State lands within Game Management Unit 13.
- The BLM Glennallen Field Office (GFO) continues to work with Ahtna Intertribal Resource Commission (AITRC)'s Community Harvest System for caribou and moose. GFO is receiving regular updates from AITRC.

II. Subsistence Permitting Updates

- The Glennallen Field Office is open to the public, with a few periodic mask protocols in place this season as COVID 19 rates in the community fluctuated. Hunters could come in and get their permits in person. Or, apply over the phone if they had been issued permits previously and receive permits by mail or pick them up. In Delta Junction, hunters stayed outside to request their permits and documents were ferried back and forth by staff. The BLM continues to take these precautions to limit exposure to staff and the public.

III. Wildlife Updates

- The Bureau of Land Management and Alaska Department of Fish and Game continue a multi-year cooperative agreement. The objective is to actively cooperate and monitor subsistence resource populations among BLM and State of Alaska lands within GMU13.

Federal Subsistence Moose Harvest GMU13

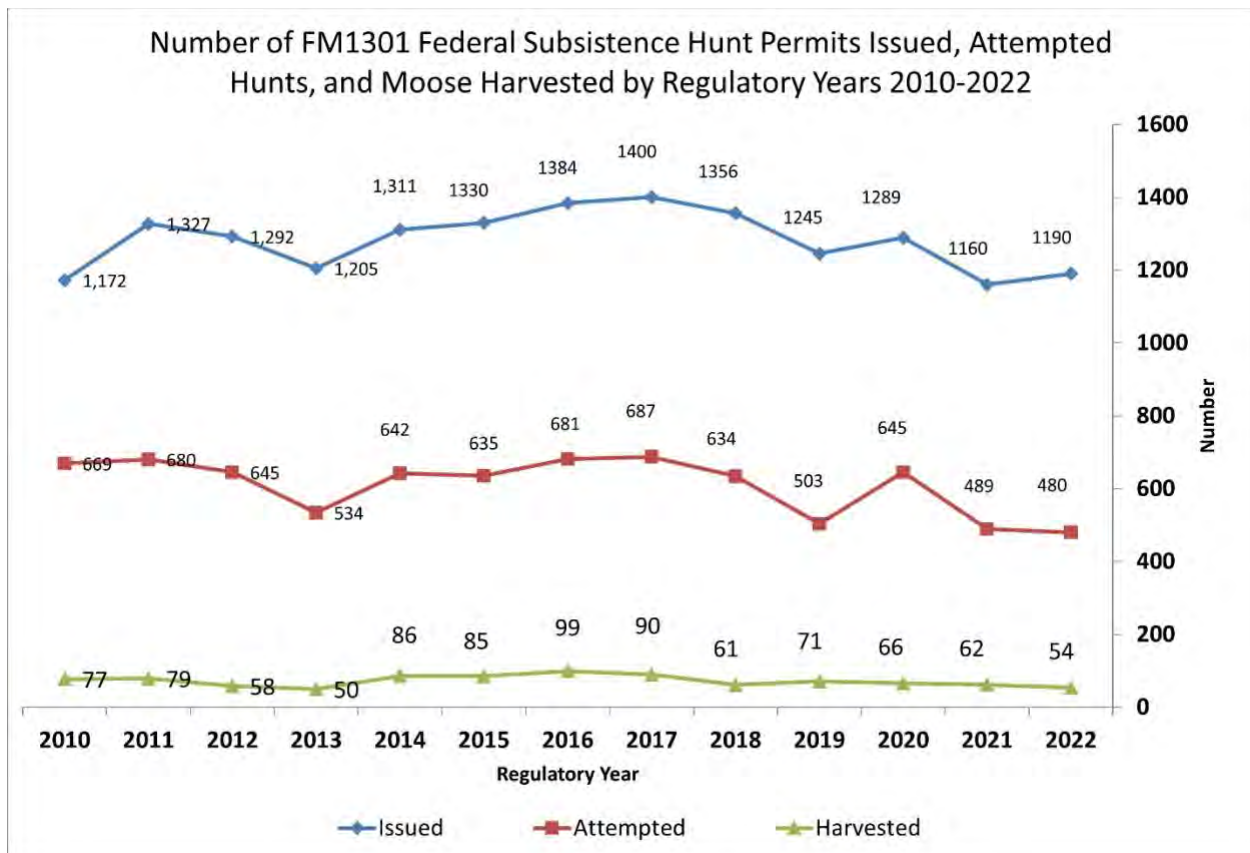
Table 1. FM1301 harvest for the 2022 moose season in GMU13

Time Frame	Permits Issued	Permits Attempted	Bulls Harvested	Hunter Success Rate
2022*	1,190	480	54	11.3%
5 Year Average**	1,290	591	69	11.9%

* Prepared January 13, 2023, 86% reports returned.

**2017-2021

Figure 1. Federal Subsistence Moose Harvest Pattern (FM1301) from 2010 to 2022



Federal Subsistence Caribou Harvest GMU13

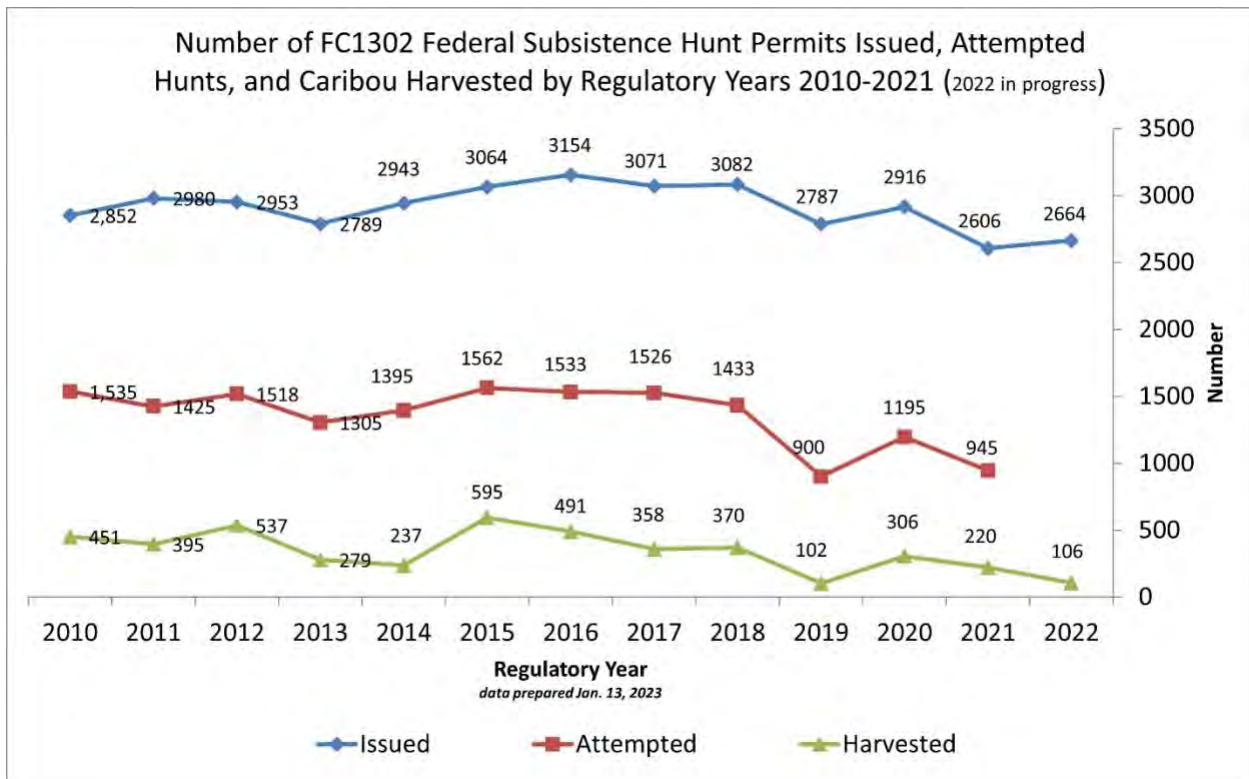
Table 2. FC1302 caribou harvest in GMU13.

	Permits Issued*	Permits Attempted*	Bulls Harvested*	Cows Harvested*	Total Harvest*	Success Rate*
2022/23*	2664		79	27	106	
5 Year Average**	2,892	1,190	173	97	270	22.1%

*Final harvest numbers, hunter success rate, and total permits issued for regulatory year 2022 will be calculated after the season ends March 31, 2023.

**2017-2021

Figure 2. Federal Subsistence Caribou Harvest Pattern (FC1302) from 2010 to 2021 (2022 in progress).



* Data prepared Jan. 13, 2023; season ends March 31, 2023.

Fall 2023 Regional Advisory Council Meeting Calendar

Last updated 11/7/2022

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

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

Winter 2024 Regional Advisory Council Meeting Calendar

Last updated 12/22/2022

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

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

Fall 2024 Regional Advisory Council Meeting Calendar

Last updated 12/22/2022

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

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

Subsistence Regional Advisory Council Correspondence Policy

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

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

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

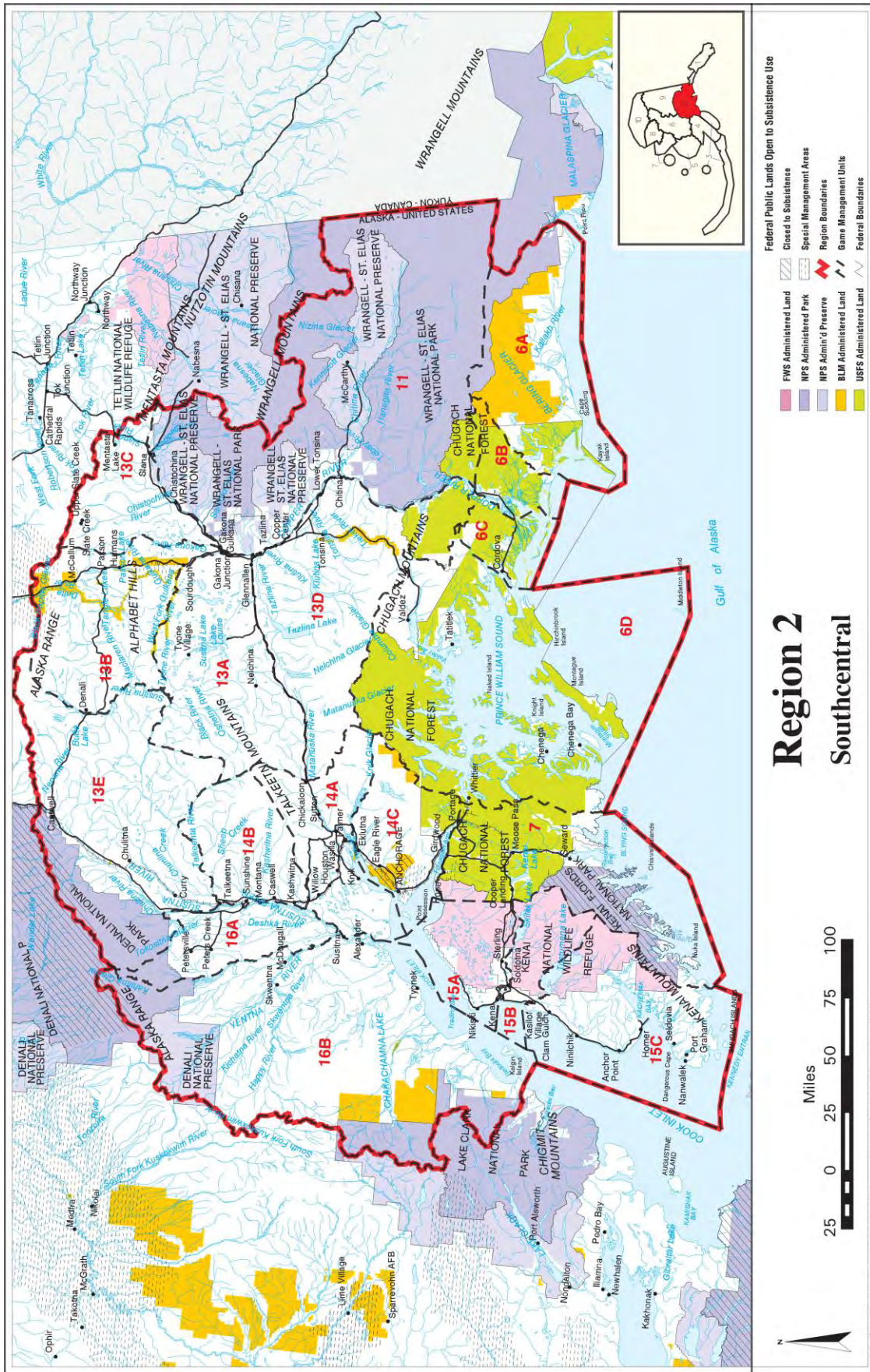
The Secretaries of Interior and Agriculture created the Federal Subsistence Board and delegated to it the responsibility for managing fish and wildlife resources on Federal public lands. The Board was also given the duty of establishing rules and procedures for the operation of the Regional Advisory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

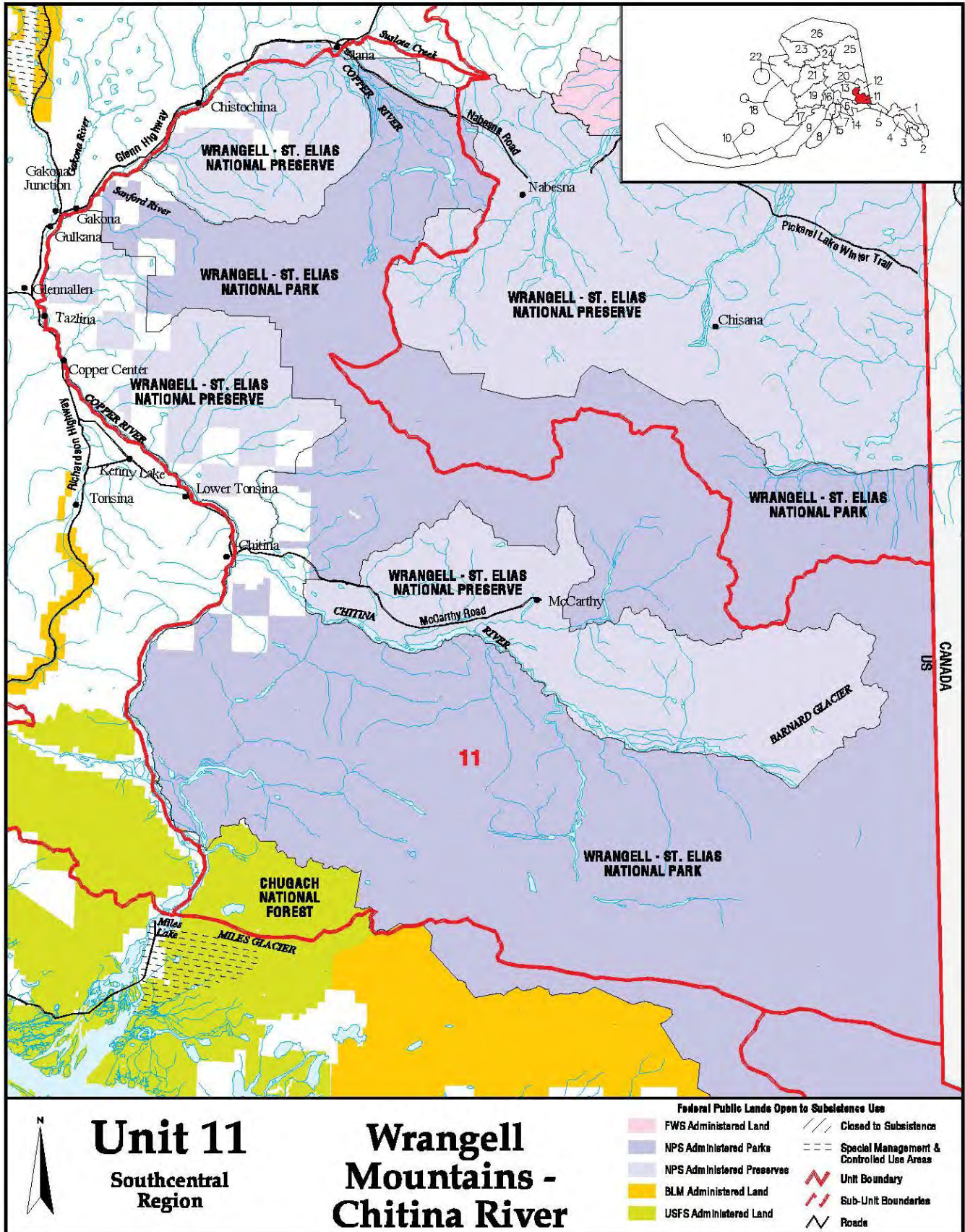
Policy

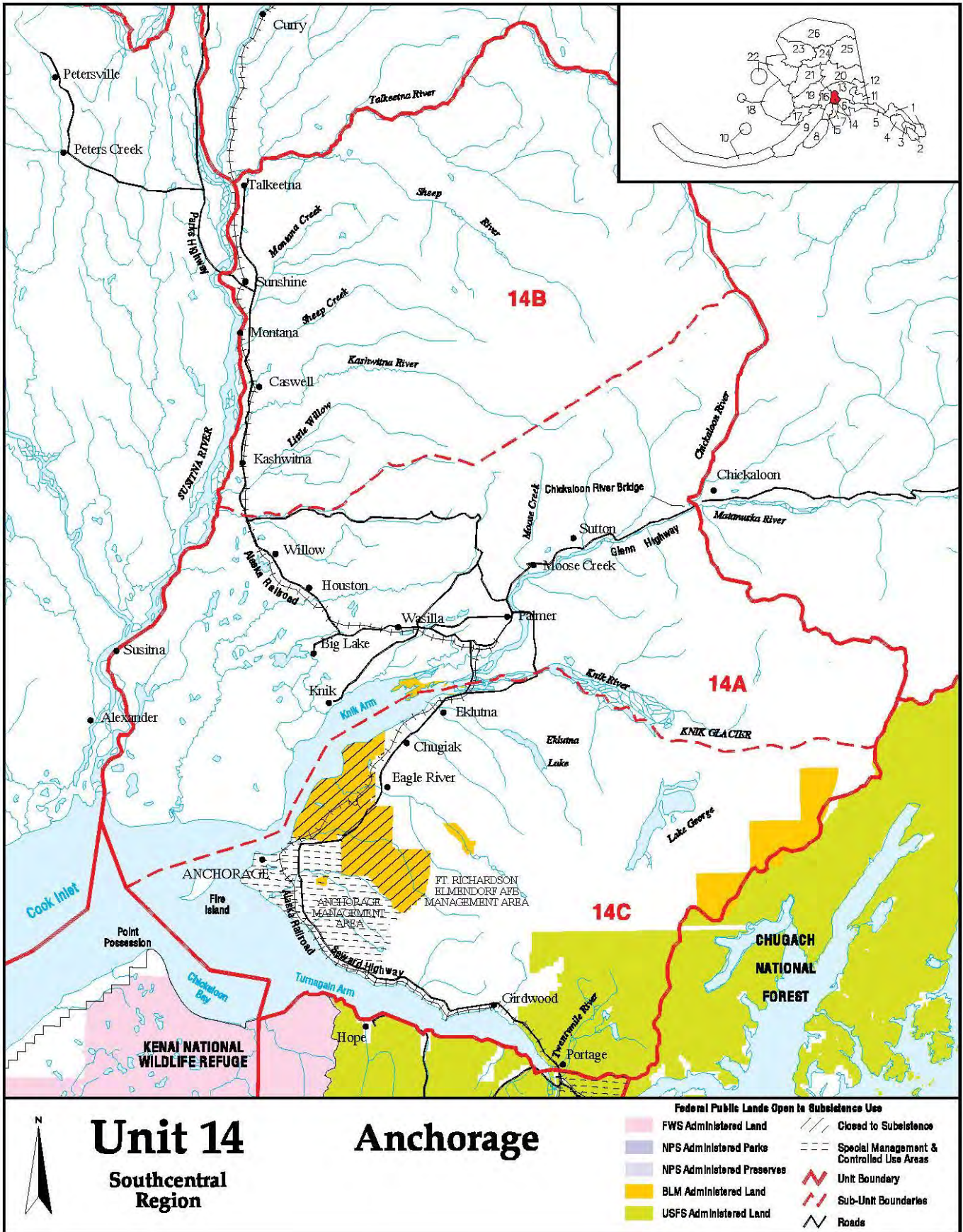
1. The subject matter of Council correspondence shall be limited to matters over which the Council has authority under §805(a)(3), §808, §810 of Title VIII, Subpart B §____.11(c) of regulation, and as described in the Council charters.
2. Councils may, and are encouraged to, correspond directly with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

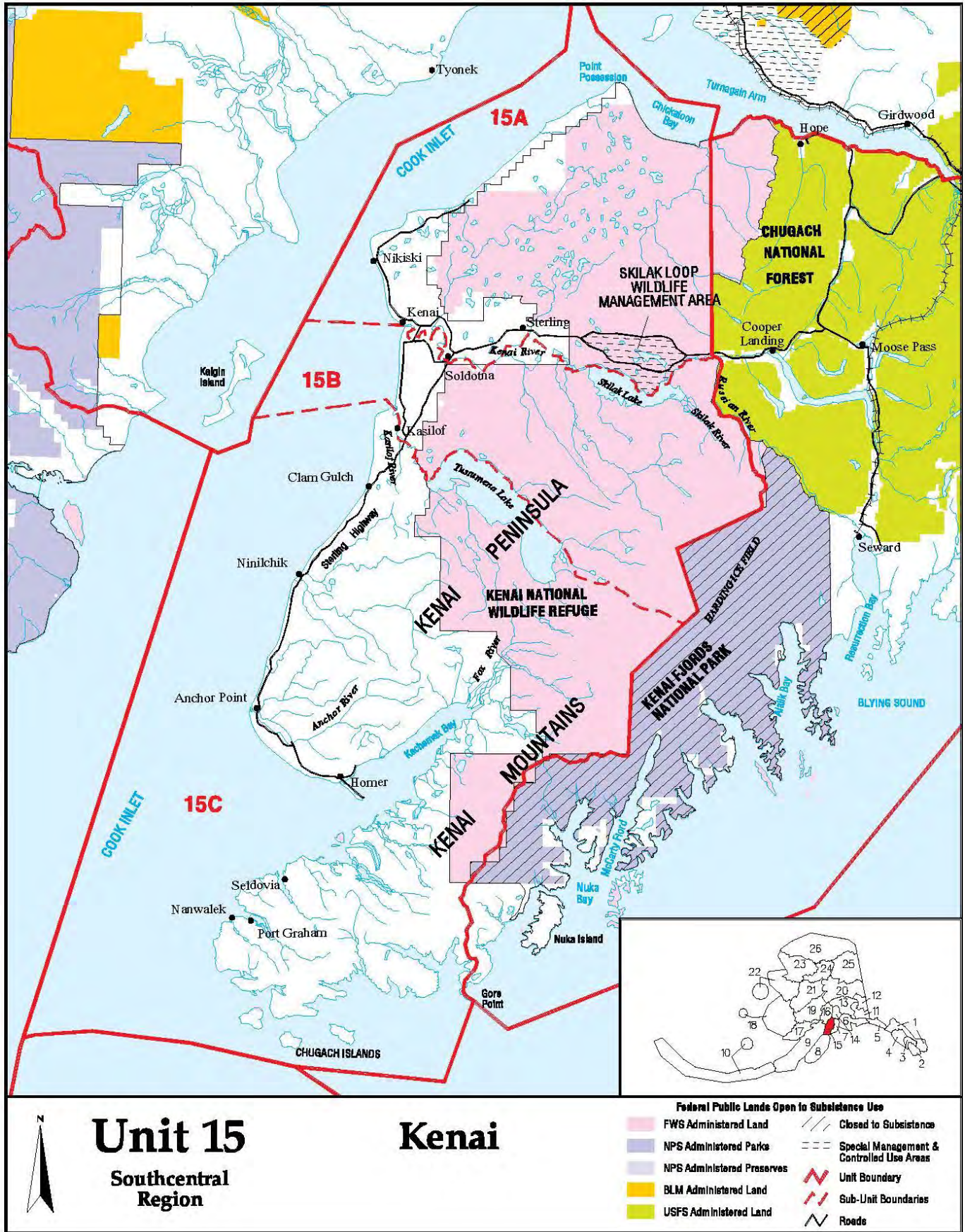
4. As a general rule, Councils discuss and agree upon proposed correspondence during a public meeting. Occasionally, a Council chair may be requested to write a letter when it is not feasible to wait until a public Council meeting. In such cases, the content of the letter shall be limited to the known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

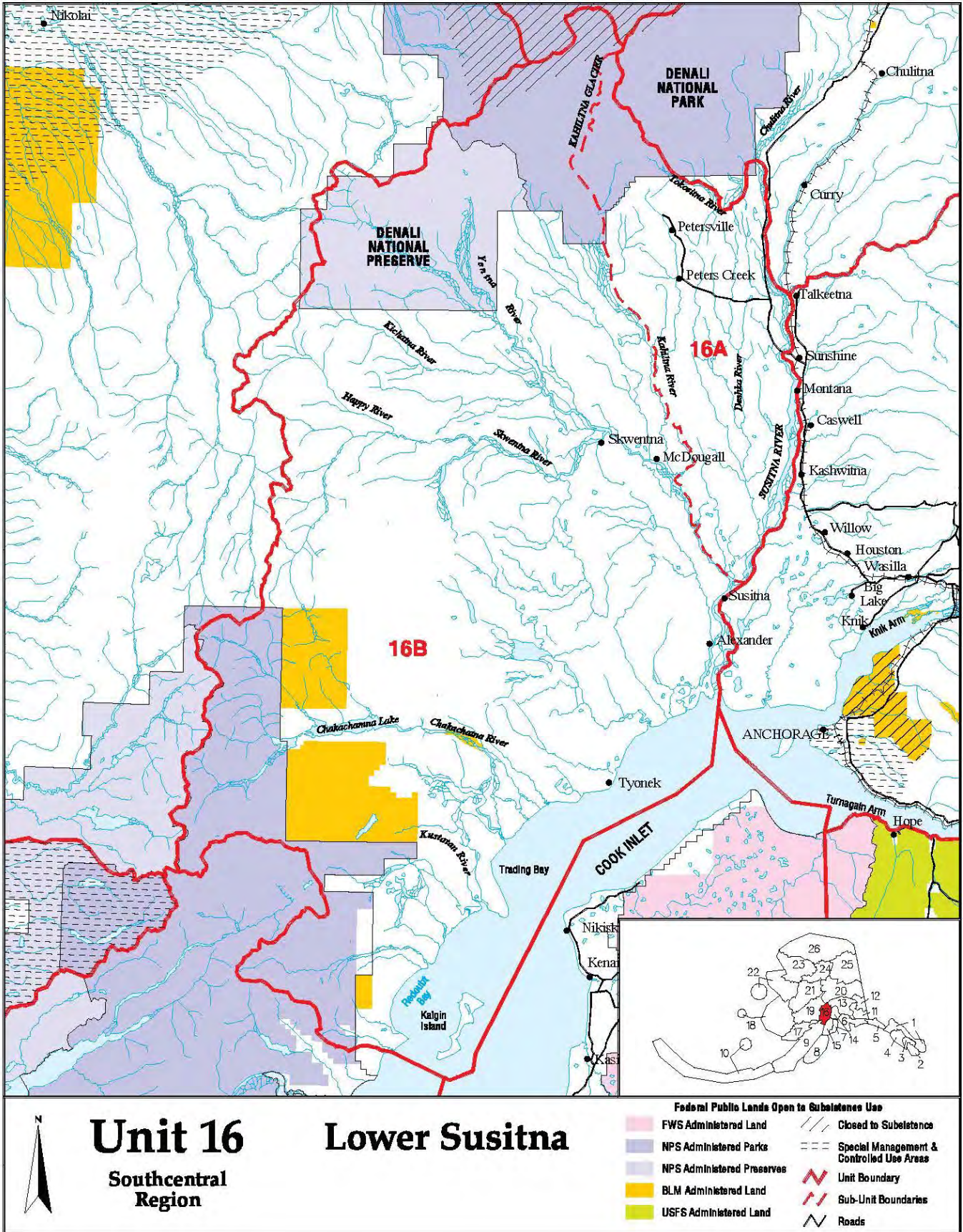
Approved by the Federal Subsistence Board on June 15, 2004.

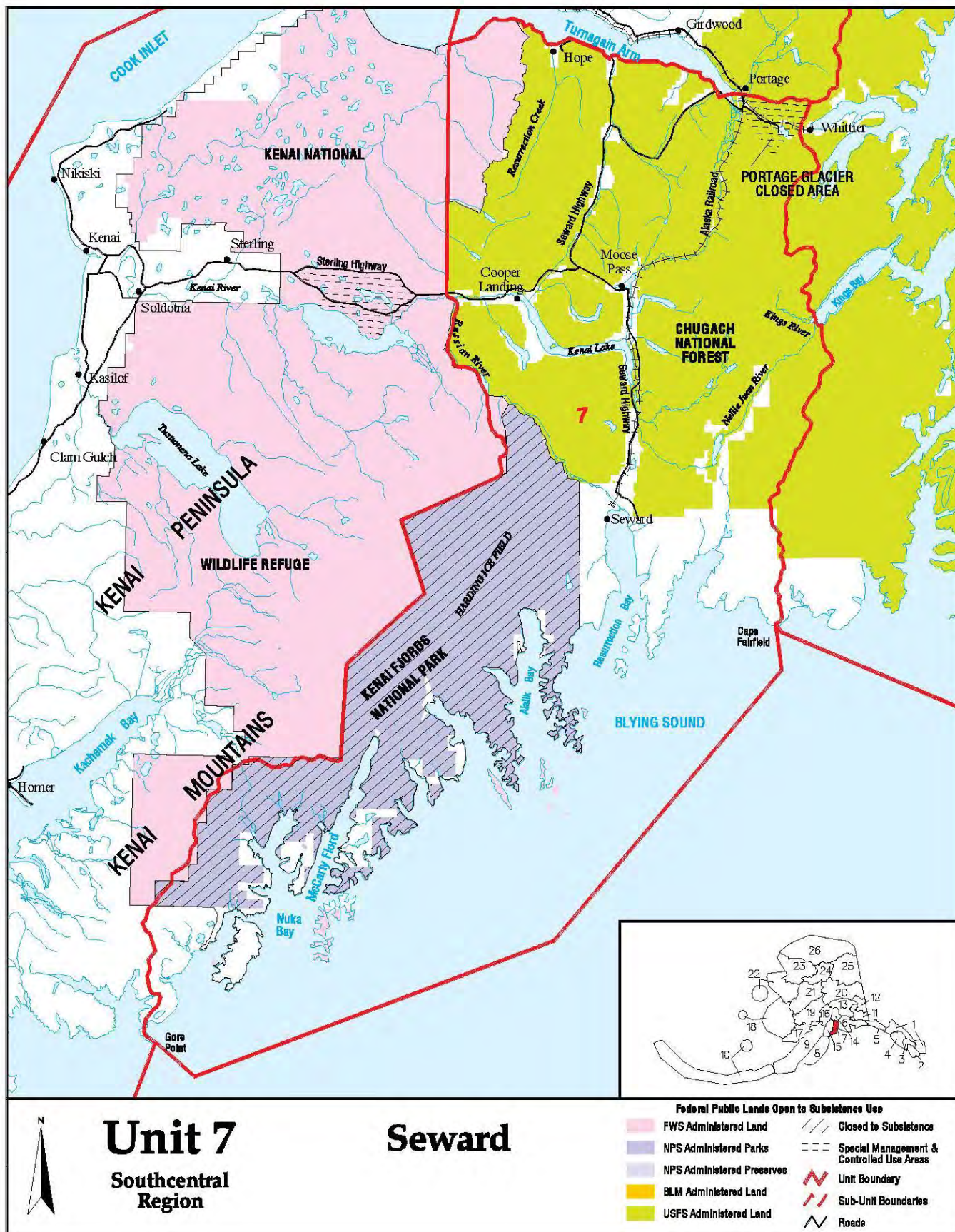


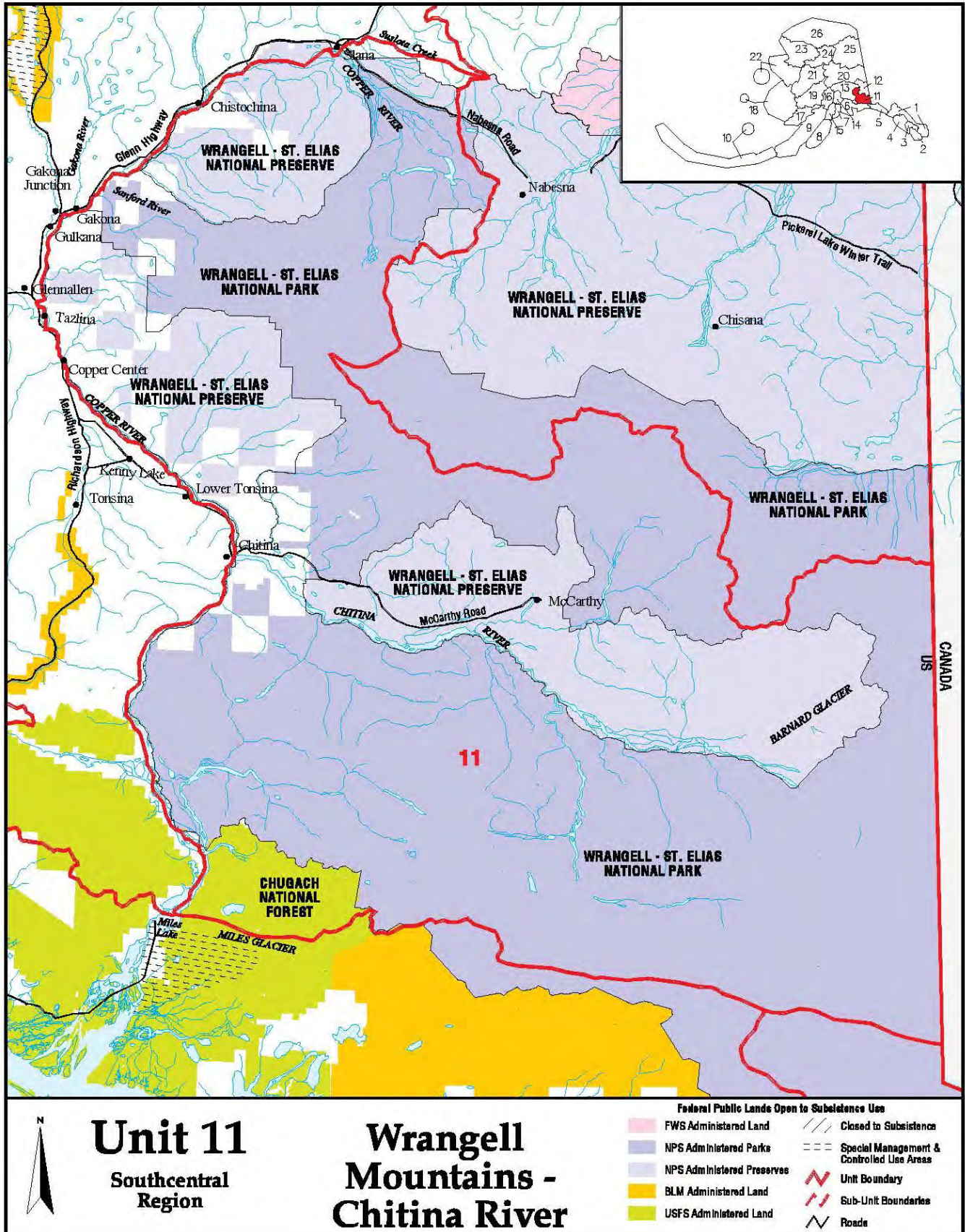


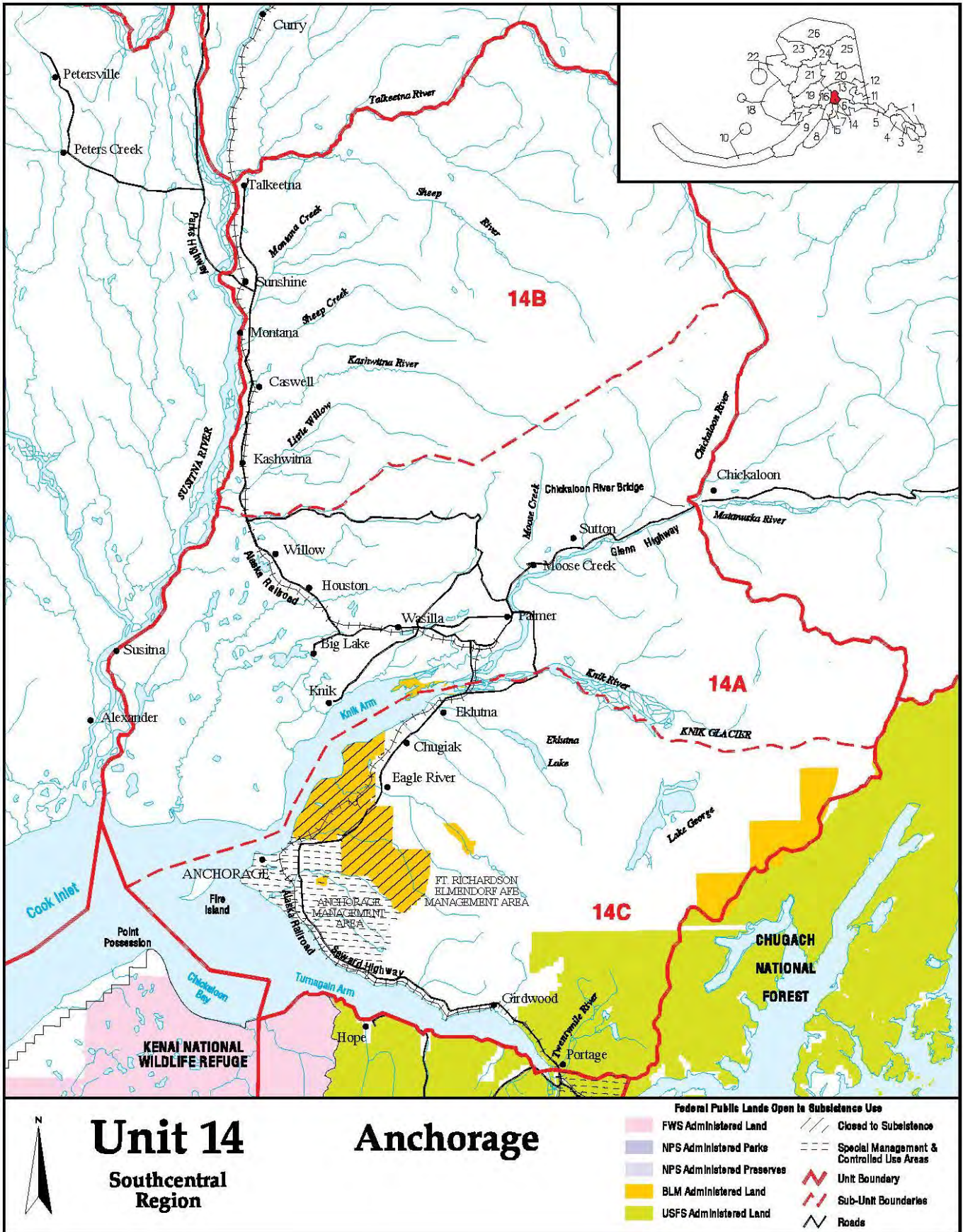


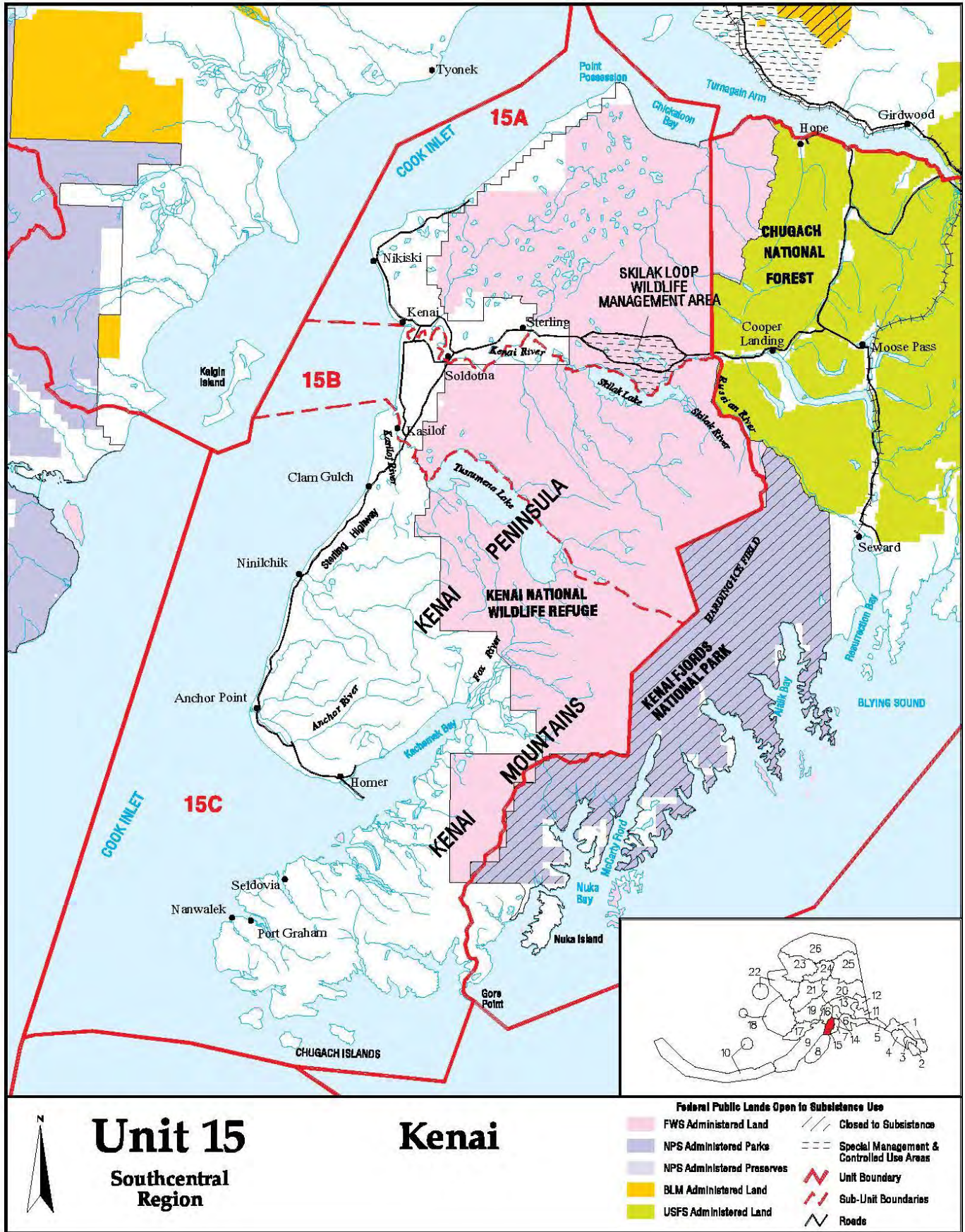


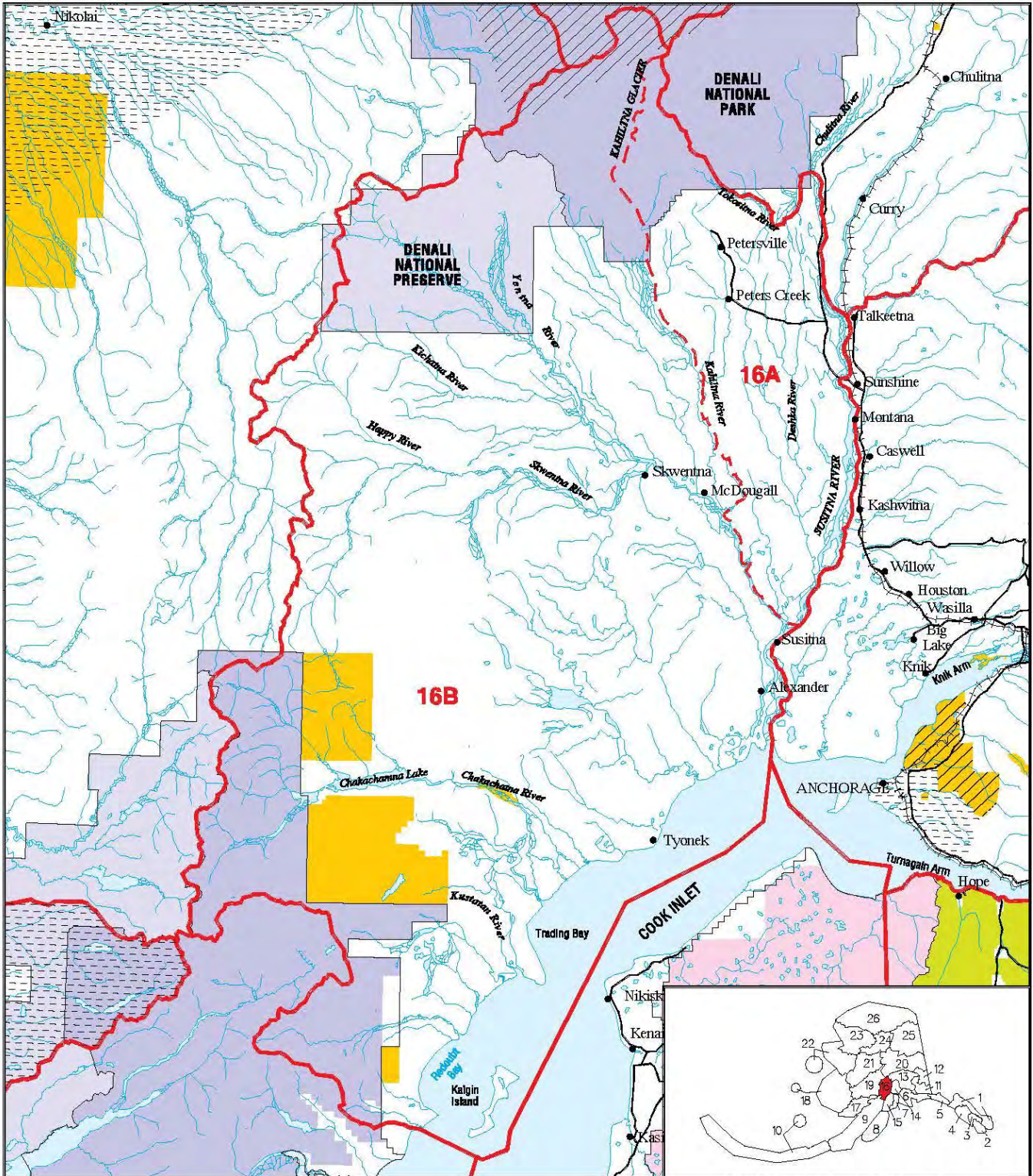








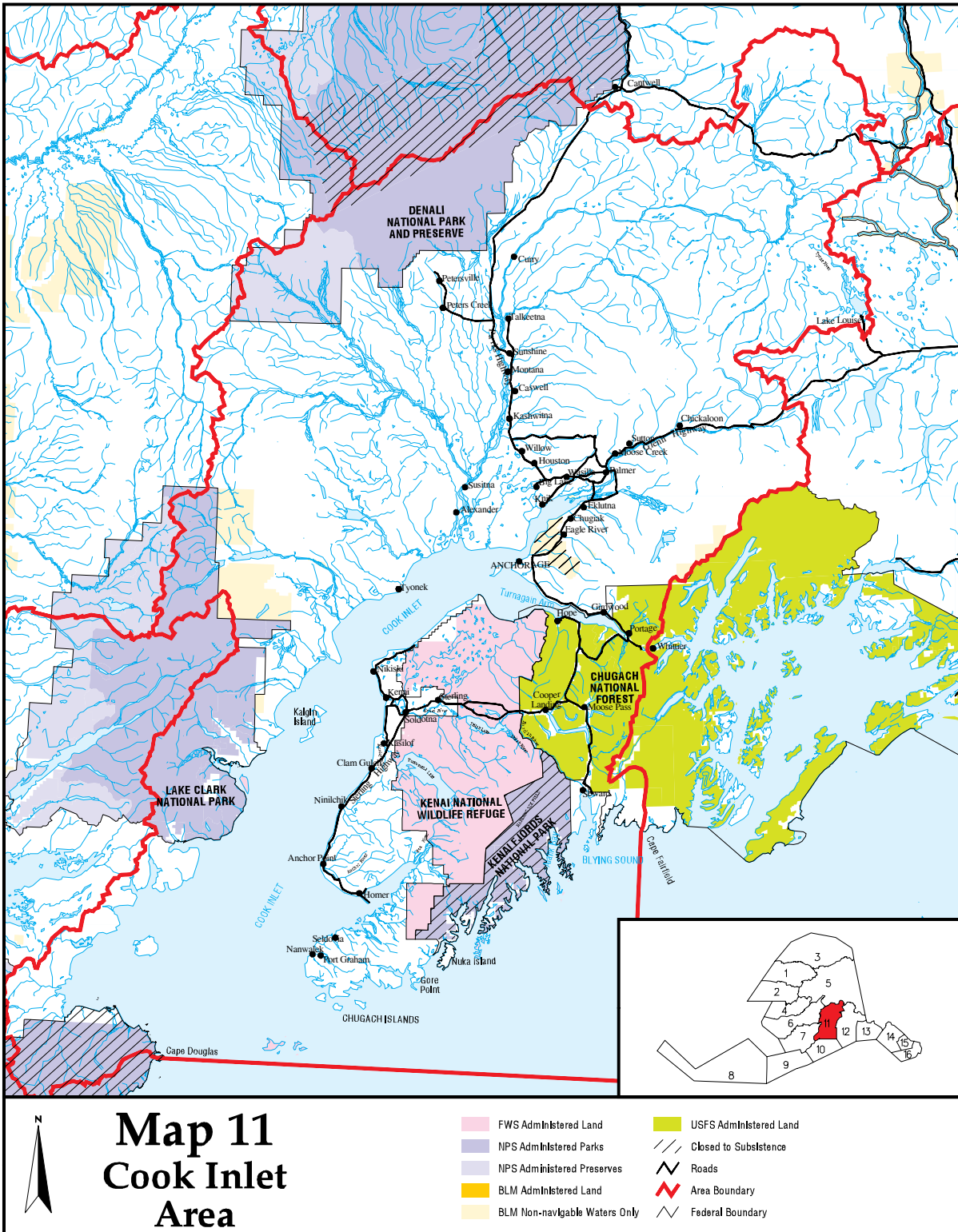


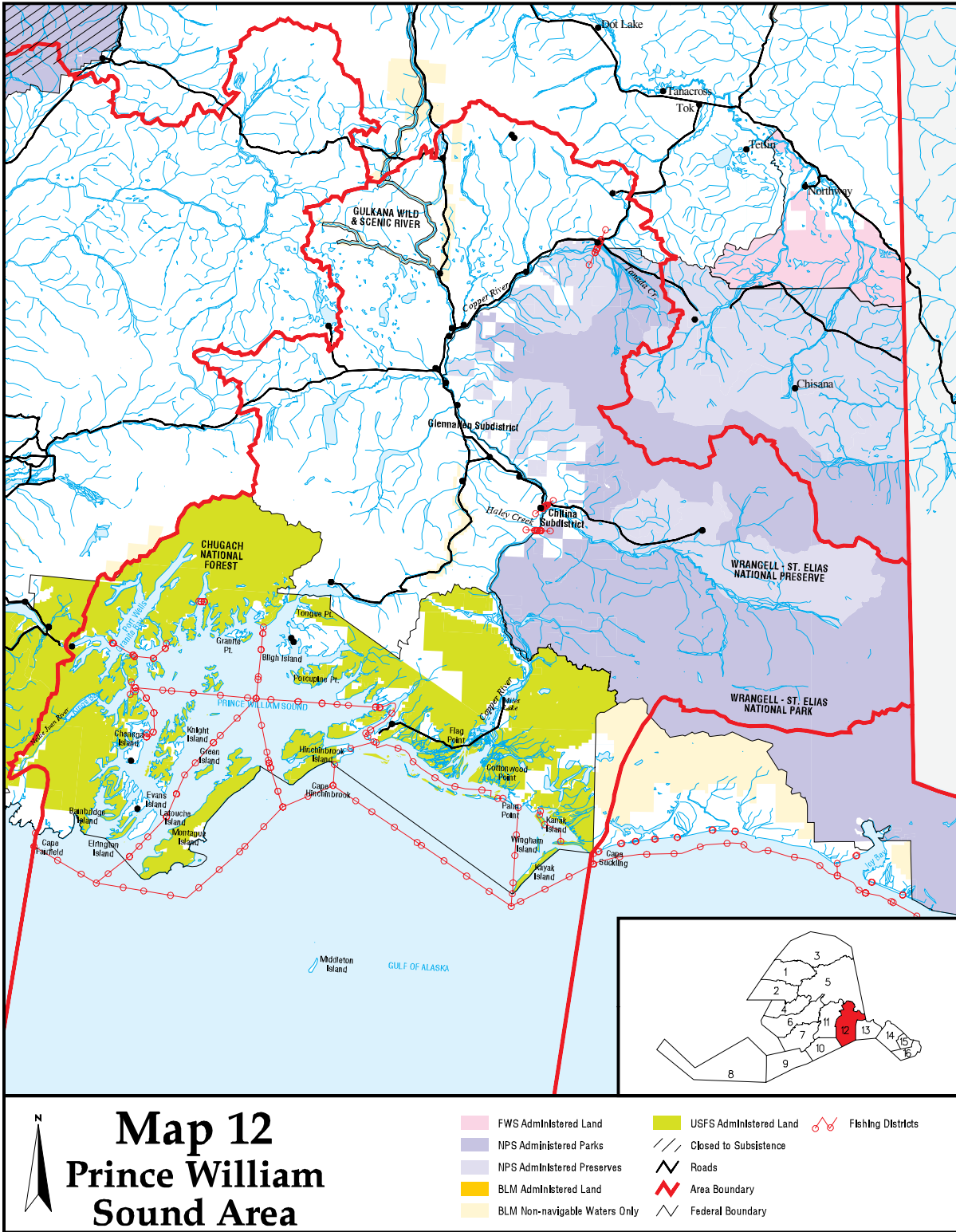


Unit 16 Lower Susitna

Southcentral Region

Federal Public Lands Open to Subsistence Use	
 FWS Administered Land	 Closed to Subsistence
 NPS Administered Parks	 Special Management & Controlled Use Areas
 NPS Administered Preserves	 Unit Boundary
 BLM Administered Land	 Sub-Unit Boundaries
 USFS Administered Land	 Roads





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

Southcentral Alaska Subsistence Regional Advisory Council

Charter

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

- (3) A recommended strategy for the management of fish and wildlife populations within the Region to accommodate such subsistence uses and needs; and
 - (4) Recommendations concerning policies, standards, guidelines, and regulations to implement the strategy.
 - e. Appoint one member to the Wrangell-St. Elias National Park Subsistence Resource Commission and two members to the Denali National Park Subsistence Resource Commission in accordance with section 808 of the ANILCA.
 - f. Make recommendations on determinations of customary and traditional use of subsistence resources.
 - g. Make recommendations on determinations of rural status.
 - h. Provide recommendations on the establishment and membership of Federal local advisory committees.
- 5. **Agency or Official to Whom the Council Reports.** The Council reports to the Federal Subsistence Board Chair, who is appointed by the Secretary of the Interior with the concurrence of the Secretary of Agriculture.
- 6. **Support.** The U.S. Fish and Wildlife Service will provide administrative support for the activities of the Council through the Office of Subsistence Management.
- 7. **Estimated Annual Operating Costs and Staff Years.** The annual operating costs associated with supporting the Council’s functions are estimated to be \$170,000, including all direct and indirect expenses and 1.15 Federal staff years.
- 8. **Designated Federal Officer.** The DFO is the Subsistence Council Coordinator for the Region or such other Federal employee as may be designated by the Assistant Regional Director – Subsistence, Region 11, U.S. Fish and Wildlife Service. The DFO is a full-time Federal employee appointed in accordance with Agency procedures. The DFO will:
 - (a) Approve or call all Council and subcommittee meetings;
 - (b) Prepare and approve all meeting agendas;
 - (c) Attend all committee and subcommittee meetings;
 - (d) Adjourn any meeting when the DFO determines adjournment to be in the public interest; and

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

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

10. Duration. Continuing.

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

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

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

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

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

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

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

Alternate members may be appointed to the Council to fill vacancies if they occur out of cycle. An alternate member must be approved and appointed by the Secretary before attending the meeting as a representative. The term for an appointed alternate member will be the same as the term of the member whose vacancy is being filled.

Council members will elect a Chair, Vice-Chair, and Secretary for a 1-year term.

Members of the Council will serve without compensation. However, while away from their homes or regular places of business, Council and subcommittee members engaged in Council, or subcommittee business, approved by the DFO, may be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in Government service under Section 5703 of title 5 of the United States Code.

13. **Ethics Responsibilities of Members.** No Council or subcommittee member will participate in any Council or subcommittee deliberations or votes relating to a specific party matter before the Department or its bureaus and offices including a lease, license, permit, contract, grant, claim, agreement, or litigation in which the member or the entity the member represents has a direct financial interest.
14. **Subcommittees.** Subject to the DFO’s approval, subcommittees may be formed for the purpose of compiling information or conducting research. However, such subcommittees must act only under the direction of the DFO and must report their recommendations to the full Council for consideration. Subcommittees must not provide advice or work products directly to the Agency. Subcommittees will meet as necessary to accomplish their assignments, subject to the approval of the DFO and the availability of resources.
15. **Recordkeeping.** The Records of the Council, and formally and informally established subcommittees or other subgroups of the Council, must be handled in accordance with General Records Schedule 6.2, and other approved Agency records disposition schedules. These records must be available for public inspection and copying, subject to the Freedom of Information Act (5 U.S.C. 552).

 /signature of the filed original/
Secretary of the Interior

 Dec. 10, 2021
Date Signed

 Dec. 13, 2021
Date Filed

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