



EASTERN INTERIOR ALASKA
SUBSISTENCE REGIONAL
ADVISORY COUNCIL
Meeting Materials

*October 14-15, 2021
via teleconference*



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USFWS photo by Yukon Flats NWR

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EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

Via teleconference
October 14-15, 2021 | 9:00 am daily

TELECONFERENCE: call the toll free number: **1-866-807-6997**, then when prompted enter the passcode: **73803960**.

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. 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.

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To call into the meeting, dial the toll free number: **1-866-807-6997**, then when prompted enter the passcode: **73803960**

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 Vince Mathews, 907-455-1823, vince_mathews@fws.gov, or 800-877-8339 (TTY), by close of business on October 8, 2021.

**Tribute to Andrew Firmin
Eastern Interior Council member 2007 – 2021**



The Eastern Interior Subsistence Regional Advisory Council honors the memory and life (1979 – 2021) of Andrew Firmin, Eastern Interior Alaska Subsistence Regional Advisory Council Vice Chair, who suffered an untimely death last spring.

During his fourteen years on the Eastern Interior Council, member Firmin served as a dedicated representative and an outspoken advocate for the Federally qualified subsistence users of Fort Yukon and other Yukon Flats communities, the Gwich'in people, and the subsistence way of life. Member Firmin was a leader on his Council, serving as both Secretary and as Vice Chair. He was known for supporting fellow Council members by valuing and respecting their knowledge and opinions. He had an in-depth practical knowledge of subsistence fish and wildlife resources and their uses in the Eastern Interior Region and beyond. He was a strong voice for sustainable use of these resources while providing for subsistence needs.

Member Firmin was proud when in 2016 the Council decided to hold its meeting in his home community of Fort Yukon and provided his son's picture for the meeting materials cover. He was respected by all and a friend to many. He was a great man, known for his hard work, humor, and friendliness. Member Firmin's service on the Eastern Interior Council will be remembered with gratitude and he will be sorely missed!

REGION 9
Eastern Interior Alaska Subsistence Regional Advisory Council

| Seat | Year Appointed <i>Term Expires</i> | Member Name and Community |
|-------------|---|---|
| 1 | 2001 2022 | Susan L. Entsminger Mentasta Chair |
| 2 | 2022 | <i>VACANT</i> |
| 3 | 2021 2022 | Linda M. Evans Rampart |
| 4 | 2021 2022 | Nicholas W. Henry Chalkyitsik |
| 5 | 2005 2023 | William L. Glanz Central Vice Chair |
| 6 | 2002 2023 | Andrew W. Bassich Eagle |
| 7 | 2017 2023 | Robert C. Wright, Sr. Tanana |
| 8 | 2017 2021 | Charlie Jagow Porcupine River |
| 9 | 2004 2021 | Donald A. Woodruff Eagle Secretary |
| 10 | 2018 2021 | Timothy J. McManus Nenana |

EASTERN INTERIOR SUBSISTENCE REGIONAL ADVISORY COUNCIL

Meeting Minutes

Via teleconference due to COVID-19 pandemic
March 4, 2021

Invocation

Council member Timothy McManus led the Council in the invocation. He requested a special prayer for Council Vice-chair Andrew Firmin of Ft. Yukon who just had several strokes and is in the hospital.

Call to Order, Roll Call and Quorum Establishment

Madame Chair Sue Entsminger called the meeting to order on Thursday, March 4 at 9:08 AM. Council members Linda Evans, William Glanz, Robert Wright (Council Secretary), Charlie Jagow, Donald Woodruff, and Timothy McManus all called in for the Council teleconference. Nicholas Henry and Andrew Firmin were not present. The Council has one vacant seat. A quorum was established with 7 of 9 seated Council members participating by phone.

Attendees:

In addition to Council members, at least the following 39 people from agencies, organizations and members of the public participated in this teleconferenced Council meeting:

- OSM- Pippa Kenner, Dr. Brent Vickers, Katya Wessels and Tom Kron
- Other USFWS- Holly Carroll, Tim Lorenzini, Shawn Bayless, Bryce Lake, Ally Mulligan, Vince Mathews, Jimmy Fox and Steve Berendzen
- NPS- Dr. Barbara Cellarius, Amy Craver, Dave Sarafin, Kyle Joly, Marcy Okada, Dr. Joshua Ream, Kim Jochum, Pat Owen and Caroline Ketron
- BLM- Jim Herriges
- BIA- Pat Petrivelli
- ADF&G- Deena Jallen, Jeff Estensen, Mark Burch, Lisa Stube, Sabrina Garcia, Klaus Wuttig, and Dr. Katie Howard
- YRDFA- Catherine Moncrieff and Serena Fitka
- TCC- Ben Stevens, Bruce Irvine, Deborah Lind and Jim Simon
- AITRC- Karen Linnell, Odin Miller, Dustin Carl and Hanalee Stanford
- Ahtna Inc.- Gloria Stickwan
- Klutii Klaa- Eyak Ewan
- public- Jack Reakoff

Review and Adopt Agenda

Motion by Council member Woodruff, seconded by Council member McManus, to adopt the agenda as read with the following changes:

- Under Old Business, add Federal Subsistence Board request that this Council compromise with the SCRAC over a proposal to start a new subsistence fishery in Cordova.
- Under Agency Reports, remove climate change research from Dr. Todd Brinkmann; Dr. Brinkmann is unavailable today.

The motion passed unanimously.

Election of Officers

Ms. Sue Entsminger was elected again as the Council's Chair.

Mr. William Glanz was elected as the Council's Vice-Chair.

Mr. Donald Woodruff was elected as they Council's Secretary.

Review and Approve Previous Meeting Minutes

Motion by Council member Glanz, seconded by Council member Woodruff, to approve the fall 2020 meeting minutes as presented with the following modification: The Council wished to shout out to Tim for his involvement in helping to feed the local people in his city and Village Council. The motion was approved unanimously.

Council Member and Chair Reports

Council Vice-Chair William Glanz of Central reported that the caribou situation has been very challenging and there have been lots of hunters from outside the area and there was a lot of ATV activity. He noted that the ADF&G objective was for a 5,000 caribou harvest and that the situation was dangerous. People are tearing up the countryside with ATVs and rural residents around Central have been very concerned. People are not able to get moose in the upper Yukon River area.

Mr. Timothy McManus of Nenana reported that they had a lot of rain in Nenana during the fall hunting season. He said that he helped with several rescues. He said that there were lots of berries last fall and that he had been able to put up some fish last summer. Winter has been good and he has been seeing lots of lynx and wolf tracks.

Council Secretary Donald Woodruff of Eagle reported that they have been seeing caribou all winter. He said that snowshoe hare and lynx populations have been falling rapidly. He said that about 90% of the people in Eagle have been vaccinated for COVID-19 and thanked TCC for the vaccination effort.

Mr. Charlie Jagow of the Porcupine River reported that they only had light snow early in the winter. He noted that the martin population crashed in his area and is only about 25% of what it was. He noted that the snowshoe hare population crashed last year and that lynx population is declining. He said that there were lots of wolverines this year.

Mr. Robert Wright, Sr. of Tanana reported that there have been salmon conservation issues on the Yukon River. He said that black bear populations are down, and that moose are scarce around Rampart. He said that the snow was deep last year. He noted that COVID-19 infections are down and that he is looking forward to spring. After the COVID-19 pandemic, he is looking forward to being able to meet person to person again. He said that there had been a lot of hardship on the river, and that he is looking forward to a better year ahead.

Ms. Linda Evans of Rampart reported that she has been out of Alaska this winter, but will be coming back to Alaska in the spring. She shares the concerns expressed by Robert Wright. The lack of subsistence has been a hardship for everyone.

Madame Chair Sue Entsminger of Mentasta reported that they had about a foot of snow early, and that February was cold. She said that they have had more snow in the past two weeks. She was out with friends who got 3 wolves earlier. Moose and sheep are dealing with deep snow now, and she hopes that they will do OK through the rest of the winter. She is concerned about the Forty Mile Caribou Herd. She noted that she had been able to get a sheep last fall. She has been appointed to the Ahtna Intertribal Resource Commission (AITRC) Board. She recently participated in teleconferences for the Federal Subsistence Board meeting and Wrangell-St. Elias National Park and Preserve Subsistence Resource Commission (SRC). She said that she looks forward to being able to have face to face meetings again after the COVID-19 pandemic. She noted that the Federal Subsistence Board had asked the Southcentral and Eastern Interior Councils to see if they could reach a compromise on FP21-10, and that the Eastern Interior Council would talk about this more later in the meeting today.

Madame Chair Sue Entsminger asked if there were public or Tribal comments on non-agenda items.

Mr. Jack Reakoff from Wiseman expressing concerns about BLMs Central Yukon Plan to transfer the Haul Road corridor to the State of Alaska. Both the Western Interior and North Slope Councils opposed the BLM plan at their meetings the past two weeks. Council member Wright made a motion, seconded by Council member Woodruff to send a letter to BLM opposing their Central Yukon Plan. The motion passed unanimously. The Eastern Interior Council asked BLM to extend the comment period noting that the process had been rushed and that there had not been adequate public input. The deadline for comments was March 11. Tom Kron will work with the Madame Chair Sue Entsminger to get the Council letter out before the deadline.

Ms. Karen Linnell of AITRC gave an update on their community hunt framework for 8 Ahtna communities. Last year there were poor salmon runs on the Copper River and there were poor moose harvests.

Ms. Gloria Stickwan of Tazlina thanked the Council for voting against FP21-10.

Mr. Ben Stevens from TCC thanked the Council for voting against the BLM Central Yukon Plan.

Ms. Faye Ewan of Kluti-Kaah expressed concerns about Copper River salmon conservation and the need to provide for elders and to maintain the subsistence way of life.

Old Business

Madame Chair Sue Entsminger explained that the Federal Subsistence Board, at their January 26-29 meeting, has asked that the Eastern Interior and Southcentral Alaska Subsistence Regional Advisory Councils try to find a compromise on the lower Copper River dip net proposal (FP21-10). The Board has faith that the Councils have the correct process to figure this out. Council member Wright made a motion, seconded by Council member Woodruff for the joint fall 2021 Eastern Interior Council meeting with the Southcentral Council on October 14, followed by an October 15 Eastern Interior Council meeting in Fairbanks. The proposal is for the two Councils to meet face to face in Anchorage on October 14 and then for the Eastern Interior Council to travel back to meet in Fairbanks on October 15. The Eastern Interior wants to hold their Council meeting in Fairbanks to allow for public participation from the Eastern Interior Region. If travel to Anchorage is not approved, the request is for a teleconference for the joint session between the Eastern Interior and Southcentral Councils. The motion passed unanimously.

Mr. Jimmy Fox (Yukon Flats NWR Manager) reported on hunter ethics, education and outreach work they did last summer at Circle and Ft. Yukon. With the COVID-19 pandemic last fall, there wasn't as much activity around the Ft. Yukon airport. There was more activity out of Circle, and they have been working with the public there to help with hunter ethics and education.

Ms. Kim Jochum gave the NPS Individual C&T update. Council member Woodruff made a motion, seconded by Council member Glanz to support the Mayo family for an Individual C&T for moose for Denali NP&P. The motion passed unanimously.

Mr. Jim Herriges (BLM) and Tom Kron (OSM) gave an overview of the Nome Creek issue and the recent Closure Review. Ms. Lisa Stuby (Fisheries Biologist, ADF&G, Sport Fish Division) gave an update on ADF&G's and BLM's plans for a telemetry and mark-recapture study in Nome Creek to better assess Arctic Grayling population dynamics there. The Council felt that they should wait on this issue and plans to submit a subsistence fishery regulatory proposal for Nome Creek at their winter 2022 meeting for the 2023-2025 regulatory years. The Council thought that it would be helpful to have more information before moving forward. The Council noted that the subsistence fishery in Nome Creek has been closed in Federal regulations for 2 decades. The Council is not planning to submit a special action request for the subsistence fishery there for the next two summers.

New Business

Fisheries Resource Monitoring Program Update

Ms. Pippa Kenner (OSM Anthropologist) presented the Council with the Fisheries Resource Monitoring Program update.

Call for Federal Wildlife Proposals

Ms. Kenner informed the Council that the Board is accepting proposals through May 24, 2021 to change Federal regulations for the subsistence wildlife hunting and trapping on Federal public lands for the 2022-2024 regulatory years. The Board will consider proposals to change Federal subsistence hunting and trapping seasons, harvest limits, methods, and means related to taking of wildlife for subsistence uses, as well as customary and traditional use determinations. The Council did not have any wildlife proposals at their March 4 meeting.

Council Charter

The Council reviewed their Charter and requested that a “carryover” provision be added so that Council members are allowed to continue to serve on the Council until a decision is made on appointments. This is based on delays in Council appointments in recent years. It was noted that NPS Subsistence Resource Commissions (SRC) had such a condition in their charters, and that this provision was subsequently move out of the SRC charters and into NPS regulations. Council member Woodruff made a motion for a “carryover” provision in the Eastern Interior Council Charter; the motion was seconded by Council member Glanz. The motion passed unanimously.

Other new Business

Mr. Mark Burch (ADF&G) helped to explain Alaska Board of Fisheries and Alaska Board of Game proposed meeting schedules during the COVID-19 pandemic.

Council member Wright expressed concern that the number of moose along the upper Yukon River has been declining, and that there has not been a recent moose survey. Mr. Wright made a motion, seconded by Council member Glanz that the Council send a letter to upper Yukon land and resource managers (ADF&G, FWS, NPS and BLM) requesting moose surveys along the upper Yukon River. The motion passed unanimously.

Review and approve FY-2020 annual report

The Council reviewed their draft 2020 Annual Report and agreed to the report with the addition of a request for the following Copper River salmon information:

“The 2021 preseason estimates indicate that Sockeye and Chinook will be below the most recent 10-year average by 37.4% and 22.4% respectively. For Chinook, this recent 10-year average already represents a steep decline from previous decades. The 10-year average for the 1998-2007 period was 86,684 compared with only 47,386 for the 2010-2019 period (Schwanke 2019). While sockeye runs were generally strong during the early 2010s (Botz and Somerville 2017), they have been markedly smaller since 2017, and alarmingly low during 2018 and 2020. The estimated total run size for 2018 is 817,121 Sockeye Salmon, while preliminary estimates for 2020 put the number at 602,000, making these among the lowest returns since at least the early 1980. The declines indicate an urgent need for more research into better understanding Copper River salmon fisheries, in order to inform management of those crucial subsistence resources. The Office of Subsistence Management should prioritize funding research.”

Council member Glanz made a motion, seconded by Council member McManus to approve the annual report with the Copper River salmon addition. The motion passed unanimously.

Agency Reports:

- Ms. Karen Linnell (Executive Director) reported again on AITRC issues.
- Council member McManus reported on Tribal issues for Nenana. He said that fall salmon fishing had been poor. He had released Chum Salmon while keeping Silver Salmon at this fishwheel last summer. He noted that TCC had gotten salmon from Bristol Bay last summer and he was very thankful for that.
- Dr. Katie Howard and Ms. Sabrina Garcia (Fisheries Biologists, ADF&G) gave updates on early marine life of Yukon River salmon.
- Ms. Holly Carroll (new USFWS Yukon River fisheries manager) gave the overview for the 2020 Yukon River salmon fishery. She noted that the Chum Salmon return last year was poor, and that the U.S. didn't make the Canadian Boarder passage goal last year. She said that they have a preliminary projection for a Yukon River return of 102,000-189,000 Chinook Salmon in 2021, but that they won't finalize the numbers until after a joint meeting with the Canadians on April 12-14. She said that she expects conservative fisheries in Alaska this coming summer. Mr. Jeff Estensen (Fall Season Yukon River Manager, ADF&G), joined in with for the salmon update.
- Ms. Serena Fitka (Executive Director) gave the YR DFA update to the Council. They plan an April 29 pre-season meeting and a June 1 start for the first in-season teleconference. Ms. Catherine Moncrieff (Anthropologist) gave an update on YR DFA projects along the Yukon River.
- Mr. Steve Berendzen (Refuge Manager) gave the Arctic NWR report.
- Mr. Tim Lorenzini (Supervisory Ranger) gave the Tetlin NWR report.
- Mr. Jimmy Fox (Refuge Manager) gave the Yukon Flats NWR report.
- Ms. Amy Craver (Subsistence Manager) and Pat Owen (Wildlife Biologist) gave the Denali NP&P report. Amy thanked Council members Jagow and McManus for their good work on the Denali SRC.

- Ms. Marcy Okada (Subsistence Coordinator) gave the update for the Yukon-Charley River National Preserve.
- Mr. Dave Sarafin (Fisheries Biologist) and Ms. Caroline Ketron (Biological Sciences Technician) gave the report for the Wrangell-St. Elias NP&P.
- Mr. Jim Herriges (Wildlife Biologist) gave the BLM report.
- Mr. Tom Kron (Acting Council Coordinator) gave the OSM report.

Future Meeting Dates:

The Council agreed to hold their winter 2022 meeting on March 8 & 9 in Ft. Yukon (1st choice) or Fairbanks (2nd choice).

After closing comments by Council members, the Eastern Interior Alaska Regional Advisory Council adjourned at 3:30 PM on March 4.

Tom Kron, Acting Council Coordinator, Designated Federal Officer
USFWS Office of Subsistence Management

Sue Entsminger, Chair
Eastern Interior Alaska Subsistence Regional Advisory Council

These minutes will be formally considered by the Eastern Interior Alaska Subsistence Regional Advisory Council at its fall 2021 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 Katerina Wessels at 1-800-478-1456 or 1-907-786-3885, email katerina_wessels@fws.gov.

Susan Entsminger
Recognition of 20 Years of Service on
the Eastern Interior Alaska Subsistence Regional Advisory Council



Susan Entsminger of Mentasta Pass has served on the Eastern Interior Alaska Subsistence Regional Advisory Council since 2001 as a commercial/sport user group representative; however, over the years she has been a strong voice for all people in her region and is invested in supporting or the subsistence way of life of rural residents in Eastern Interior of Alaska. As the long-term Chair, Ms. Entsminger has provided consistent and passionate leadership to the Council during complex discussions and challenging times. For fourteen years, Chair Entsminger has been a strong voice for the Council at the Federal Subsistence Board meetings, representing Council positions on various subsistence issues and presenting Council recommendations. Chair Entsminger has been an Alaskan resident since 1973 and has lived in Mentasta Pass, situated in the Alaska Range, since 1977. The Council benefits from her extensive on-the-ground knowledge of resource issues and uses in the Upper Tanana and Wrangell-St. Elias National Park and Preserve area. In addition, Chair Entsminger is actively involved with other advisory groups, including serving as vice chair of the Wrangell-St. Elias Subsistence Resource Commission and as a past member of the Alaska Board of Game and the Tok Cutoff-Nabesna Road Fish and Game Advisory Committee. She also participates in the Upper Tanana/Fortymile Fish and Game Advisory Committee meetings.

Chair Entsminger knows the importance of working with others and making sure everyone's voice is heard. She is an active public member of wildlife planning efforts and initiatives involving local, state, federal, and other interests. Her involvement with these planning efforts is a manifestation of her care for important subsistence resources. She reminds all that everyone plays an important part in the stewardship of lands and waters that provide for subsistence needs and other uses.

Chair Entsminger also is actively involved in and extremely passionate about the outdoor and Alaska wilderness education of youth in her area. She is an outstanding ambassador for young women, particularly Alaskan Native girls, educating them on ethical hunting and wildlife conservation.

The Federal Subsistence Management Program and the Eastern Interior Alaska Subsistence Regional Advisory Council thank Chair Entsminger for her dedicated 20 years of service and look forward to her continuing valuable service on the Council.



Preliminary 2021 Yukon River Chinook and Summer Chum Salmon Fisheries Review

Fall Regional Advisory Council Meeting Packet All data current as of August 9, 2021

Presented by the U.S. Fish and Wildlife Service Yukon Team
Fairbanks Wildlife Conservation Office
101 12th Avenue, Rm 110
Fairbanks, AK 99701
Fax (907) 456-0454

Holly Carroll, Yukon River Subsistence Fishery Manager

I joined Service as the Federal manager in November, 2020, and look forward to connecting directly with Yukon Tribes, fishermen, and all stakeholders. Please contact me at:

Phone: (907) 351-3029

Email: holly_carroll@fws.gov

Gerald Maschmann, Yukon River Subsistence Fishery Asst. Manager

I've been working on the Yukon River since 2003 assisting the Federal Manager in fulfilling our mandate to protect Yukon River fisheries for future generations of subsistence users.

Phone: (907) 456-0406

Gerald_Maschmann@fws.gov

Keith Herron Ivy, Yukon River Subsistence Fishery Asst. Manager

I joined Service as a Biologist and assistant manager focused on increasing tribal consultation and youth outreach in March 2021. I look forward to working with Yukon Tribes, fisherman and stakeholders. Please contact me at:

Phone: (907) 312-3397

Keith_Ivy@fws.gov

This summary is compiled in cooperation with the Alaska Department of Fish and Game (ADF&G)

The Yukon River summer management season is nearly complete as of this writing (August 10, 2021) and the tail end of the Chinook Salmon run is passing the border into Canada. Much of the information in this report is preliminary. Fall season management is currently in full swing and a complete review could not be included as of this writing. The preliminary 2021 Yukon River fall Chum and Coho salmon fisheries review will be presented at the winter Regional Advisory Council meetings.

Tribal Consultation and Public Outreach

The U.S. Fish and Wildlife Service (Service) has a core mission to consult with Federal Tribes and the Yukon team has been working to expand and improve government-to-government consultation. In May, the subsistence fishery manager, Holly Carroll, sent the Preseason Salmon Outlook flier to 55 Yukon drainage Tribes introducing herself as the new manager, seeking feedback, guidance, or any discussion they want to have regarding the fisheries management strategy for 2021. The team's Keith Herron Ivy followed up with phone calls to each Tribe to make sure they are getting the necessary information about fishery management and to connect with them on any concerns they may have. We appreciated the direct communication our management team had with Tribal members in an effort to have meaningful participation in decision-making. We recognize the importance of coordination, consultation and follow-up between the Service's subsistence management team and the Federally recognized Tribes living along the Yukon River and we look forward to creating and maintaining effective working relationships.

We also engaged in public outreach by sending the Outlook flier presenting the finalized pre-season management strategy to all Yukon River households on May 13 and released as a cooperative ADF&G and Service advisory announcement #1:

<http://www.adfg.alaska.gov/static/applications/dcfnewsrelease/1262168922.pdf>

The outlook and management strategy were discussed in depth at the following meetings: Yukon River Panel, Yukon River Intertribal Fish Commission (YRITFC) preseason meeting; and Yukon River Drainage Fishermen's Association (YRDFFA) Board meeting and Public preseason fishermen's meeting. Inseason assessment data and management actions were discussed weekly on the Tuesday YRDFFA teleconferences which were widely attended this season, and often allowed for up to two and a half hours of discussion each week.

Throughout the season our staff was responsive to daily requests from community members by phone or over email on many topics around salmon management in dozens of communities. This gave us input into our decision-making and enabled us to share relevant in-season salmon management information.

2021 Yukon River Chinook and Summer Chum Salmon Season Outlook

The Chinook Salmon run was forecasted to be similar to or smaller than 2020, with a drainage-wide outlook of between 102,000 to 189,000 fish. The outlook sent to households and discussed at preseason meetings indicated the need for front end closures up through the midpoint of the run, and that these actions would be taken based on the forecast and that more closures might be needed or that fishing might occur after the midpoint, depending on inseason abundance of salmon. The summer Chum Salmon run was forecasted to be near 1.2 million fish and provide

for escapement, normal subsistence harvests as well as additional commercial, personal use, and sport fishing opportunities.

Management Approach and Summer Season Review

The State of Alaska has the management authority on the Yukon River. Service's Federal management team analyzes assessment data and works closely and cooperatively with ADFG's management team to produce a management strategy preseason, and to make daily inseason decisions. The Federal inseason manager is delegated authority from the Federal Subsistence Board to issue emergency special actions when necessary to ensure the conservation of a healthy fish population, to continue subsistence uses of fish, or for public safety reasons. Management actions are decided upon by consensus and advisory announcements are crafted by both teams together. Because of this approach, there has not been a need for the federal manager to take special actions for more than a decade. And hopefully, this cooperative management has made fishery management actions clearer to all users and areas of the river.

As per the pre-season management strategy, subsistence salmon fishing was closed in the lower Yukon on June 2 (just as early Chinook Salmon arrived). Because of the poor outlook, tributaries and the Coastal district were also closed to salmon fishing at the start of the season. Overall, Pilot Station Sonar passage estimates indicated the drainage-wide Chinook Salmon run was near the lower end of the preseason outlook and summer Chum Salmon abundance was unexpectedly very poor at all lower river assessment with no typically large pulses seen. It was clear early in the season that the summer Chum were coming in well below the outlook and there was no harvestable surplus available for subsistence fishing for summer Chum Salmon. Unfortunately, with the poor abundance of Chinook Salmon and the critically low abundance of summer Chum Salmon, subsistence salmon fishing remained closed to salmon fishing throughout the drainage for the entire summer management season. When run sizes are so poor, there is no harvestable surplus; all salmon must escape to their spawning grounds in order to have viable returns 4, 5, and 6 years in the future. See Figures 1 and 2 for the end of season passage estimates of Chinook and summer Chum salmon compared to all previous years at the Pilot Station Sonar project. Both runs were some of the lowest on record.

The guiding principles outlined in the Alaska National Interest Lands Conservation Act (ANILCA) Title VIII acknowledge the importance of sound management principles; the importance of conservation of healthy populations of fish; and "the continuation of the opportunity for subsistence uses by rural residents of Alaska, including both Natives and non-Natives...is essential to Native physical, economic, traditional, and cultural existence..." When run sizes are so small that any harvest may have a negative impact on spawning success, we have the responsibility to manage for the conservation of healthy populations of fish. There is a need to balance the sacrifices the fishermen will experience in the current season, with the importance of the protecting the salmon returns for the fishermen and subsistence communities that will also rely on these returns 4, 5, and 6 years from now.

The drainage-wide Chinook and summer Chum salmon runs were some of the smallest on record, and with no projected harvestable surplus above what was needed to escape to the spawning grounds. The Federal manager, Holly Carroll, followed stipulations outlined in her delegation of authority by the Federal Subsistence Board as well as her obligations under

ANILCA Title VIII, Section 816 (b), which states that subsistence fishing may be closed “to assure the continued viability of such populations”. Managers allowed as much opportunity to harvest non-salmon species as possible. Subsistence fishing targeting non-salmon species was open throughout the drainage using 4-inch or smaller mesh gillnet (limited to 60 feet in length) and other legal gear for non salmon during both summer and fall seasons. After transitioning to the fall season, opportunities to harvest other salmon such as Pink and Sockeye salmon were provided with dip nets and hook and line in districts that have those species, however, all Chinook and chum salmon were required to be released alive immediately. Because subsistence fishing was closed, all other consumptive uses such as commercial, personal use and sport fishing were also closed for Chinook, summer chum and fall chum throughout the drainage.

Subsistence harvest estimates will not be available until after household surveys are completed and results finalized, typically in December. But it is likely that Yukon households will have experienced record-low harvests for Chinook, summer chum, and fall chum salmon. This represents the loss of over 190,000 salmon (based on historical harvest averages) to Yukon River families. Closures on these populations were not taken lightly, and we recognize the severe hardship to subsistence fishermen in the loss of meals and traditional practices that these closures represent.

Preliminary Escapement Overview

The drainage-wide stock abundance as indicated by Pilot Station Sonar and genetic sampling indicated a very weak run of Chinook, and despite fishing closures, Chinook Salmon counts were below average at all projects where escapement is monitored. The East Fork Andreafsky River goal was not met, and goals are not projected to be met at the Chena and Salcha rivers in the Tanana River drainage. The Henshaw Creek escapement (in the Koyukuk River drainage) was well below average. Systems with aerial-based escapement goals will be monitored, weather permitting.

Passage estimates at the Eagle Sonar as of August 9, represented approximately 90% of Canadian-origin Chinook run at the project based on late run timing (Figure 3). The estimate of 26,972 Chinook salmon may end up being one of the lowest on record and indicates the 42,500-55,000 Interim Management Escapement Goal will not be met.

The 2021 summer Chum Salmon run was the lowest on record. Estimated passage past the Pilot Station Sonar was approximately 153,500 summer Chum salmon, well below the lower end of the drainage-wide escapement goal of 500,000-1.2 million. Escapement goals at the East Fork Andreafsky and Anvik rivers were not met and summer Chum salmon escapements at the Henshaw Creek, Chena River, and Salcha River were well below average.

Preliminary Fall Season Assessment and Management as of August 9

The fall season management is underway at time of writing. The fall Chum Salmon projection, based on the relationship between summer Chum Salmon and fall Chum Salmon run sizes, was for a run size less than 300,000 fish, which is critically low. According to the State of Alaska regulatory fall Chum Salmon Management Plan, the projection does not meet the threshold of 300,000 fish needed to allow subsistence fishing. Therefore, fall season began with full closures on subsistence salmon fishing for fall Chum Salmon, which is unprecedented.

The fall Chum Salmon abundance at LYTF and Mt. Village Test Fishery (MVTf), have been well below average so far this season. The Pilot Station Sonar passage for fall Chum Salmon through August 9 was 68,496, which is well below the historical cumulative median of 306,984. The midpoint of the run for fall Chum Salmon is August 10, while a typical late year midpoint is August 15. The current projected run size is unlikely to meet the drainagewide escapement goal of 300,000-600,000 fall Chum Salmon, tributary escapement goals and Canadian treaty objectives.

Future Expectations

Given that subsistence salmon fishing was closed throughout the river, escapement was much lower than expected based on inseason estimates at Pilot Station Sonar. This is the third year in a row where the expected number of fish escaping into Canada is much lower than expected. We do not know the reasons for this yet, but law enforcement patrolled all areas of the river this season, engaging with fishermen and indicated good compliance with the fishing closures, therefore it is unlikely that large illegal harvests occurred. En route mortality of Chinook may be occurring due to environmental factors such as the observed warm water temperatures in tributaries and the mainstem Yukon River and/or the effects of the parasite *Ichthyophonus*. Service and ADF&G collected samples opportunistically this season (only on salmon naturally killed in a test fishery or caught in legal 4-inch gear) to test for prevalence and severity of *Ichthyophonus* and results of these studies and suggestions for future mortality research will be discussed at winter meetings.

Juvenile salmon research in the Bering Sea has led to an effective model for forecasting adult returns of Chinook to the Yukon River three years ahead. This model has been quite accurate and is indicating the 2022 run may be similar or smaller than the run size in 2021. Run sizes as small as we saw this year are likely to need heavy fishing restrictions to full closures in order to get enough Chinook salmon to the spawning grounds to preserve them for future generations. Fishermen should start preparing now for the eventuality that there may be little to no Chinook salmon fishing next year. Unfortunately, we do not have Bering Sea juvenile-based forecasts for Chum Salmon, although researchers are working on refining forecasting models for chum.

Managers would like to ask the Regional Council members, Tribal Governments, and other stakeholder groups for their help in preparing their communities for another poor salmon season. Post-season reviews and pre-season meetings at the Regional Advisory Councils, Tribal consultations, and with other stakeholder groups will enable us to continue to share information and communicate in a timeline manner to maximize input for future in-season decision-making. For example, fishermen on the YR DFA teleconferences reported using 4-inch gillnets to catch non-salmon species, however, many fishermen reported not having this gear. We encourage fishermen to make plans to harvest other species in years when Chinook or Chum Salmon abundance is poor, and to invest in gear types such as 4-inch, which can even be used in the winter, through the ice. If the Chinook Salmon run is poor, but Chum Salmon abundance is strong, managers may be able to allow dip net opportunity that allows the harvest of Chum Salmon, with the live release of Chinook Salmon, so investing in selective gear types such as dip nets may also be recommended.

The managers would like to acknowledge the very serious hardship this season has caused Yukon River families. We would also like to thank Yukon River fishermen for their compliance during this difficult year and commend those Tribes and communities that took steps to provide fishing gear, freezers, and came up with creative solutions to compensate for loss of salmon meals. We also thank the Bristol Bay fishermen and processors and organizations that helped to distribute non-Yukon salmon to families in many villages. Yukon fishermen have shown incredible resiliency in adapting to the changing environment and changing salmon run sizes.

Figure 1. Cumulative passage of Chinook salmon at the Pilot Station Sonar from 1995 through 2021. Passage for 2021 is preliminary, and ongoing as of August 9, 2021.

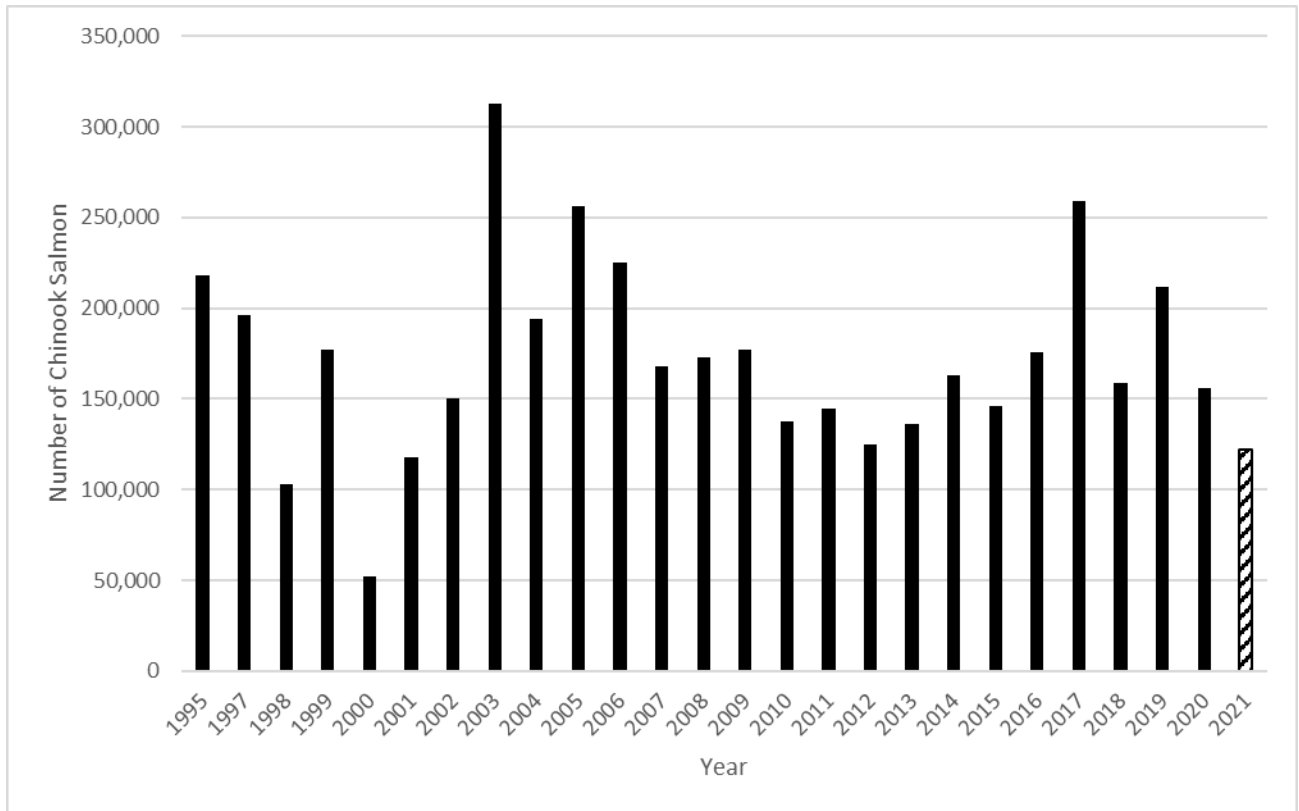


Figure 2. Cumulative passage of summer Chum at the Pilot Station Sonar project from 1995 through 2021. The dashed lines indicate the drainage-wide escapement goal range of 500,000 to 1.2 million, which was established in 2016. Passage for 2021 is preliminary but is considered complete through July 18, after which all chum are considered fall Chum Salmon.

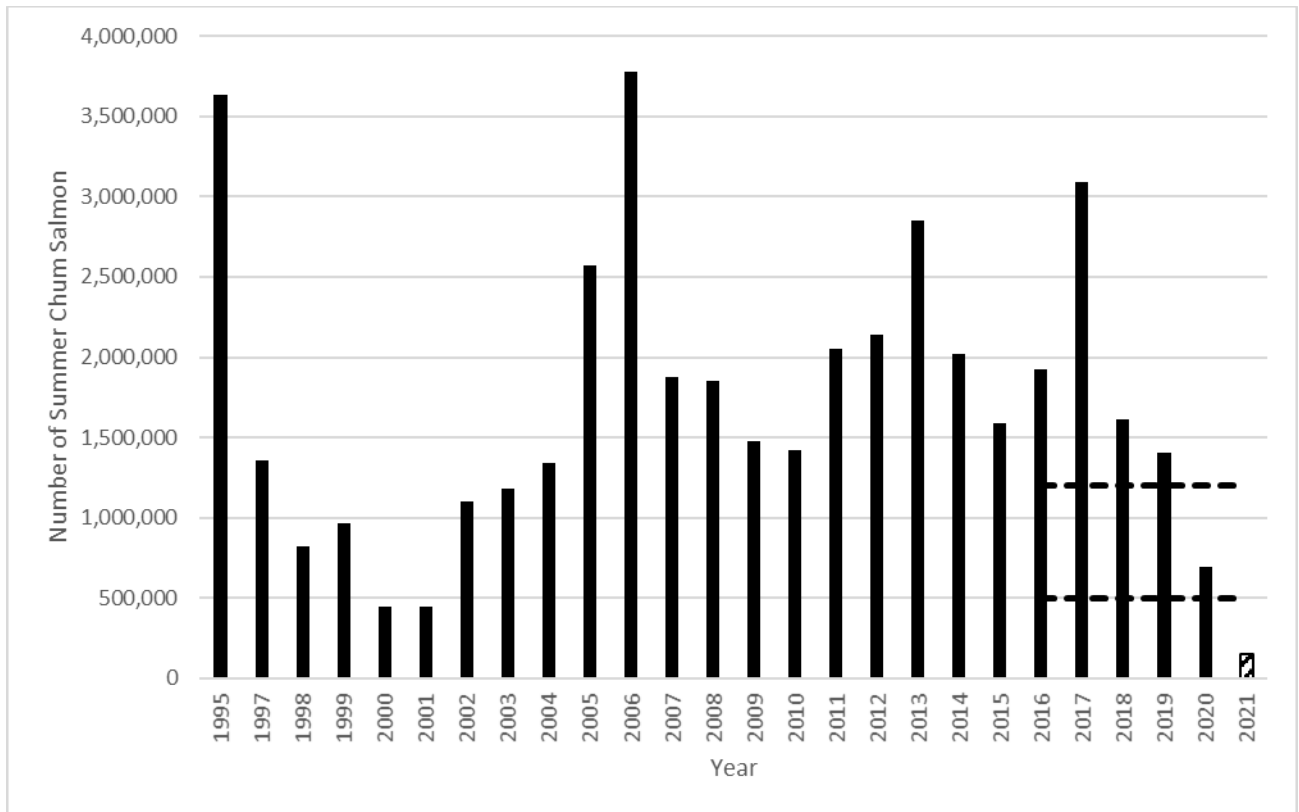
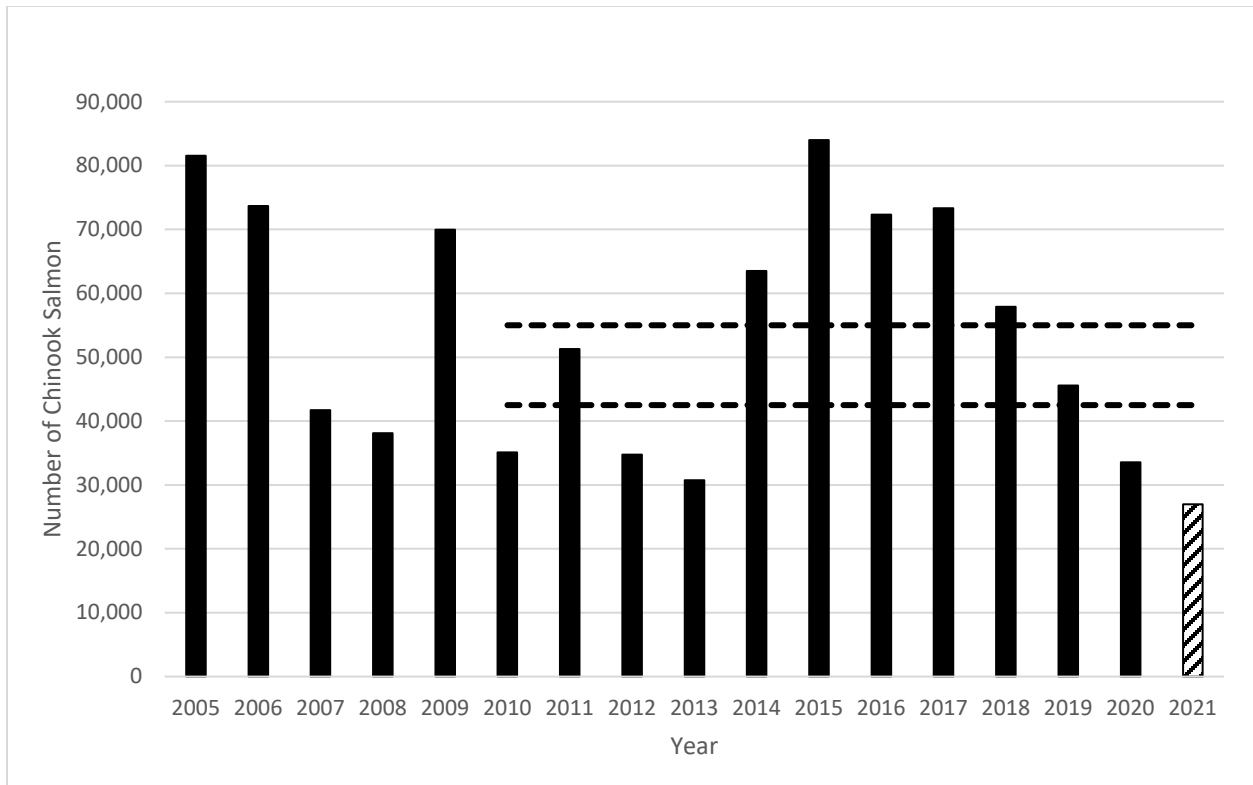


Figure 3. Cumulative passage estimates of Canadian-origin Chinook salmon at Eagle Sonar from 2005 through 2021. Passage for 2021 is preliminary, and ongoing as of August 9, 2021. The dashed lines are the Interim Management Escapement Goal range of 42,500-55,000, established in 2010.





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Report to Eastern Interior Regional Advisory Council Winter 2021

Report prepared by Serena Fitka and Catherine Moncrieff

Yukon River Drainage Fisheries Association Annual Board meeting:

April 27 & 28, 2021 in Fairbanks, Alaska

Due to COVID-19, our Annual meeting was held in person for the YRDFA Delegation and virtually for those who wished to attend. Both Board of Directors and Alternates were in attendance, which captured the majority of the Yukon River communities. 20 representatives were in attendance in-person and 6 attended virtually over the course of the 2 days of meetings.

The delegation gave community reports, elections took place, Bylaws were updated and 5 of the 6 resolutions were passed. The Annual meeting began with a River Blessing with Stanley Pete from Nunam Iqua, Esther McCarty from Ruby, Dorothy Shockley from Manley Hot Springs, and Paul Williams from Beaver. With the low returns of our salmon, YRDFA felt it was necessary to start incorporating our traditional values when coming together to talk about our salmon. As the YRDFA Delegation reconvened a moment of silence for the passing of Andrew Firmin from Ft. Yukon and reflection of his leadership on the Board for the past 10 years. We had the honor to have his parents in attendance along with his partner, Kara'lisa Trembley and presented the family with Andrew's award of service and dedication as a long standing YRDFA Board member.

The meeting continued with community reports from the Delegation, which reported high water throughout the summer and poor fishing conditions. After lunch, 3 guest speakers were online to give a presentation. Jill Klein with the Bering Sea Fishermen's Association gave an update on the Yukon River Comprehensive Salmon Plan. John Linderman, Co-Chair of the Yukon River Panel and Regional Supervisor for the AYK Region gave a PowerPoint presentation about the Yukon River Panel. Our final presentation was given by Emily Groves with Foraker on Fund Development.

RESOLUTIONS:

FAILED - Resolution: 2021-01: Introduced by Native Peoples' Action - Rochelle Adams-Protecting the Yukon River: Opposing Oil & Gas Development in the Yukon Flats

PASSED - Resolution: 2021-02: Support the Bering Sea Pollock Fishery Conservation of Yukon River Chinook and chum salmon

PASSED - Resolution: 2021-03: Escapement Goals for One Full Life Cycle

PASSED - Resolution: 2021-04: Transboundary Mining in the Yukon River Watershed
Joining the SE transboundary coalition

PASSED - Resolution 2021-05: Concern about Hatchery Production

PASSED - Resolution 2021-06: Concern about Oil & Gas Development in the Yukon
Flats

2021 Elections

| Fishing District | Term | Member | Community |
|------------------|---------|------------------------|------------|
| Coastal, Seat 1 | 3 years | Lester Wilde | Hooper Bay |
| Y-1, Seat 1 | 3 years | Stanley Pete | Nunam Iqua |
| Y-2, Seat 1 | 3 years | Bill Alstrom | St. Mary's |
| Y-2, Seat 2 | 2 years | Mike Peters | Marshall |
| Y-3, Seat 1 | 3 years | Alfred Demientieff, Jr | Holy Cross |
| Y-4, Seat 1 | 3 years | Fred Huntington, Sr. | Galena |
| Y-5, Seat 1 | 3 years | Charlie Wright | Rampart |
| Y-5, Seat 2 | 2 years | Stan Zuray | Tanana |
| Y-6, Seat 1 | 3 years | Tim McManus | Nenana |
| Koyukuk River | 2 years | Pollock Simon, Sr. | Allakaket |
| Flats, Seat 1 | 2 years | Jan Woodruff | Eagle |
| Alternates: | | | |
| Y-1 Seat 1 | 3 years | Paul Andrews | Emmonak |
| Y-2 Seat 1 | 3 years | VACANT | |
| Y-2 Seat 2 | 2 years | VACANT | |
| Y-6, Seat 1 | 3 years | VACANT | |
| Yukon Flats | 2 years | Rochelle Adams | Beaver |



YR DFA Board of Directors and Alternates at Annual Meeting, Fairbanks, April 28, 2021.

Yukon River Salmon Summer Pre-season Preparation Meeting:

The Yukon River Summer Pre-season meeting was held in Fairbanks on April 29, 2021 with the YR DFA Delegation in attendance and other participants joined in via Zoom. Limited in-person capacity was due to COVID-19. Prior to the Pre-season meeting, YR DFA hosted a series of Yukon River fishing district meetings. These meetings were developed to provide the fishers in their districts with the additional opportunity to provide discussion and formulate feedback to fishery managers during the Pre-season meeting. All meeting minutes were presented to the fishery managers for their review. Reports of the fishing district meeting were conducted during the Pre-season meeting.

2021 Fishery Disaster Request:

A group of Yukon River organizations have been meeting to discuss the 2021 fishery disaster request. The Yukon Delta Fisheries Development Association, Tanana Chiefs Conference, Alaska Village Council Presidents, and YR DFA will be submitting a joint letter similar to last year's request to the Governor. We will be asking for support from all entities; such as, the RACs, ACs, AFN, etc. to provide support during these hard times the Yukon River communities are facing. The group has also discussed the importance of reaching out to our State and US delegation to encourage the Governor to make a quick request to the Department of Commerce for the 2021 season. We understand the Department's requirement to provide adequate reporting when requesting a fishery disaster; however, the fact that all communities were unable to harvest any Chinook, summer or fall chum salmon for subsistence states clearly shows we are in a disastrous situation.

In-Season Salmon Management Teleconferences:

The In-Season Salmon Management Teleconferences began on Jun 1, 2021. In preparation for the teleconferences, posters were sent to all communities along the Yukon River including Canadian First Nations. A meeting was held with the fishery management team to discuss any concerns or issues associated with the upcoming season. The last two years the number of participants and length of the calls have increased. We reflected the approximate cost

association for each call if all participants stayed on for the duration of the call. The teleconference rate is \$0.09 per participant per minute.

| Date | Number of Participants | Length of call in mins. | Approximate Cost |
|-------------|-------------------------------|--------------------------------|-------------------------|
| 06/01/21 | 46 | 81 | \$335.34 |
| 06/08/21 | 71 | 130 | \$830.70 |
| 06/15/21 | 94 | 140 | \$1184.40 |
| 06/22/21 | 83 | 140 | \$1045.80 |
| 06/29/21 | 138 | 149 | \$1850.58 |
| 07/06/21 | 101 | 199 | \$1808.91 |
| 07/13/21 | 110 | 172 | \$1702.80 |
| 07/20/21 | 77 | 128 | \$887.04 |
| 07/27/21 | 71 | 120 | \$766.80 |
| 08/03/21 | 65 | 82 | \$479.70 |
| 08/10/21 | 67 | 102 | \$615.06 |
| 08/17/21 | Info not available | | |
| 08/24/21 | During time of | | |
| 08/31/21 | reporting | | |

Due to fishing closures throughout the Yukon River drainage we anticipated a high call volume. We appreciated all the questions, comments, and observations during the in-season teleconference. We heard the people's concerns about traditional loss and the struggles of food security that will likely occur over the course of the winter season. The other concerns we heard, which we will also make a priority, are bycatch in the Bering Sea, Area M, and climate change.

In-Season Subsistence Salmon Survey Program: Through the Inseason Subsistence Salmon Survey Program, YRDFA hires a local person in 10 communities along the Yukon River stretching from Alakanuk to Eagle to survey fishers during the Chinook salmon season in their community. The observations fishers share with YRDFA surveyors are summarized, by community to protect anonymity, and then shared with Yukon River Inseason Managers and the Yukon River community through the In-season Salmon Management Teleconferences. This important communication tool helps managers know what fishers are seeing and how they are doing in their communities. This year, we were able to hire 10 surveyors and hold a mixed in-person and virtual training event in April. Although it was a difficult season with little salmon

fishing, our surveyors did their best to survey and represent the fishers in their community. As we write this report, we are just wrapping up this season with the upper river communities. By your fall meeting time we will have a summary report and evaluation of the season. This project is funded by the FRMP through March of 2024.

Traditional Ecological Knowledge of anadromous fish in the Yukon Flats with an emphasis on Draanjik drainage: This project, funded by the FRMP, was extended until March of 2022 due to the pandemic. Instead of in-person community review meetings, we developed and sent a Community Review document to each participant and tribal council in the study for their feedback and followed up with phone calls. The TCC staff is currently working on the biological fieldwork this summer. They are conducting an aerial survey of the Kevinjik Creek in the Teedraanjik drainage to identify and locate a Coho salmon spawning area (Nèhdljij Nì'inlii) that has not yet been added to the Anadromous Waters Catalog. This location has been identified by traditional knowledge and with positive eDNA analysis. Additional fieldwork was planned for the spring and summer of 2021 to document rearing juvenile and spawning adult Chinook and chum salmon. If possible we will provide more updates at your fall meeting.

OTHER PROJECTS:

They Told Us There'd Come a Time, Conserving Fish, Preserving Tradition on the Yukon River, A catalog of Elders Warnings: This project, funded by the North Pacific Research Board, has YRDFA partnering with the Tanana Chiefs Conference young adult Emerging Leaders to research documented Local and Traditional Knowledge of salmon and search for advice or warnings from the Elders. The goal of the project in year one is to review Local and Traditional Knowledge archives for warnings from Elders about salmon shortages or threats. Early in the new year we had a virtual training workshop to learn how to access the archives. In June, the PI attended the Denakkanaanga gathering in Fairbanks to provide an update on the project. Additionally, the Emerging Leaders and the PI have met twice in Fairbanks at the UAF Rasmuson Library to spend time looking through the archives. We plan to continue working on the archives this year and next year we will do some analysis and begin interviewing contemporary Elders with questions that arise from our work in year one.

Integrating Local and Traditional Ecological Knowledge into Anadromous Waters Cataloging and Fish Inventories of select drainages of the Tanana and Yukon rivers 2021-2023: This funded, project by the Alaska Sustainable Salmon Fund (AKSSF), is a partnership between YRDFA and the Alaska Department of Fish and Game. Together, we are working with the communities of Tanana, Nenana, and Manley Hot Springs to identify important areas with anadromous fish and other fish for investigations to nominate areas for the anadromous waters catalog and the fish inventory. This summer we traveled to all three study communities and held LTK interviews and mapping activities with knowledgeable fishers and hunters. We were able to conduct a total of 20 interviews; five in Manley Hot Springs, five in Tanana, and ten in Nenana. These knowledgeable subsistence providers shared important information about fish locations. Next summer ADF&G staff will attempt to document fish presence, rearing and spawning in these locations through river boat and helicopter surveys and include them in the fish inventories and anadromous waters catalog.



YUKON RIVER DRAINAGE FISHERIES ASSOCIATION

In-season Subsistence Salmon Survey – 2021 Post Season Summary

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

This post season summary includes a chart showing participation in 2021, a summary of the Final Interviews in each community and a summary of the Post Season evaluation with the surveyors.

| YRDFA In-Season Subsistence Salmon Survey 2021 Season Summary | | | | | | | |
|--|-----------------------|-------------------------|--------------------------------------|------------------------|-----------------------------|------------------------------|-------------------------------|
| | Hired Surveyor | Trained Surveyor | # of participating households | # of interviews | # of Teleconferences | # of final interviews | Post Season evaluation |
| Alakanuk | yes | yes | 0 | 0 | 0 | 0 | 0 |
| Mountain | yes | yes | 10 | 43 | 7 | 6 | yes |
| Marshall | yes | no | 19 | 73 | 9 | 12 | yes |
| Russian | yes | yes | 29 | 63 | 13 | 13 | yes |
| Anvik | yes | yes | 18 | 28 | 4 | 5 | yes |
| Ruby | yes | yes | 6 | 10 | 3 | 10 | yes |
| Huslia | yes | yes | 4 | 15 | 4 | 0 | 0 |
| Tanana | yes | yes | 8 | 47 | 9 | 8 | yes |
| Fort Yukon | yes | yes | 11 | 45 | 3 | 10 | yes |
| Eagle | yes | yes | 5 | 21 | 7 | 3 | yes |

This was a difficult season, not only for fishing, but for surveying fishers. Surveyors reported increased difficulty trying to talk to fishers about their fishing success this year. Although we were able to hire and train a surveyor for each community, some found it very difficult to survey frustrated fishers who were not fishing. The YRDFA surveyors did their best to gather information from fishers in their communities this year but reported mixed success along the river due to frustrations from the mostly-closed fishery.

Final Interviews with fishers

To wrap up the season, the In-season Salmon Surveyors ask the fishers in their community a series of questions aimed at summarizing the season. Eight of 10 surveyors were able to conduct the Final Interview Questions.

Overall summary:

- In all communities reporting, none reported meeting their needs. Most communities reported that fishing in 2021 was worse than 2020 because there was some fishing allowed in 2020.
- In two communities, fishers thanked management for protecting the run, allowing 4” nets to be used for non-salmon.
- Challenges included some fishers not have the allowable gear - 4” nets - and thus could not participate.
- Concerns included: food security, no dog food for winter, general concern over fishery.
- These fishers get their information from: YR DFA Teleconferences, ADF&G Hotline, Facebook, radio, Tribal Councils, other people

Eagle – Three Final Interviews were completed and no one reported meeting their needs this year. In comparing to last year, some expressed frustration that this was the second consecutive year with zero salmon. And some reported voluntarily not harvesting salmon this year. In terms of opportunity provided, Eagle fishers thanked managers for leaving the 4” net opportunity open drainage-wide and for repeating that information with every announcement. Although they appreciated the opportunity and were able to provide some people food, they were not able to catch enough fish to feed their dogs. When asked what could have been improved, they responded more research particularly on: rebuilding salmon, the 40-mile drainage, mining, and pesticides. They did not think the question about notice was relevant since there were no openings. Their main source of fishing information is the ADFG hotline, Facebook, word of mouth, radio, sonar crew, news releases.

Fort Yukon – Ten Final Interviews were completed in Fort Yukon and no one reported meeting their needs this year. In comparing to last year, eight fishers reported that this year was “bad,” “worse than ever,” “no fish,” while some reported they had no 4” net and two fishers reported the same conditions as last year. In terms of opportunity provided, nine said that they did NOT have an opportunity to meet their subsistence needs. When asked what could have been improved, seven said “more openings,” “longer openings,” and “openings when the pulse is running;” “stop other fishing such as commercial fishing;” and “everything/new management.” Five reported that they did not have enough notice for openings and five said they did have enough notice but there was no fishing. Their main source of fishing information was from the radio, other people, and Facebook.

Tanana – Eight Final Interviews were completed in Tanana/Rapids area and no one reported meeting their needs. Their comments included: “none at all,” “real bad,” “fed some dogs but no dog food for winter.” Three fishing families did not fish this year and left fish camp. In comparing to last year, five reported that they got a few fish last year and none this year, two consider this year much worse, the worst year ever catching not even one king or chum. In terms of opportunity provided, some reported that under the circumstances that was impossible. Some were thankful they could feed their dogs and four supported the closures. Others reported that the run was a failure and there was no opportunity or “we got no fish.” When asked what could have been improved, two said, “Don’t cover up the problem/stop hiding from studies,” three said, “find out problem and do something,” and three said, “shut down commercial for good and hatcheries/act on hatchery issues,” and one said “everything.” When asked if they received enough notice, all eight reported “no openings.” Their main source of fishing information came from Surveyor (6), Radio (5), internet (2), ADFG news release (1).

Huslia - We did not receive Final Interviews from Huslia this year due to issues surrounding Covid-19. We may receive information at a later date.

Ruby - Ten Final Interviews were completed for Ruby and no one reported meeting their need this year. In comparing to last year, two reported they caught nothing this year while last year they were able to fish and others commented, “poorly,” “nothing at all,” “zero fish this year,” “0% of needs met,” “zero fish in the freezer,” and “very disappointing!” In terms of opportunity provided, all ten reported that there were no openings that provide any King or chum salmon and no opportunity. When asked what could have been improved, four said, “open up fishing for kings and silver [edible chum salmon], let us fish,” two said, “close commercial fishing/fisheries” and others said, “an opening during 1st pulse with limits on catch,” “at least a 6-hr opener,” “opportunity to fish at the end,” and “better management.” When asked if they received enough notice of openings, four replied “yes, if there were openings” and six merely said, “no openings.” Their main source of fishing information came from Facebook/social media (5), YRDFA Teleconferences (4), radio announcements (3), Tribal Council (2), Fax (2) and TCC fishing and hunting taskforce.

Anvik - Five final interviews were completed for Anvik and no one reporting meeting their needs this year. In comparing to last year, four reported “nothing” or “nothing to compare to no fishing” and “did not fish.” In terms of opportunity provided, comments included “no,” “nothing,” and “poor management.” When asked what could have been improved, two said, “more fishing” and others said, “we need our fishing rights back.” When asked about whether they received enough notice, four said no and there were no openings. Their main source of information was the In-season Teleconferences (3), the phone and Facebook.

Russian Mission - Thirteen Final Interviews were completed in Russian Mission and 100% reporting they did not meet their needs. In comparing to last year, comments included “bad,” “only whitefish, no salmon,” “worst,” “sent to help daughters on Kuskokwim,” and “finally have 4” net for whitefish.” In terms of opportunity provided, they replied that there were no salmon openings. When asked what could have been improved, eleven said “restrictions on the high season fishery” and two said “at least a couple openings just to taste salmon.” When asked about whether they received enough notice, 4 said no and there were no openings. Their main sources of fishing information came from phone recordings (11), radio (5), word around town/on the street, and pay it by ear.

Marshall - Twelve Final Interview were completed in Marshall and 100% reported they did not meet their needs. In comparing to last year, all twelve commented “bad,” Other comments included: “very little bit of fish or whitefish and sheefish only,” “bad year for subsistence users on the Yukon!” “worse fishing year ever,” “very bad,” “last year was better,” and “nothing in the freezer.” In terms of opportunity provided, nine replied “no,” “Nope not every Elders got salmon,” and “start or try to shut down oceans fisheries.” When asked what could have been improved they replied, “Change of fisheries management,” “shut down all fishing in oceans,” “ocean and river management needs to work together,” and “dipnet to catch fish.” When asked whether they received enough notice, six said yes, and eight said no openings yet. Their main source of information was 459-7387; phone recordings (8); Surveyor (5); Facebook (1); and TC (1).

Mountain Village - Six Final Interviews were completed in Mountain Village and 100% reported they did not meet their needs. In comparing to last year, three said it was “really poor,” two said, “disaster” and other comments included “poorest season he has seen,” “worse than last year,” and “didn’t get to fish yet.” In terms of opportunity provided, five said “no” or “nope not even close,” some said “only with 4” net, but not too many have them,” and “nope not even close.” When asked what could have been improved three commented, “let us fish some kings and chums” and others said “open more subsistence.” When asked whether they received enough notice, three said yes, and two said no. Their main source of information was Facebook (3), teleconferences (2), Fish and Game/ phone recording (2), people (2).

Alakanuk - We did not receive any Final Interviews from Alakanuk. We may receive information at a later date.

Post Season Evaluation – Surveyors.

Eight of ten surveyors completed the end of season evaluation. They all stated that they felt well trained and prepared for their position and enjoyed the work. This year they were all extremely challenged in their ability to do their jobs by the lack of fishing opportunity this year. Some surveyors found that more fishers declined participation due to the long closures. The surveyors feel that this program does inform and represent the fishers and gives them an opportunity to voice their opinions. They value and enjoy their opportunity to participate in and report on the weekly teleconferences.



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Federal Subsistence Board

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



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OSM 21046.VM

AUG 30 2021

Sue Entsminger, Chair
Eastern Interior Subsistence Regional Advisory Council
c/o Office of Subsistence Management
1011 E. Tudor Road, M/S 121
Anchorage, AK 99503-6199

Dear Chairwoman Entsminger:

The Federal Subsistence Board (Board) met on January 26-29, 2021 via teleconference to consider proposed changes to Federal subsistence management regulations for the harvest of fish and shellfish on Federal Public lands and waters in Alaska, fisheries closure reviews, and a nonrural determination proposal. This letter is to provide a report on the actions taken by the Board on proposals and closure reviews affecting Federally qualified subsistence users.

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

Out of 14 fisheries proposals submitted, one proposal (FP21-04) was withdrawn by the proponent. The Board agreed with the recommendations of the Regional Advisory Councils, in whole or with modifications, on 9 proposals. The Board deferred its decision on Proposal FP21-10 until the next fisheries cycle to allow conflicting user groups to meet and attempt to reach a compromise. The Board reviewed 12 fisheries closure reviews and accepted the recommendations of the Regional Advisory Councils on 10 of 12 fisheries closure reviews. The Board voted to maintain status quo on 2 of them (FCR21-01 and FCR21-22) and to eliminate one of the closures (FCR21-06). The Board deferred 7 of 12 fisheries closure reviews (FCR21-08, -09, -11, -13, -16, -18, and -19) until next fisheries cycle to allow the Council to meet with communities and discuss the closures. The Board deliberated one rural determination proposal RP19-01 and agreed with the Southcentral Alaska Subsistence Regional Advisory Council recommendation with modification.

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

The Board uses a consensus agenda on those proposals and closure reviews where there is agreement among the affected Regional Advisory Council(s), a majority of the Interagency Staff Committee, and the Alaska Department of Fish and Game concerning a proposed regulatory action. These fisheries proposals and closure reviews were deemed non-controversial and did not require a separate discussion. The consensus agenda contained one fisheries closure review **FCR21-06** affecting the Eastern Interior Alaska Region, which the Board deferred to the Eastern Interior Alaska Subsistence Regional Advisory Council (Council) recommendation as follows: The Board adopted eliminating the closure to the harvest of all fish in the Toklat River drainage by Federally qualified subsistence users from August 15 through May 15.

The remaining fisheries proposals and closure reviews affecting the Eastern Interior Alaska Region appeared on the non-consensus agenda. However, for two of the fisheries proposals, the Board took action consistent with the Council's recommendations. The Board deferred to the Council's recommendation on the fisheries proposal **FP21-12** and rejected prohibiting the use of monofilament and multifilament mesh dip nets before August 15 in the Upper Copper River District. The Board also deferred to the Council's recommendation on the fisheries proposal **FP21-14** to prohibit use of onboard devices that indicate bathymetry and/or fish locations (fish finders) while fishing from boats or other watercrafts in the upper Copper River and adopted this proposal. The Board clarified that these devices may not be used; however, they do not have to be removed or uninstalled from a boat or a watercraft.

The Board's actions on the remaining two fisheries closure reviews were inconsistent with the Council's recommendations and are therefore outlined in the attached report.

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

If you have any questions regarding the summary of the Board's actions, please contact Vince Mathews, Acting Council Coordinator, at 1-907-455-1823 or vince_mathews@fws.gov.

Sincerely,



Anthony Christianson,
Chair

Enclosure

cc: Federal Subsistence Board
Eastern Interior Alaska Subsistence Regional Advisory Council members
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director and Acting Fisheries Division Lead
Office of Subsistence Management
Robbin La Vine, Policy Coordinator, Office of Subsistence Management
George Pappas, State Subsistence Liaison, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor
Office of Subsistence Management
Vince Mathews, Acting Subsistence Council Coordinator, Office of Subsistence Management
Interagency Staff Committee
Administrative Record

FEDERAL SUBSISTENCE BOARD 805(c) REPORT
(corrected)

January 26-29, 2021
Anchorage, Alaska

Section 805(c) of the Alaska National Interest Lands Conservation Act provides that the “Secretary ... shall consider the report and recommendations of the regional advisory councils concerning the taking of fish and wildlife on the public lands within their respective regions for subsistence uses.” The Secretary has delegated authority to issue regulations for the take of fish and wildlife to the Federal Subsistence Board (Board). Pursuant to this language in Section 805(c), the Board defers to the Council’s recommendations. However, Section 805(c) also provides that the Board “may choose not to follow any recommendations which [it] determines is not supported by substantial evidence, violates recognized principles of fish and wildlife conservation, or would be detrimental to the satisfaction of subsistence needs.” The purpose of this report is to detail how the Board’s action differed from the Council’s recommendations based on these criteria.

SOUTHCENTRAL AREA FISHERIES PROPOSALS

Fisheries Proposal FP21-10 – Establish a dip net fishery for Sockeye Salmon in the lower Copper River

DESCRIPTION: FP21-10 requests the Board implement a salmon subsistence fishery in the lower Copper River adjacent to the Copper River Highway with a harvest limit of 15 salmon other than Pink Salmon for the first two members of a household and 10 salmon for additional household members, with not more than 5 Chinook Salmon per household, using dip net, rod and reel, spear, or gaff only.

COUNCIL RECOMMENDATIONS:

Southcentral Alaska Subsistence Regional Advisory Council – **Support** with OSM modification

Eastern Interior Alaska Subsistence Regional Advisory Council – **Oppose**

BOARD ACTION: Defer to allow conflicting user groups to meet and attempt to reach a compromise

JUSTIFICATION: The Board voted to defer this proposal because it has resulted in a disagreement between Regional Advisory Councils, some tribal communities, and other Federally qualified subsistence users. The deferral will give the Southcentral and the Eastern Interior Regional Advisory Councils time to meet and work toward a compromise that can be supported by those affected. These regions and communities are already faced with a greatly diminished

fisheries resource from which to meet their subsistence needs, and it is important to find, or at least explore, a compromise and identify if there are cooperative solutions between the Regional Advisory Councils. Cordova residents already have a meaningful priority for subsistence fishing in the Copper River however not all residents have the means and resources to access locations where that opportunity currently exists. This proposal would provide additional access to Copper River salmon and the harvest is anticipated to be a small portion of the overall Copper River harvest. Regardless, the Board hears the concerns of residents from the upper Copper River watershed that salmon harvest is declining and requires increased effort. The Board does not want to pit subsistence users against each other over a very small proportion of the fishery. It has faith in the Regional Advisory Council process and believes that the Councils may be able to create a consensus proposal that the Board could consider in the future.

Fisheries Proposal FP21-11 – Recording and reporting daily salmon harvest in the upper Copper River

DESCRIPTION: FP21-11 requests that the Board require that daily harvest of salmon be recorded and reported to the agency issuing the permit within three days of harvest in the upper Copper River District.

COUNCIL RECOMMENDATIONS:

Southcentral Alaska Subsistence Regional Advisory Council – **Support**

Eastern Interior Alaska Subsistence Regional Advisory Council – **Support**

BOARD ACTION: **Reject**

JUSTIFICATION: The Board's opposition is consistent with the recommendations of the Wrangell St. Elias Subsistence Resource Commission and the Office of Subsistence Management. While the Board agrees in concept with the Southcentral Alaska and Eastern Interior Alaska Subsistence Regional Advisory Councils about the need for in-season harvest information, opposing the proposal is justified per Section 26 .805(c)(1). There is no evidence that a mandatory three-day harvest reporting requirement is the best way to collect such information and there is no substantial evidence that requiring this burden of the subsistence user would be worthwhile in terms of the information gathered. The Board recognized that rural users are frequently not connected online. The proposed mandatory requirement tied to every Federal subsistence fishing permit is burdensome and will likely result in a high degree of non-compliance. The proposed requirement would also only address harvests by Federally-qualified subsistence users who make up a relatively small percentage of the Copper River fishers.

Fisheries Proposal FP21-13 – Prohibit dip net fishing from watercrafts in the upper Copper River

DESCRIPTION: FP21-13 requests that the Board prohibit fishing with dip nets from boats or crafts floating in the river in the Upper Copper River District.

COUNCIL RECOMMENDATIONS:

Southcentral Alaska Subsistence Regional Advisory Council – **Oppose**

Eastern Interior Alaska Subsistence Regional Advisory Council – **Support**

BOARD ACTION: **Reject**

JUSTIFICATION: The Board considered that adopting this proposal would take subsistence harvest opportunity away from the Federally qualified subsistence users who rely on dipnetting from boat or watercrafts and do not have access to fishwheels. Most of the salmon harvest by Federally qualified subsistence users in the Glennallen Subdistrict is by fishwheel and public land available to install a fishwheel is pretty limited, so dipnetting from boats is a necessity for some subsistence users and it is particularly efficient for harvest in the Chitina Subdistrict. The Board opined that imposing a restriction on Federally qualified subsistence users who do not have fishwheels will not contribute to conservation of salmon stocks or provide a solution to the concern that the increased popularity of dip netting from boats could be contributing to the depletion of Copper River salmon stocks. Compared to State fisheries, Federal subsistence harvest of Copper River salmon is relatively low. Although the Board agreed with the State assertion that there is no conservation need right now to restrict dipnetting from boats, the Board also encouraged further research of the current health of Copper River salmon stocks.

YUKON NORTHERN AREA FISHERIES CLOSURE REVIEWS

Fisheries Closure Review FCR21-07 – Yukon River Drainage, Nome Creek— Arctic Grayling

DESCRIPTION: Closure to the harvest of Arctic Grayling in Nome Creek of the Yukon River drainage by Federally qualified subsistence users.

COUNCIL RECOMMENDATIONS:

Eastern Interior Alaska Subsistence Regional Advisory Council (EIRAC) – **Modify the closure** by closing the Nome Creek drainage to the harvest of Grayling by all uses and users.

Yukon-Kuskokwim Delta Subsistence Regional Advisory Council – **Defer** to EIRAC

Western Interior Alaska Subsistence Regional Advisory Council – **Defer** to EIRAC

Seward Peninsula Subsistence Regional Advisory Council – **Defer** to EIRAC

North Slope Subsistence Regional Advisory Council – **Defer** to EIRAC

BOARD ACTION: Support maintaining closure (status quo)

JUSTIFICATION: During the January 26-29, 2021 Federal Subsistence Board meeting, the Solicitor’s office expressed concern that any actions taken by the Board beyond simply eliminating or maintaining the closure would not allow appropriate notice and opportunity for public comment. Further, the Solicitor’s Office recommended that changes to the harvest limits and allowable gear types recommended by the EIRAC be addressed in the short term by a special action request and in the long term by a proposal submitted during the next regulatory cycle. Based on this advice from the Solicitor’s office, the Board voted to maintain the closure in the Nome Creek drainage with the expectation that a special action request could be submitted by the EIRAC. The current sport catch and release fishery does not represent a conservation concern and such concern is not supported by substantial evidence.

The EIRAC can submit a temporary special action requesting that the Board rescind the closure to the harvest of all fish in the Nome drainage by Federally qualified subsistence users, and modify regulations as stipulated above to conserve Arctic grayling. This would provide an opportunity for subsistence harvest and a subsistence priority not currently in regulation.

Fisheries Closure Review FCR21-04 – Jim River: All Fish

DESCRIPTION: Closure to the harvest of all fish in the Jim River drainage by Federally qualified subsistence users.

COUNCIL RECOMMENDATIONS:

Western Interior Alaska Subsistence Regional Advisory Council (WIRAC) – **Support** eliminating the Jim River subsistence closure and modifying regulations to allow rod and reel only, and an Arctic Grayling harvest and possession limit of 10 per day.

Seward Peninsula Subsistence Regional Advisory Council – In concurrence with the WIRAC, **support** eliminating the Jim River subsistence closure and modifying regulations to allow rod and reel only, and an Arctic Grayling harvest and possession limit of 10 per day.

Eastern Interior Alaska Subsistence Regional Advisory Council – **Defer** to WIRAC

North Slope Subsistence Regional Advisory Council – **Defer** to WIRAC

Yukon Kuskokwim Delta Subsistence Regional Advisory Council – **Defer** to WIRAC

BOARD ACTION: Support maintaining closure (status quo)

JUSTIFICATION: During the January 26-29, 2021 Federal Subsistence Board meeting, the Solicitor’s office expressed concern that any actions taken by the Board beyond simply eliminating or maintaining the closure would not allow appropriate notice and opportunity for public comment. Further, the Solicitor’s Office recommended that changes to the harvest limits and allowable gear types that were recommended by this Council be addressed in the short term by a special action request and in the long term by a proposal that would be submitted during the next regulatory cycle. Based on this advice from the Solicitor’s office, the Board voted to maintain the closure in the Jim River drainage with the expectation that a special action request could be submitted by this Council.

The WIRAC can submit a temporary special action requesting that the Board rescind the closure to the harvest of all fish in the Jim Creek drainage by Federally qualified subsistence users and modify regulations to allow rod and reel only, and an Arctic Grayling harvest and possession limit of 10 per day.



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Anchorage, Alaska 99503 - 6199



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AUGUST 04 2021

OSM 21030.KW

Sue Entsminger, Chair
Eastern Interior Alaska Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1101 East Tudor Road, MS 121
Anchorage, Alaska 99503-6119

Dear Chairwoman Entsminger:

This letter responds to the Eastern Interior Alaska Subsistence Regional Advisory Council's (Council) fiscal year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

1. Food security and subsistence needs satisfaction

The Council brings its concern to the attention of the Board regarding rapidly declining important subsistence food resources in the Eastern Interior Region, which results in most of the subsistence needs not being met (except caribou). The Council members report that in FY 2020, all across the Region, the fisheries were very poor and salmon are in significant decline. Salmon are one of the most critical subsistence resources that communities rely on for food security. According to ADF&G data, "The composition of the wild food harvest in rural Alaska is 31.8% salmon, 21.4% other fish, 22.3% land mammals, 14.2% marine mammals, 2.9% birds, 3.2% shellfish, and 4.2% wild plants."¹

¹ *Food Security and Wild Resource Harvests in Alaska, James A. Fall and Marylynn L. Kostick, Alaska Department of Fish and Game Division of Subsistence, July 2018.*

In the summer of 2020, some communities had almost no fishing opportunities and the average season's catch was dismal (sometimes as few as three fish) with only a few Chinook Salmon and fall Chum Salmon. Sometimes, the only fish available to Federally qualified subsistence users were whitefish, pike, suckers, and sticklebacks. The returning Chinook Salmon were of the poorest quality Yukon fishers had seen in the last 30 years. With few salmon coming, there is a lot of hardship and lack of critical food for the Federally qualified subsistence users in the communities along the Yukon River and in other parts of the Eastern Interior Region.

Besides being a critical food source for Federally qualified subsistence users, Chum Salmon are also a very important food source for sled dogs. The poor returns, especially of fall Chum Salmon, resulted in tremendous costs to mushers that maintain sled dog teams. The lack of fish last summer left mushers unable to stock up enough food for their dog teams for the winter, and many mushers had to cull their teams, sometimes as much as fifty percent. Due to the pandemic travel restrictions and quarantines, Federally qualified subsistence users were not even able to travel to other fishing areas in the State to compensate for the lack of fish in their region.

According to the U.S. Congress findings outlined in the Title VIII Sec. 801 of ANILCA, "the continuation of the opportunity for subsistence uses by rural residents of Alaska, including both Natives and non-Natives, on the public lands ... is essential to Native physical, economic, traditional, and cultural existence and to non-Native physical, economic, traditional, and social existence." ANILCA also states that "no practical alternative means are available to replace the food supplies and other items gathered from fish and wildlife ..." Based on its observations, the Council feels that over the coming decade climate change impacts and other environmental stressors will have significant yet unpredictable impacts on food security for the Federally qualified subsistence users.

The Council raises the alarm that the depletion of wild salmon stocks creates a very serious situation making traditional food unavailable to the users. The Council requests that the Board directs Federal managers to step up and develop measures to mitigate the situation before it is too late. The Federal managers need to make their decisions based on Federally qualified subsistence users' food needs that are identified through comprehensive surveys. Additionally, the Council believes that Federal managers need to show flexibility, and when salmon stocks are not available, provide easier access to the other subsistence fish stocks. Based on last summer's situation, it is very important to develop adaptation strategies and policy responses in cooperation with State managers to accommodate subsistence users' critical needs and provide food security.

Response:

The Board understands the Council's concerns and recognizes that climate change poses a fundamental challenge to food security and the continuation of subsistence uses, because the ranges, abundance, and seasonality of species traditionally harvested are shifting. Cultural traditions and community wellbeing are negatively affected. See the attached enclosure for additional information about recent Chinook and Chum salmon runs in your region.

Federal managers must manage for both conservation and continuation of subsistence uses, and for a subsistence priority over other uses when resources are limited. The Council is correct that comprehensive surveys would help to illustrate subsistence uses and changes in harvest over time. Through interviews with local experts, they may also identify likely reasons for changes in communities' abilities to meet subsistence harvest goals, and the adaptive strategies that people might be able to take, if supported by regulation.

The Board is aware that in some cases there is a lack of up-to-date comprehensive surveys, often due to insufficient funding. These surveys are vital if management is to be responsive to dynamic climate conditions and effects on fish and wildlife. The Board understands the need for more frequent comprehensive surveys. These are usually conducted by the Alaska Department of Fish and Game Division of Subsistence but can be supported by funding from the Fisheries Resource Monitoring Program and other sources.

The Federal Subsistence Management Program can support adaptation to changing conditions by using the various tools available that enable the program to be responsive to subsistence users' needs as conditions change. For example, the Special Action process enables the Board to respond quickly to out-of-cycle needs for regulatory actions. The Board has also used its ability to delegate authority to fisheries in-season managers to enable them to respond quickly to unforeseen circumstances such as unpredictable seasons and fluctuations in resource availability.

More persistent changes to the availability and seasonality of resources due to climate change can also be accommodated through the regulatory process. When species become less abundant due to climate change, closures to non-Federally qualified users, or ANILCA 804 prioritizations among Federally qualified subsistence users, may become necessary. Other species may become more abundant with shifts in environmental conditions, or as new species expand into the region. In this case, the Federal Subsistence Management Program can assist communities in delineating seasons, harvest limits, and methods and means for these newly available resources.

2. Impacts of hatchery production on Alaska's wild fisheries

In the last three annual reports, the Council highlighted to the Board the issue of hatchery production impacts on Alaska's wild fisheries.

The Council understands that, as the Board pointed out in its FY 2019 annual report reply, "the hatchery system in Alaska and the vast majority of Alaska's marine waters are outside the purview of the Board"; however, the Council acts in accordance with the ANILCA Title VIII mandate that these annual reports to the Board contain "an evaluation of current and anticipated subsistence needs for fish" and "recommended strategy for the management of fish." The Council believes that the increase in hatchery production is having tremendous biological impact on all of Alaska's wild fisheries.

It is time for Yukon River subsistence users to be better informed about the potential impacts of hatchery production on their fisheries in the State of Alaska and along the Pacific Rim. ANILCA mandates that the Council can have access to "all available technical and scientific support data"; therefore, the Council requests to make the existing data on the current biological impacts of hatchery production available to it. Specifically, the Council requests a synopsis of historic data on hatchery production from 1980 to the present. Having access to this information will allow the Council that represents the Federally qualified subsistence users of the Eastern Interior Region to have a better understanding of anthropogenic impacts on fish resources crucial to the users. Understanding these impacts is key to restoring some of these fisheries.

The fish populations are not familiar with, and don't recognize administrative borders of, various Federal and State agencies. For this reason, the Council suggests that the Board consider working collaboratively across traditional jurisdictional boundaries with other agencies to develop policies and regulations that support "the continued viability of such populations" and insure long term viable fisheries for Federally qualified subsistence users throughout the State of Alaska.

Response:

Much of the current hatchery programs we know today in Alaska were initiated in the 1970s to rehabilitate depleted salmon fisheries. During the development of these programs, precautionary plans, permits and policies were enacted to help proactively protect wild salmon stocks. The management of these hatchery stocks begins with decisions made by the State to allow for hatchery production through a permitting process. The Alaska Board of Fisheries then reviews these regulatory changes to allow for hatcheries. Operation of the hatcheries is governed by the

aquaculture associations, and the Marine Stewardship Council certifies fisheries as sustainable with public participation from local stakeholders.

Alaska has a total of two State sport fish operated hatcheries: one research hatchery managed by the National Marine Fisheries Service, and one production hatchery managed by the Metlakatla Indian Community and eight private nonprofit hatchery associations that operate a total of 26 hatcheries throughout Southeast, Southcentral, and Kodiak, Alaska. Currently, an estimated 4.9 billion hatchery juvenile salmon are released annually between the United States, Canada, Japan and Russia. Alaska currently releases between 1.5 and 1.7 billion juvenile salmon annually. The majority of the released juvenile salmon are Chum and Pink salmon. From the inception of the Alaska hatchery programs, salmon production has increased from 400 million juveniles released annually in 1980 to 1.4 to 1.8 billion juvenile salmon released annually between 1990-present. The primary release of hatchery propagated juvenile salmon is intended for the Gulf of Alaska and the overall mixing of hatchery salmon between the Gulf of Alaska and the Bering Sea is currently unknown, which leaves the contributions of hatchery propagated fish into the Yukon River unknown. However, the Canadian Whitehorse Hatchery cultures Chinook Salmon and releases an estimated 150,000 smolt annually into the Yukon River. This small contribution is to offset the impacts of the dam on annual salmon migration.

The Board encourages the Councils to recommend Priority Information Needs directed towards the FRMP to prompt prospective investigators to research the possible genetic contributions of hatchery fish in the Yukon. This research would offer insight into the genetic mixing of wild stocks with hatchery stocks, and potentially offer clues as to the potential impacts of hatchery fish on wild stocks. The Board will continue to instruct OSM to extend invitations to subject matter experts from management agencies and universities on the topic of impacts from hatchery production on wild Alaska fisheries to present at upcoming Council meetings.

3. Climate change and its impacts on moose mating seasons

The Council observed that over the last few years, moose were not going into rut until the end of September, which has a significant impact on the current hunting season. The Council also wants to highlight to the Board its observation of smaller calf moose in the early spring, which is potentially a result of climate change.

In accordance with ANILCA mandates, the Council requests “all available technical and scientific support data” on climate change impacts on moose, for example later rutting dates and potential effects on legal hunting seasons. Having access to this information will allow the Council to develop informed proposed regulatory changes and work with State and Federal

mangers on adjusting hunting seasons that better correspond to the moose rutting season. Timely adjustment of hunting seasons on the Federal public lands will accommodate remote Federally qualified subsistence users, so they can harvest moose legally when the weather is sufficiently cool for hanging meat to dry. Many remote users do not have freezers, and rely on harvesting when weather conditions are cooler and drier.

Response:

The Board shares the Council's concern over the impact of climate change on the fish, wildlife, and habitat essential to continuation of the subsistence way of life. As the Council noted, over the past ten years weather and environmental conditions have become highly unpredictable and deviated from historical conditions and are affecting animals.

The role of the Office of Subsistence Management (OSM) as a regulatory agency includes synthesis of climate change research only as it applies to analyses of specific regulatory proposals. OSM staff collects all available technical and scientific data to analyze regulatory proposals. That said, OSM does have recent research findings on regional moose population dynamics and behavior in the Yukon Flats area. Point estimates demonstrate that the moose population has increased over the years in Yukon Flats. Although it has not yet been determined, it is possible that the population increase is related to a series of mild winters over the past decade. All metrics also indicate healthy moose body sizes for the Yukon Flats; i.e., data does not suggest that there has been a decrease in calf size. Research on moose suggests that daylength is the strongest driver for rut timing. However, there may be a latent association with temperature. Lastly, research shows that later ice freeze-ups and earlier break-ups make moose hunting more difficult for rural Alaskans.

It is the Board's understanding that the Council's observation of smaller moose calves in the early spring came from the Tanana/Rampart area. More research, observations, and testimonies are needed for other areas from the Eastern Interior region to better understand associations between moose size, behavior and environmental change and to compare these general trends to how moose in the Tanana/Rampart might be affected.

The Board appreciates the Council's comments and testimonies of change in moose and other animal behaviors. The Council members are an important source of traditional ecological knowledge and local observations of climate change. Therefore, the Council should continue to document its own observations of changes through annual reports and testimony at Council and Board meetings.

4. Hunter ethics education and outreach and dialog with rural communities

The Council again would like to emphasize to the Board their wishes to continue work on developing of the Board's approved hunter ethics and education initiative. To achieve better understanding between rural communities and the Federal Subsistence Management Program, it is imperative to increase cultural awareness and foster respect for people who live in rural Alaska. The Council also would like to have a better mechanism to engage in a direct dialog with rural communities like Arctic Village. A lot of the times when a meeting is held in a hub community, rural users do not have an opportunity to attend it.

In October 2019, the Council requested the Board's approval to create a subcommittee to work on Arctic Village Sheep Management Area issues and find mutually beneficial solutions. The Board deferred to act on the Council's request until the Council, with the help of their Coordinator, develops a framework for establishing this subcommittee. Prior to the fall 2020 Council meeting, no work had been done on the development of this framework due to the Council Coordinator being on extended sick leave and OSM staff shortages, and the last meeting was held via teleconference due to the pandemic travel restrictions.

However, despite these delays, the Council wants to continue pursuing the creation of a subcommittee and other means of having an open, engaged dialog with rural communities. Other means might be to have one of the Board agencies, such as the U.S. Fish and Wildlife Service, sponsor a Council member trip to a community, or receive approval from OSM's Assistant Regional Director to hold a future meeting in a rural community. Getting users from rural communities like Arctic Village involved with the Council will provide them with better opportunities to become proactive in the management of the wildlife; plus, it can become an example for other communities. The Council requests that OSM provide "adequate qualified staff," as mandated in ANILCA, to accomplish these goals.

Response:

The Board remains supportive of the Council's wishes to continue work on the development of the Board's approved hunter ethics and education initiative. The primary responsibility of coordinating this work is with your Subsistence Council Coordinator. OSM continues to experience staff shortages, and currently the position of the Subsistence Council Coordinator for your Council remains vacant. OSM intends to advertise and hire this position by the end of 2021.

During the fall of 2020 the Council received a brief oral report from OSM on small progress in the initiative, when the preliminary contacts were made with the representatives from Eielson Air

Force Base and Fort Wainwright to discuss collaboration on the pilot project concept titled “Hunt Like an Alaskan” that was aimed to work with military groups on creating a program that would emphasize the importance of mutual respect between different user groups through building and improving relationships between military, local communities, and the land. There was no further progress on this pilot project concept primarily because of the pandemic and OSM staff shortages.

Additionally, during the fall 2020 meeting, the Council heard a report from the Yukon Flats Refuge Manager, Jimmy Fox, on the progress of the other pilot project titled “A Community Based Hunter Liaison” that was conducted in cooperation with the Council of Athabascan Tribal Governments and was in its second year. Through this partnership the hunter liaisons were stationed in both Fort Yukon and Circle. This pilot project continues being successful with many hunters willing to talk to liaisons about meat sharing and cultural values of local residents, as well as property and boundary lines concerns. Amanda Pope, Community Hunter Liaison in Circle, provided a report on her work as well. Suggestions were made to expand this collaboration to include the National Park Service and to station a hunter liaison in Eagle, as well as to have another liaison stationed at the beginning of the Taylor Highway. The Council also suggested and unanimously voted to organize a hunter ethics brainstorming teleconference meeting to develop a plan for the future with the intent to hold this meeting in February 2021; however, due to the late Council appointments and other priorities, the meeting did not take place.

The Board recognizes that the Council must interact with the public as part of their official duties, and that the Council desires to engage in a direct dialog with rural communities. Currently, the two avenues of dialog available to the Council are through 1) holding one of its public meetings in a rural community and having discussions with rural users on record, and 2) communicating the Council’s comments and positions on subsistence issues to the Tribal and/or rural community leadership through correspondence. If the Council desires to hold a future public meeting in a rural non-hub community, the Board encourages the Council to submit, with the help of their Subsistence Council Coordinator (when this position is filled), a request to the OSM Assistant Regional Director for consideration. At the same time, the request for creating a formal subcommittee to work on the resolution of the Arctic Village Sheep Management Area (AVSMA) issues can be re-submitted. The Council is also free to work through their Subsistence Council Coordinator with the U.S. Fish and Wildlife Service and request the Service sponsor a Council member trip to Arctic Village for a specified purpose of finding solutions to the AVSMA issues. The Board recommends that the Council reach out to the USFWS Regional Subsistence Coordinator, Jill Klein, and the Arctic National Wildlife Refuge Manager, Steve Berendzen.

5. Copper River Sockeye and Chinook Salmon

The 2021 pre-season estimates indicate that Sockeye and Chinook salmon will be below the most recent 10-year average by 37.4% and 22.4%, respectively. For Chinook Salmon, this recent 10-year average already represents a steep decline from previous decades. The 10-year average for the 1998 - 2007 period was 86,684, compared with only 47,386 for the 2010 - 2019 period. While Sockeye Salmon runs were generally strong during the early 2010s, they have been markedly smaller since 2017, and alarmingly low during 2018 and 2020. The estimated total run size for 2018 is 817,121, while preliminary estimates for 2020 put the number at 602,000, making these among the lowest returns since at least the early 1980s. These declines indicate an urgent need for more research into better understanding Copper River salmon fisheries, in order to inform management of these crucial subsistence resources. The Council requests that the Office of Subsistence Management prioritizes funding research of Copper River salmon fisheries through its Fisheries Resource Monitoring Program.

Response:

The Board recognizes the need for continued monitoring to inform in-season fisheries management decisions on the Copper River. Without these monitoring projects, fisheries managers are left with inadequate data to make informed in-season decisions, and often this results in a conservative management approach. The Fisheries Resource Monitoring Program process begins with Councils providing fisheries priority information needs for their respective regions. These research needs are then advertised on www.grants.gov as a Notice of Funding Opportunity, and prospective investigators submit investigative proposals to address these priority information needs. The 2022 priority information needs for the Southcentral Region contained this information need:

Reliable estimates of Chinook, Coho, and Sockeye salmon escapements (for example projects utilizing weir, sonar, and/or mark-recapture methods) into the Copper River drainage and delta systems.

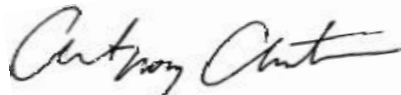
All proposals submitted to the Fisheries Research Monitoring Program are evaluated by a Technical Review Committee based on five criteria, which include strategic priority, technical and scientific merit, investigator ability and resources, partnership and capacity building, and cost benefit. The 2022 Draft Fishery Resource Monitoring Plan will be reviewed this fall by the Regional Councils. The Board recognizes that the users of several communities in the Eastern Interior Alaska subsistence region have a C&T use determination for salmon in the Chitina Subdistrict, Glennallen Subdistrict of the Upper Copper River, and Batzulnetas Area; therefore,

if your Council would like to express support for research proposals that address your concerns for the Copper River, which is in the Southcentral Region, you could ask to have the Southcentral Region Draft Fisheries Monitoring Plan presented at your fall meeting.

Currently the Alaska Department of Fish and Game (ADF&G) administers a sonar project at Miles Lake to count lower river Sockeye Salmon escapement. They are also working on validating a size-based apportionment for Chinook Salmon using sonar; however, this method is currently still being evaluated and is not a management tool yet. The Native Village of Eyak estimate is currently the only statistically viable estimate for Chinook Salmon abundance, which uses fish wheels and mark-recapture methods. This fish wheel also hosts several other projects opportunistically. Currently, ADF&G is planning to tag 700 Chinook Salmon using the Native Village of Eyak fish wheel to capture the fish and follow their movement into the upper watershed to better understand spawning habitat and run timing. Additionally, since 2018, Dr. Pete Rand from the Prince William Sound Science Center has utilized the Native Village of Eyak fish wheels to capture and tag Sockeye Salmon to assess energetic content and track migratory success. He is also investigating the presence of pathogens within the Sockeye Salmon population and looking into the cause for the observed reduction in body size. The ADF&G Sport Fish Division is also tagging juvenile Chinook Salmon using coded wire tags to estimate survival from smolt to adult, providing the first data on ocean survival for Copper River Chinook Salmon. This project is scheduled to continue through 2025. Additionally, the Native Village of Eyak is planning to install a sonar in the Klutina River to provide an estimate of Chinook Salmon abundance. The Board recognizes the need for these projects to continue and for additional projects to find new ways to study recent salmon declines.

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

Sincerely,



Anthony Christianson
Chair

Enclosure

cc: Eastern Interior Alaska Subsistence Regional Advisory Council
Federal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director, Office of Subsistence Management
Robbin La Vine, Subsistence Policy Coordinator, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor
Office of Subsistence Management
Lisa Grediagin, Wildlife Division Supervisor, Office of Subsistence Management
George Pappas, State Subsistence Liaison and Acting Fisheries Division Supervisor
Office of Subsistence Management
Jonathan Vickers, Anthropology Division Supervisor, Office of Subsistence Management
Interagency Staff Committee
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Project Coordinator, Alaska Department of Fish and Game
Administrative Record

**Enclosure to Topic 1 of the Eastern Interior Council Annual Report Reply
Information from the USFWS management staff**

Returns of Chinook Salmon on the Yukon River have been approximately half the size they were, on average, compared to numbers seen in the 1980s and 1990s, and seem to have stabilized to an average run size around 187,000 fish. Run sizes below 150,000 fish tend to be too small to effectively meet escapement goals, and they provide very few extra fish for harvest (**Figure 1**). Therefore, in most years since 2008, fishing restrictions to reduce harvests of Chinook Salmon have been necessary.

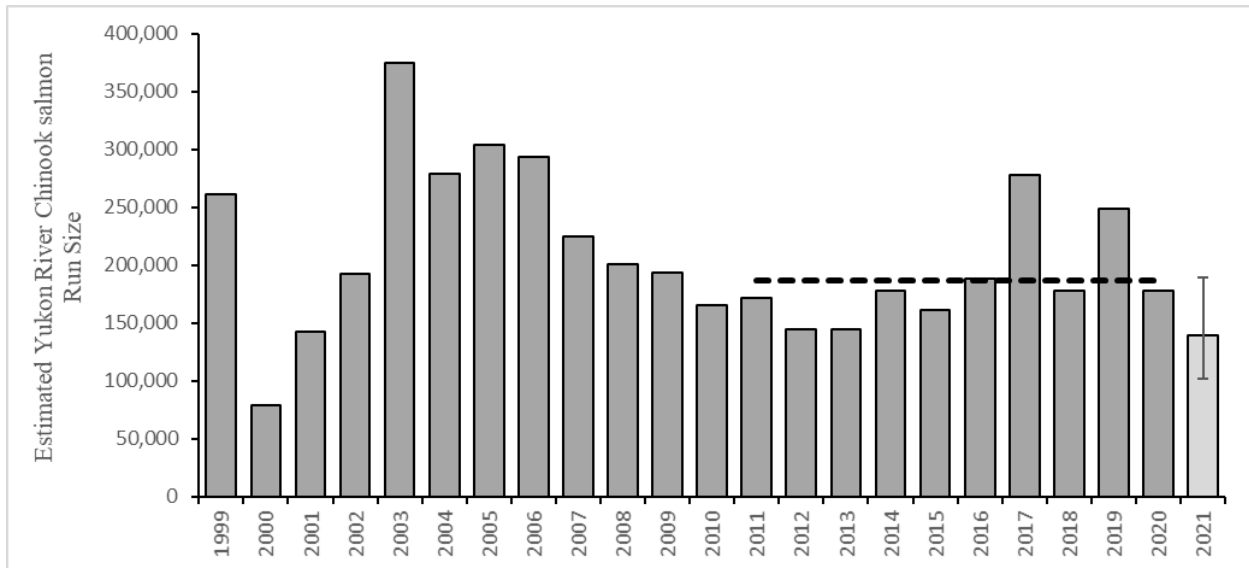


Figure 1: Drainage wide run sizes of Chinook Salmon. These bars represent the passage estimate at Pilot Station sonar plus harvest and escapement below the sonar. The average run size is approximately 187,000. The pale bar for 2021 shows the outlook and range around the estimate and a run size that may be smaller than 2012, 2013, and 2020- years when goals were not met.

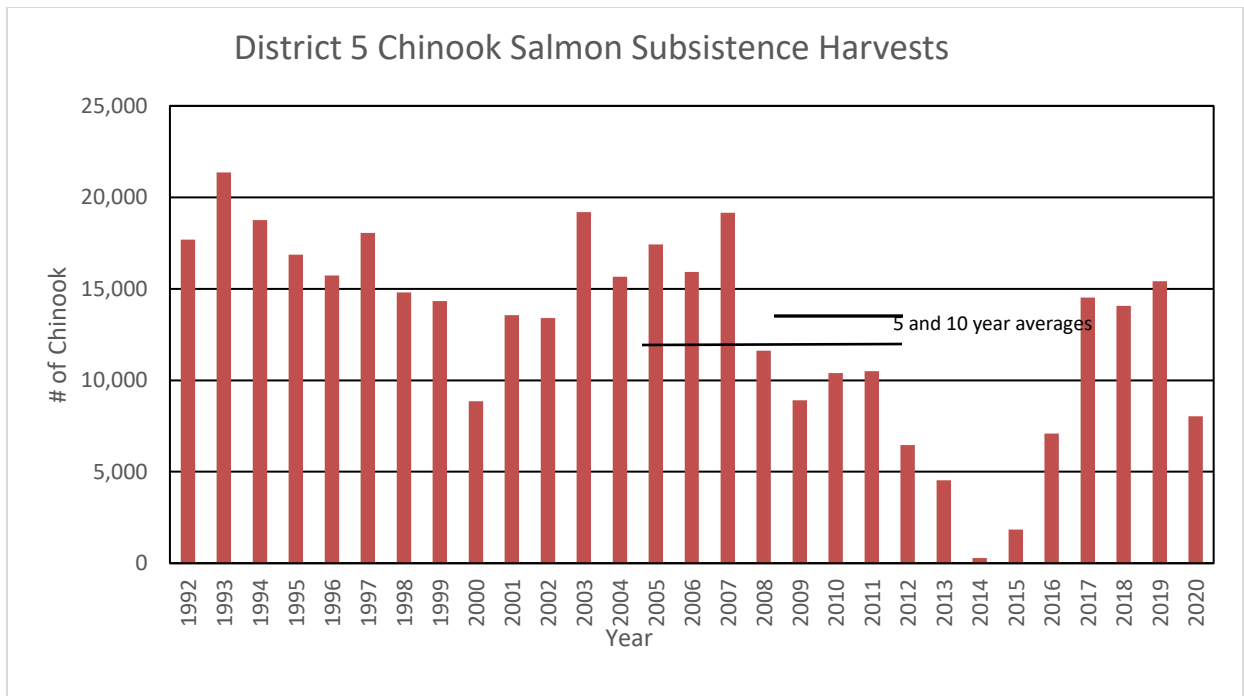


Figure 2: District 5 Chinook Salmon subsistence fishing harvests since 1992, with recent 5 and 10-yr averages. Data from the ADG&G website: (https://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareayukon.subsistence_salmon_harvest)

Overall, when reviewing Chinook Salmon subsistence harvests in all regions, every region is experiencing reductions in traditional Chinook Salmon subsistence harvests. The drainage-wide harvest of Chinook Salmon was just under 23,000 Chinook Salmon and this represents a 23% reduction from the recent 5-year average. Sometimes fishing restrictions may not be enough to reduce harvest sufficiently to meet escapement goals, this was true in 2019 and 2020. In 2020, despite fishing restrictions for Chinook Salmon, we failed to meet the goal (42,500-55,000) by nearly 10,000 fish. While management couldn't have known this in-season, we should have been more restrictive with fishing throughout the drainage. The graph below, taken from the 2021 JTC report shows the historical estimated Chinook Salmon spawning escapement into Canada (**Figure 3**).

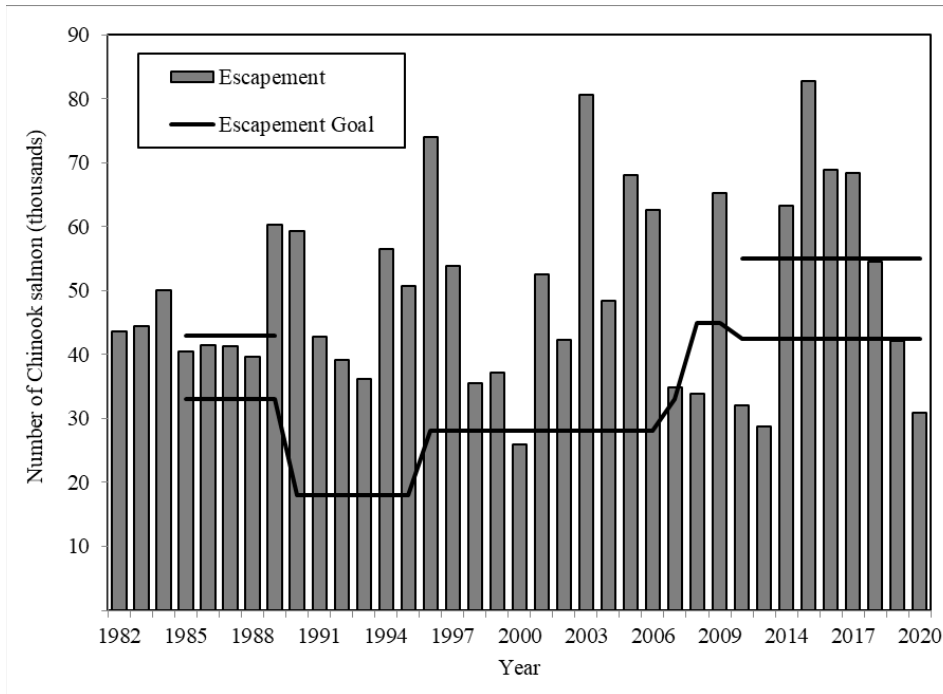


Figure 3: Canadian-origin Chinook Salmon run escapements (at the Canadian border) and escapement goals.

Recent fall Chum Salmon runs have been relatively large in most years, and very few years have required fishing restrictions. See **Figure 4**.

Fall Chum Salmon Run Sizes

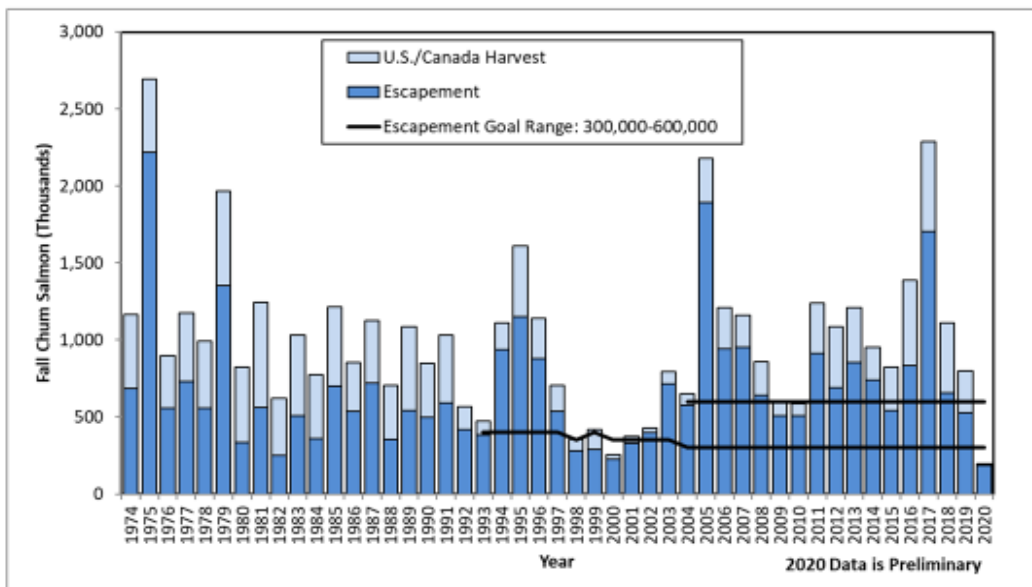


Figure 4: Fall Chum Salmon run sizes (including harvest) and the mainstem escapement goal at the Canadian Border.

Harvest of fall Chum has been relatively stable river-wide with recent 5-year average harvest (2014-2019) of about 77,000 fall Chum. **Figure 5** below shows District 5 subsistence fall Chum Salmon harvests from 1992 – 2020 using historical data from the ADG&G website: (https://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareayukon.subsistence_salmon_harvest)

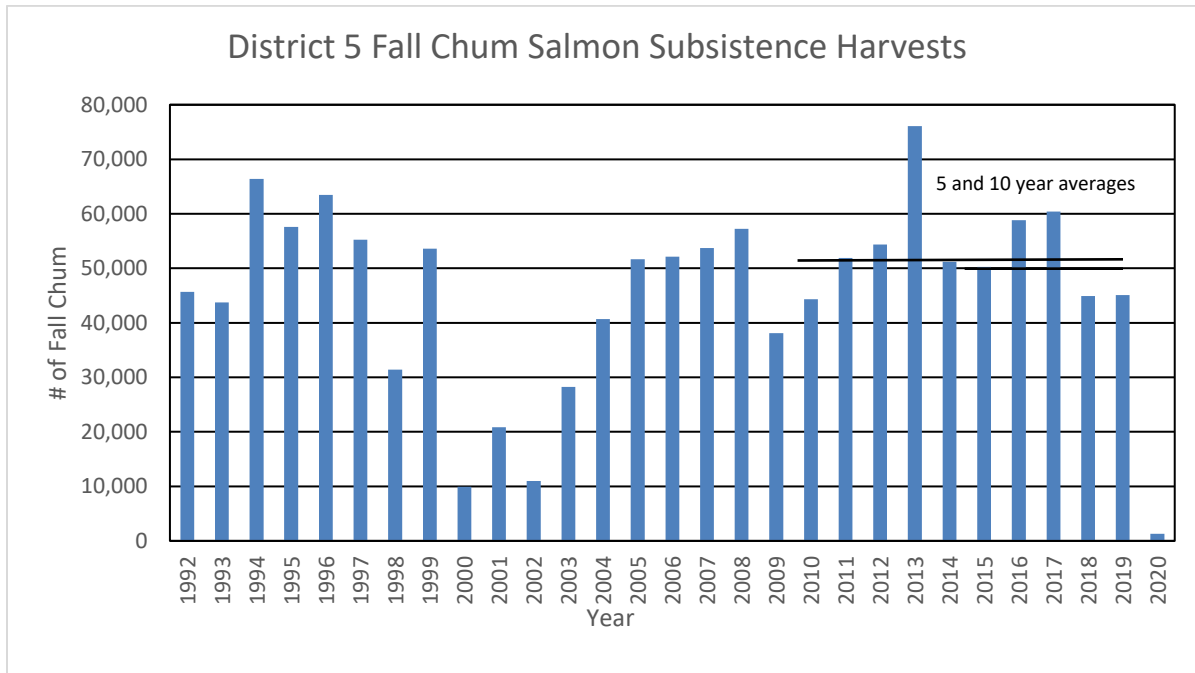


Figure 5: Fall Chum Salmon harvests in District 5. The 5-yr average harvest for this area is about 52,000 fish and is similar to the 10-yr average of about 54,000 fish).

District 5 fishermen rely heavily on fall Chum Salmon and their harvest accounts for about 34% of the total subsistence harvest of all fall Chum Salmon on the Yukon River. However, in 2020, the fall Chum Salmon run was the lowest on record and there was no harvestable surplus available and fishing was closed throughout the river early in the season when run projections indicated escapement goals would not be met. Subsistence salmon restrictions this severe have not occurred during fall season since 2002. (See **Figure 4**). This created a hardship for fishermen, particularly in District 5. When Chinook Salmon runs are low, fishermen in the upper river have stated they depend more on fall Chum Salmon to meet their subsistence needs. The subsistence harvest restrictions on Chinook Salmon combined with the closure on fall Chum Salmon harvest hit District 5 incredibly hard.

Local fisherman and biologist Stan Zuray has been sampling Chinook Salmon at his camp near Tanana for many years, and indicated in 2020 he saw the most severe level of *Ichthyophonus* in the salmon hearts that he's seen in many years. *Ichthyophonus hoferi* is a protozoan parasitic organism that infects adult Chinook Salmon in the Yukon River. This disease may be affecting migration and reproductive success of Chinook Salmon. If this disease was widespread in the river, that coupled with high water, would have made challenging migration conditions for Chinook Salmon. This could have led to sicker fish and thus, lower quality Chinook Salmon in subsistence harvests. USFWS is collaborating with Stan Zuray, ADF&G and other experts to design and implement renewed baseline sampling for *Ichthyophonus* to better understand the effects of this disease in the Yukon River.

Summer Chum Salmon harvests vary greatly over time but can be used for dog food in the lower reaches of District 5 and in District 6. In district 5 ABC, the use of summer Chum Salmon for dog food is not always preferred by mushers, despite fishing opportunity provided in most years, because summer Chum Salmon swim on the opposite bank from Chinook Salmon, and fishing both banks can be cumbersome, so most dog mushers have reported preferring to wait for fall Chum Salmon to fish for dog food. Fall Chum fishing is also preferred because of cooler temperatures and better preserving weather during the fall Chum Salmon season, and typically fewer fishing restrictions during the fall season because most Chinook Salmon have passed through the area. As stated above, 2020 notwithstanding, summer and fall Chum Salmon returns have been large since 2005. However, some fishermen in the upper river have concerns the fall Chum Salmon runs have been returning later in the season, making it difficult to harvest these fish when the river and their fish wheels are freezing. Fall season managers are aware of the need for fall Chum Salmon in District 5, particularly when Chinook Salmon runs are low and have made management efforts to pass early season fall Chum Salmon to the upper river. It may be advisable for dog mushers to harvest summer Chum Salmon if they are available in their area.

To avoid continuing declines in run size we need to ensure the viability of the stocks by getting enough fish to the spawning grounds each year. Most fall Chum and Chinook Salmon harvested in District 5 are Canadian-origin and are managed based on meeting the Interim Management Escapement Goal as a primary biological priority for sustaining the runs into the future, with subsistence fishing being the highest priority use when there is available surplus for harvest above escapement goals. Despite being a terminal fishery, Tanana stocks are managed similarly to the mainstem stocks. Tanana River origin stocks have escapement goals associated with them and for both Chinook and summer Chum Salmon, these stocks contribute nearly 30% to the drainage-wide runs, so are critically important to the abundance of the Yukon drainage runs. Drainage-wide, escapement goals for Chinook and summer Chum Salmon have not been consistently met in recent years. In 2020, summer and fall Chum Salmon runs were some of the lowest on record, and fall Chum Salmon failed to provide any harvestable surplus in Alaska, and failed to meet the escapement goal at the Canadian border.

Management of fisheries throughout the drainage has required subsistence restrictions (limitation on harvest) in most seasons for Chinook Salmon, and in recent years, reduction in harvest for Chums has also been necessary. These restrictions and closures are necessary to ensure viability of these salmon populations. When there is a harvestable surplus of fish, priority is always given to subsistence fishing.

The ADF&G performs a post season subsistence fish survey each year and has decades of data on the trends and harvest of communities for all species of salmon and non-salmon. Managers use this long-term data set to make sure that fishing opportunity and harvests are spread equitably among the districts based on their long-term proportions of total harvest. (e.g., the upper river uses more Chinook and fall Chum Salmon than other areas, because they can't rely on summer Chum Salmon.) Some of this data has been included here, to show how one region of river uses a proportion of the total, and how the harvests compare to amounts necessary for subsistence (Tables 1 and 2). The Federal management team uses the well-documented comprehensive community surveys and analyses of food and trade networks that are produced by ADF&G's Subsistence Division. The results of these studies can be found on ADF&G's website.

During salmon closures, regulations often provide for the use of selective gear, such as dip nets, beach seines, and manned fish wheels, to harvest summer Chum Salmon, while releasing Chinook Salmon, back into the river. Managers provide for these gear types whenever possible during necessary gillnet closures, however, not all fishermen have this gear, and in some areas it may not work efficiently, or be cost effective. In most years, subsistence fishermen on the Yukon River have been able to harvest fish other than salmon with 4-inch or smaller mesh gillnet gear, 24 hours per day, 7 days per week. In 2020, 4-inch mesh gillnets were closed or restricted throughout the drainage, but closed for up to 19 days of the fishing season in District 5. This was because, based on projected escapement at the border, there was no harvestable surplus of Chinook Salmon. However, because of the concerns expressed last year when the 4-inch gear was restricted, the Federal management team has worked with the ADF&G management team and in consultation with the US section of the Yukon River Panel to agree to a strategy that will allow the use of 4-inch gear during salmon closures unless: 1) there is deemed to be no harvestable surplus of Chinook Salmon, or 2) to only restrict its use if it appears there's widespread use of this gear to target salmon, which so far has not been a concern on the Yukon River. We have also decided to reduce the length of the nets to 60 feet maximum in the 2021 season, to allow the opportunity, while reducing the chance of incidental harvest of Chinook Salmon in this gear during Chinook Salmon subsistence closures.

ANNUAL REPORT REPLY PROCESS REVISION

During the Federal Subsistence Board's (Board) August 2021 work session, the Board reviewed and discussed the annual report reply process and agreed to add this topic to the Regional Advisory Councils (Councils) Fall meeting agendas to get Council input on proposed revisions.

ANILCA, Section 805 gives authority to the Councils to prepare an annual report containing information related to current and future subsistence uses of fish and wildlife populations, an evaluation of current and future subsistence needs for these populations, a strategy for their management, and recommendations related to policies, standards, guidelines, and regulations to implement the strategy. These reports are invaluable as they provide the Board with a broad, holistic picture of local resource conditions, and the needs and challenges facing communities across rural Alaska. With this knowledge, the Board can make more informed decisions.

Historically, the Federal Subsistence Management Program has strived to provide responses to every topic listed in annual reports, developed by a diverse group of Federal staff. While all topics can be important to the Board in understanding local conditions, it is unclear if the responses on all matters warrant the use of often very limited staff capacity. Furthermore, the same or similar topics are often repeated in subsequent years with no resolution, and many topics are on issues over which the Board has no regulatory authority.

Importantly, ANILCA does not require replies to annual reports from the Councils and currently the Code of Federal Regulations state that the Board "consider the reports and recommendations of the Regional Councils." Instead of replying to every topic in an annual report, the Board believes it would be more beneficial to use other communication methods when Councils request a response from the Board, or from others who may have better technical understanding of each issue. Often this is already accomplished by Councils writing letters to these entities, including to the Board. This proposed revision will allow for more substantive and timely responses from the Board on topics most critical to the Councils. We propose that Councils consider letter writing as the most appropriate means for requesting a response to topics of concern, and that the annual report process be streamlined as a mechanism for informing the Board of local conditions and needs. Under this scenario, Councils could ask their Coordinators to write a letter to the Board if there are annual report topics to which they are specifically requesting a response. Any other topics, such as those outside the regulatory authority of the Board, can be addressed to the appropriate Federal agency staff at Council meetings, or Councils can write letters requesting a response directly from them, thus streamlining the response process and encouraging direct agency communications with the Councils.

The suggested revision is not intended to diminish the ability of the Councils to report to the Board on topics of concern, and Councils will still receive responses when requested from the Board. At this time, the Board is seeking input from the Councils on this proposed change to the annual report process. Council feedback on this issue is critical as the Board moves forward to make the reply process more efficient and responsive. The Board will consider Council input on this revision at its winter work session at the end of January 2022.

Presentation Procedure for Proposals and Closure Reviews

1. Introduction and Presentation of Draft Staff Analysis

2. Report on Board Consultations:

- a. Tribes
- b. ANCSA Corporations

3. Agency Comments:

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

4. Advisory Group Comments:

- a. Other Regional Advisory Council(s)
- b. Fish and Game Advisory Committees
- c. Subsistence Resource Commissions

5. Summary of Written Public Comments

6. Public Testimony

7. Regional Council Recommendation (motion to adopt)

8. Discussion/Justification

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

9. Restate final motion for the record

10. Council's Vote

WP22-51 Executive Summary

| | |
|---|--|
| General Description | Proposal WP22-51 requests elimination of the Minto Flats Management Area (Minto Flats) registration hunt for moose in Unit 20B. <i>Submitted by: the Bureau of Land Management (BLM)</i> |
| Proposed Regulation | <p>Unit 20B—Moose</p> <p><i>Unit 20B, that portion within the Minto Flats Management Area—1 bull by Federal registration permit only Sep. 1-20. Jan. 10-Feb. 28.</i></p> <p><i>Unit 20B, remainder—1 antlered bull Sep. 1-20.</i></p> |
| OSM Preliminary Conclusion | Support |
| Eastern Interior Subsistence Regional Advisory Council | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS
WP22-51

ISSUES

Proposal WP22-51, submitted by the Bureau of Land Management (BLM), requests elimination of the Minto Flats Management Area (Minto Flats) registration hunt for moose in Unit 20B from Federal regulation (**Map 1**).

DISCUSSION

The proponent states that the Tanana Chiefs Conference (TCC) submitted a proposal to the Federal Subsistence Board (Board) in 1990 to establish a moose hunt in Minto Flats. However, since 1990 most of the Federal lands within Minto Flats have been conveyed to the State of Alaska. The remaining Federal lands are encumbered by Native selections and therefore, are not open to hunting under Federal subsistence harvest regulations.

The proponent states that Federally qualified subsistence users sometimes inquire about the winter registration hunt currently in regulation. Elimination of this hunt would reduce user confusion since the Federal lands to which it would apply do not exist. The proponent further states that this regulatory change would not affect moose populations or users.

Existing Federal Regulation

Unit 20B—Moose

| | |
|---|--|
| <i>Unit 20B, that portion within the Minto Flats Management Area—1 bull by Federal registration permit only</i> | <i>Sep. 1-20. Jan. 10-Feb. 28.</i> |
|---|--|

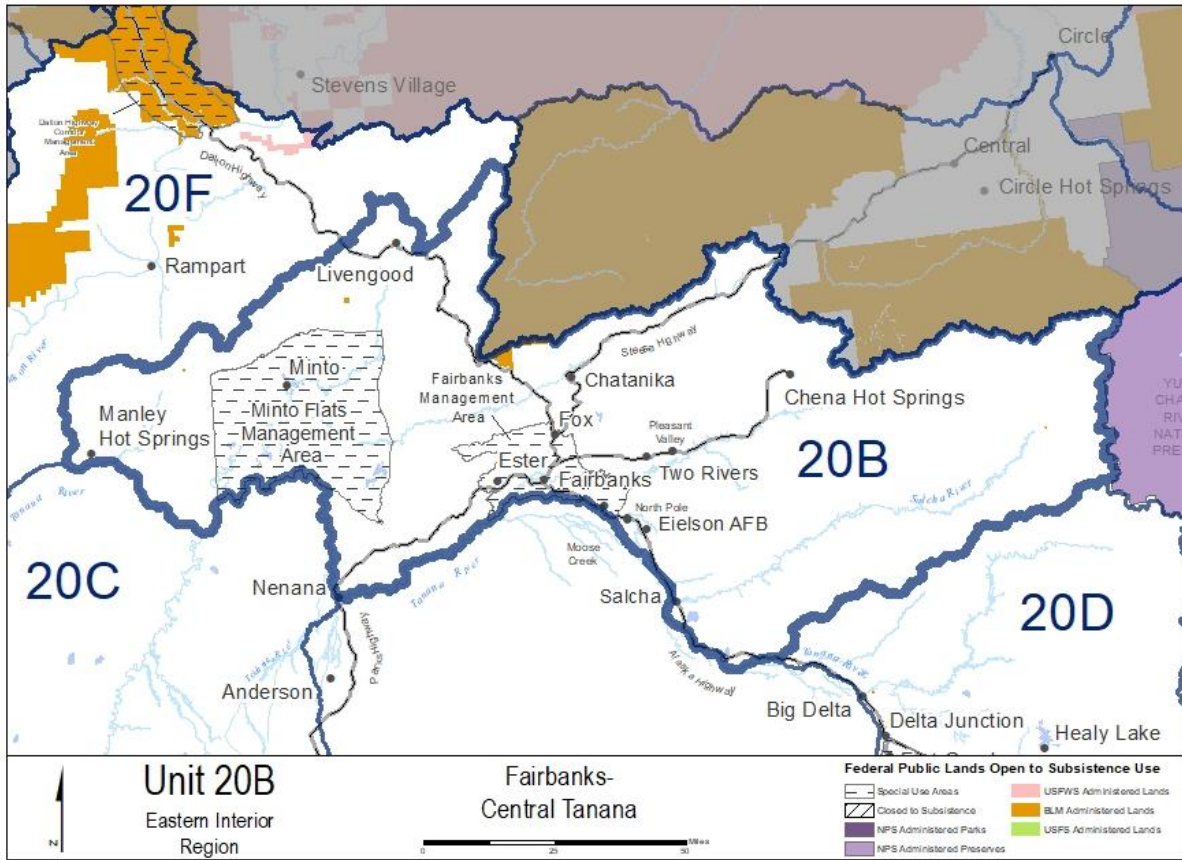
| | |
|--|-------------------|
| <i>Unit 20B, remainder—1 antlered bull</i> | <i>Sep. 1-20.</i> |
|--|-------------------|

Proposed Federal Regulation

Unit 20B—Moose

| | |
|--|---|
| <i>Unit 20B, that portion within the Minto Flats Management Area—1 bull by Federal registration permit only</i> | <i>Sep. 1-20. Jan. 10-Feb. 28.</i> |
|--|---|

| | |
|---|------------------------------|
| <i>Unit 20B, remainder—1 antlered bull</i> | <i>Sep. 1-20.</i> |
|---|------------------------------|



Map 1. Unit 20B

Existing State Regulation

Unit 20B–Moose

Unit 20B within the Minto Flats Management Area

| | | | |
|--------------|--|-------|------------------|
| | One bull | HT | Aug. 21-Aug. 27 |
| | OR | | |
| Residents | One bull with spike-fork or 50-inch antlers or antlers with 3 or more brow tines on at least one side | HT | Sept. 8-Sept. 25 |
| | OR | | |
| | One antlerless moose by permit available at http://hunt.alaska.gov in person in Fairbanks Sept. 3 | RM785 | Oct. 15-Feb. 28 |
| Nonresidents | One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit | DM784 | Sept. 8-Sept. 25 |

Extent of Federal Public Lands

Unit 20B is comprised of 0.36% Federal public lands and consist of 0.36% BLM managed lands.

Minto Flats is comprised of 0% Federal public lands.

Customary and Traditional Use Determinations

Residents of Minto and Nenana have a customary and traditional use determination for moose in Unit 20B, Minto Flats Management Area.

Residents of Unit 20B, Nenana, and Tanana have a customary and traditional use determination for moose in Unit 20B remainder.

Regulatory History

The Minto Flats moose seasons, harvest limit, and customary and traditional use determination were adopted from State regulations in 1990. Later in 1990, the Board approved Special Action S90-09 to establish a Federal subsistence moose season in Unit 20B, Minto Flats. Federal regulations in Minto Flats have not changed since 1990.

Effects of the Proposal

If this proposal is adopted, the Federal subsistence moose hunt within Minto Flats in Unit 20B would be eliminated. This change is not expected to have any impact on the moose population since no Federal hunts can occur in this area because all Federal public lands have either been conveyed or are encumbered. It would also reduce confusion among Federally qualified subsistence users and simplify regulations.

OSM PRELIMINARY CONCLUSION

Support Proposal WP22-51

Justification

As Federal public lands open to Federal subsistence hunting no longer exist in the Minto Flats hunt area, a Federal hunt is not needed.

WP22-52 Executive Summary

| | |
|---|--|
| General Description | Wildlife Proposal WP22-52 requests that the closing date of the moose season in Unit 25A be extended to Dec. 20. <i>Submitted by: Heimo Korth of Fort Yukon.</i> |
| Proposed Regulation | <p align="center">Unit 25A—Moose</p> <p align="center"><i>Unit 25A –1 antlered bull</i></p> <p align="right"><i>Aug. 25 – Sept. 25</i></p> <p align="right"><i>Dec. 1 – Dec. 10 20</i></p> |
| OSM Preliminary Conclusion | Support |
| Eastern Interior Subsistence Regional Advisory Council | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

**DRAFT STAFF ANALYSIS
WP22-52**

ISSUES

Proposal WP22-52, submitted by Heimo Korth of Fort Yukon, requests that the closing date of the moose season in Unit 25A be extended to Dec. 20.

DISCUSSION

The proponent states that the proposed changes would increase opportunity to harvest a moose. The proponent notes that in some years, moose do not come along the Coleen River due to the lack of snow and thin ice. Traveling inland for the proponent is difficult due to tussocks. The proponent also states extending the season in Unit 25A would align with the winter season in Unit 25D remainder, simplifying the paperwork involved.

Existing Federal Regulation

Unit 25A—Moose

Unit 25A –1 antlered bull

Aug. 25 – Sept. 25

Dec. 1 – Dec. 10

Proposed Federal Regulation

Unit 25A—Moose

Unit 25A –1 antlered bull

Aug. 25 – Sept. 25

Dec. 1 – Dec. ~~10~~ 20

Existing State Regulation

Unit 25A - Moose

| | | |
|---|--|---------------------------|
| <i>Unit 25A Dalton Highway Corridor Management Area</i> | <i>Resident: One bull by bow and arrow only by permit</i> | <i>Sept. 1 – Sept. 25</i> |
| | <i>Nonresident: One bull with 50-inch antlers with 4 or more brow tines on at least one side by bow and arrow only by permit</i> | <i>Sept. 5 – Sept. 25</i> |
| <i>Unit 25A, remainder</i> | <i>Resident: One bull</i> | <i>Sept. 5 – Sept 25</i> |
| | <i>Nonresident: One bull with 50-inch antlers with 4 or more brow tines on at least one side</i> | <i>Sept. 5 – Sept 25</i> |

Extent of Federal Public Lands

Unit 25A is comprised of 76.4% Federal public lands and consist 74.1% U.S. Fish and Wildlife Service (USFWS) managed lands, and 2.3% Bureau of Land Management (BLM) managed lands.

Customary and Traditional Use Determinations

Residents of Unit 25A and 25D have a customary and traditional use determination for moose in Unit 25A.

Regulatory History

The Federal Subsistence Board (Board) established the current hunting regulations for moose in Unit 25A when the Federal program was established in 1990, with a fall season of Aug. 25 – Sept. 25 and a winter season of Dec. 1 – Dec. 10 open to all rural residents with a harvest limit of one bull. The 1990-1991 State hunting regulation for moose in Unit 25A was a fall season of Sept. 5 – Sept. 25 open to all residents and nonresidents with a harvest limit of one bull.

In 1996, Proposal 96, submitted by the Native Village of Fort Yukon, requested a customary and traditional use determination for moose in Unit 25A for all communities within Unit 25A and Unit 25D. The Board adopted the proposal at its April 1996 meeting.

For regulatory year of 2002/03, the Alaska Department of Fish and Game (ADF&G) modified the State regulations for moose in Unit 25A, dividing the unit into two hunt areas: Unit 25A within the Dalton Highway corridor management area (Dalton Highway) and Unit 25A remainder. Nonresident harvest in Unit 25A remainder was limited to one bull with 50- inch antlers with 4 or more brow tines on at

least one side. Unit 25A, Dalton Highway regulations allowed residents one bull by bow and arrow only by draw permit from Sept. 1-25. Nonresidents are allowed one bull with 50- inch antlers with 4 or more brow tines on at least one side by bow and arrow only by draw permit from Sept. 5-25. These changes reflect the current State moose hunting regulations for Unit 25A.

In 2014, Proposal WP14-48, submitted by Joe Matesi, requested that a portion of Federal lands in Unit 25A be closed to the taking of moose except by rural residents of Arctic Village, Venetie, Chalkyitsik, and Fort Yukon with a Federal registration permit, and that a harvest quota be established for that portion of the unit. The proposal was rejected by the Board. More data on moose numbers in the affected areas was needed prior to moving forward with a hunting closure.

Biological Background

State management goals and objectives for moose in Unit 25 are as follows (Caikoski 2018).

- Protect, maintain, and enhance the moose population and its habitat in concert with other components of the ecosystem while providing for maximum sustained harvest.
- Provide the greatest sustained opportunity to participate in hunting moose.
- Maintain a minimum of 40 bulls:100 cows in the post hunt population.
- Maintain a 5-year running mean of ≥ 35 bulls harvested annually.
- Maintain a 5-year running mean of $\geq 30\%$ hunting success rate.

Unit 25A consists of the south slope of the Brooks Range from the Canada border, west to include all of the Chandalar river drainages. Other large drainages within Unit 25A include the Sheenjek and Coleen rivers (Caikoski 2018). Moose habitat in Unit 25A is limited to narrow riparian corridors which support a low-density population of moose.

Periodic surveys suggest that moose numbers in Unit 25A declined from the late 1980s through the early 2000s (Caikoski 2010). Surveys along the Sheenjek and Coleen Rivers within Unit 25A have been done sporadically since 1977. Both drainages have seen declines in moose populations since 1991 (Table 1), though the population in the Sheenjek River appears to have stabilized at a low level between 2000 and 2010 (Wald 2012). Moose densities to the north of the Brooks Range, Yukon Flats NWR, and Yukon Charley Rivers National Preserve have shown recent increases. Surveys done around the Kongakut watershed, the region north of the Sheenjek and Coleen rivers in the northeast portion of the Arctic NWR, increased from 94 observed moose in 2018 to 143 observed moose in 2019 (Bertram 2021 pers comm., Leacock 2021 per comm.). Population dynamics of the area are poorly understood but predation may be serving to maintain moose populations at a low density (Caikoski 2010). Composition surveys on the Coleen and Sheenjek River drainages in 1991, 2000, and 2002 showed an average bull:cow ratio of 87 bulls:100 cows on the Coleen River and 190 bulls:100 cows on the Sheenjek, while calf:cow ratios averaged 39 calves:100 cows on the Coleen and 75 calves:100 cows on the Sheenjek (Wertz and Payer 2003).

Composition surveys on the Coleen and Sheenjek River drainages in 1991, 2000, and 2002 showed an average bull:cow ratio of 87 bulls:100 cows on the Coleen River and 190 bulls:100 cows on the Sheenjek River, while calf:cow ratios averaged 39 calves:100 cows on the Coleen and 75 calves:100 cows on the Sheenjek (Wertz and Payer 2003). In the fall of 2012, a low-intensity survey of the upper Coleen River drainage classified observed moose as cow, calf, or bulls. A total of 79 moose in 29 groups composed of 32 cows, 12 calves, and 35 bulls were observed. The observed calf:cow ratio was 38 calves:100 cows, and the observed bull:cow ratio was 109 bulls:100 cows. Eighty-six percent of moose groups (n = 29) observed contained 1–4 moose, and the remaining groups contained 6–9 moose. Moose were observed throughout the survey area at elevations ranging from 2,000–3,500 feet (Caikoski 2018).

Studies in adjacent units suggest that older bulls begin dropping antlers in late November and early December and showed 60% of bull moose have lost antlers by December 15. The remaining bulls with antlers would be mostly 1-3-year olds as well as a few injured bulls that are sick and may not have dropped antlers until much later than the normal period for their age class (Mathews 2021 pers. comm., WIRAC 2010).

Table 1. Total moose counted by fall aerial surveys between 1977 and 2012 on the Sheenjek and Coleen Rivers, Alaska (Haggstrom 1977; Spindler 1978, 1980; Nowlin 1987; Mauer 1989, 2000; Mauer and Akaran 1991; Bucholtz 2002; Wertz 2008; Wald 2012; Caikoski 2018).

| Year | Sheenjek River | Coleen River |
|------|----------------|--------------|
| 1977 | 104 | 219 |
| 1978 | 125 | No Survey |
| 1979 | 151 | 245 |
| 1987 | 149 | No Survey |
| 1989 | 147 | 220 |
| 1991 | 81 | 233 |
| 2000 | 21 | 129 |
| 2002 | 21 | 103 |
| 2008 | 22 | No Survey |
| 2012 | No Data | 79 |

Harvest History

Harvest is low due to the remoteness of the area and the time, distance, and expense of accessing hunting grounds. Winter hunt participation in Unit 25A is historically low (Bertram 2021 pers. comm.) There are very few Federally qualified subsistence hunters living in Unit 25A during winter, and the only village is Arctic Village (Mathews 2021 pers. comm.).

Average annual reported moose harvest in Unit 25A during the 10-year period of 2010–2019 was 45 moose (**Figure 1**). During this time-period, the total number of hunters averaged 111 per year, and annual success rate averaged 39% (resident 41% nonresident 39%). Annual harvest, the number of hunters, and success rates have remained relatively stable from 2003-2019 (Caikoski 2014). However, since the State’s 2014 harvest report (2015-2019), there has been a slight increase in harvest. Between 2015 and 2019 the total number of hunters averaged 121 per year, annual success rate averaged 39% (resident 44% nonresident 36%) and total reported harvest averaged 47 moose (ADF&G 2021).

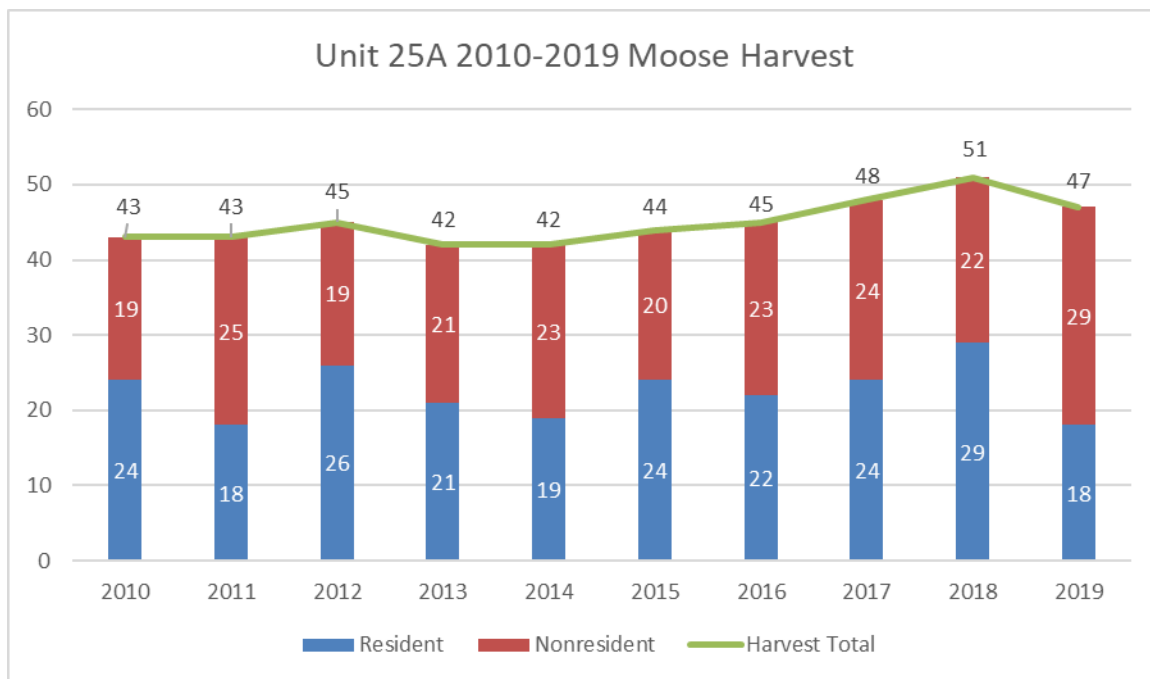


Figure 1. Reported moose harvest by residency (ADF&G. 2021)

Effects of the Proposal

If this proposal is adopted, Federally qualified subsistence users would be able to harvest one antlered bull moose in Unit 25A until December 20, providing an additional 10 days of harvest opportunity to secure a winter moose. Increasing harvest opportunity may also increase harvest on an already low population. However, the high bull:cow ratio may also indicate a harvestable surplus of bulls and any increases in harvest are expected to be minimal. Very few people live in Unit 25A in winter. The only village in Unit 25A is Arctic Village and the next closest villages are in Unit 25D. Therefore, a winter season extension would result in minimal increases in harvest if any.

If this proposal is adopted, closely monitoring the moose population and harvest by Federally qualified subsistence users would be necessary to measure any effects from an extended season and to inform sustainable management.

OSM PRELIMINARY CONCLUSION

Support Proposal WP22-52.

Justification

High bull:cow ratios, recent density increases in adjacent areas, and historically low late winter harvests mitigate possible conservation concerns of a season extension. Additionally, the extended winter season would give Federally qualified subsistence users increased opportunity to harvest the moose they need if they were not successful during the fall hunt.

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| WP22-53 Executive Summary | |
|---|---|
| General Description | Proposal WP22-53 requests establishing a trapping season for Arctic fox (<i>Vulpes lagopus</i>) in Unit 25. <i>Submitted by: Heimo Korth of Fort Yukon.</i> |
| Proposed Regulation | <p>Unit 25—Arctic Fox Trapping</p> <p><i>Fox, Arctic- No limit</i> No season <i>Nov. 1- last day of Feb.</i></p> |
| OSM Preliminary Conclusion | Support Proposal WP22-53 |
| Eastern Interior Subsistence Regional Advisory Council | |
| Kodiak/Aleutians Subsistence Regional Advisory Council | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

**DRAFT STAFF ANALYSIS
WP22-53**

ISSUES

Proposal WP22-53, submitted by Heimo Korth of Fort Yukon, requests establishing a trapping season for Arctic fox (*Vulpes lagopus*) in Unit 25.

DISCUSSION

The proponent states that Arctic foxes are trapped in Unit 25, and in some years, they are trapped more than red, cross, or silver foxes. The State currently has an Arctic fox trapping season in Unit 25 and the proponent would like a Federal season to legalize take as well since many are already incidentally caught in Unit 25 in traps intended for other species.

Existing Federal Regulation

Unit 25—Arctic Fox Trapping

No Federal regulation

Proposed Federal Regulation

Unit 25—Arctic Fox Trapping

Fox, Arctic- No limit

~~*No season*~~ *Nov. 1- last day of Feb.*

Existing State Regulation

Unit 25 – Arctic Fox Trapping

Units 24 and 25: (White and blue color phases)

No limit

Nov. 1 – Feb. 28

Extent of Federal Public Lands

Unit 25 is comprised of 72.6% Federal public lands and consist of 56.4% U.S. Fish and Wildlife Service (USFWS) managed lands, 13.9% Bureau of Land Management (BLM) managed lands and, 2.3% National Park Service (NPS) managed lands.

Customary and Traditional Use Determinations

The Federal Subsistence Board has not made a customary and traditional use determination for Arctic fox in Unit 25. Therefore, all rural residents of Alaska may harvest this species in this unit.

Regulatory History

Currently there are no Federal subsistence trapping regulations for Arctic fox in Unit 25. The State of Alaska established a season for arctic fox in Unit 25 in 2004. The initial season was from Nov. 1 – Apr. 15 with no harvest limit. Since then, the State made one season dates modification, in 2006, to the trapping regulation of reducing the season to Nov. 1 – Feb. 28. The State has not changed the ‘no limit’ regulation since establishing the Arctic fox trapping season.

Biological Background

Population dynamics of Arctic fox in Unit 25 are not documented. The arctic fox is found in treeless coastal areas of Alaska from the Aleutian Islands north to Point Barrow and east to the Canada border. They prefer tundra habitat, usually near rocky shores, and have been observed ranging far out onto pack ice in winter. They are considered to have stable and sometimes abundant populations in their home range (ADF&G 2021). Young transient Arctic foxes have been known to cross the Brooks Range outside their home range to Unit 25 and other adjacent units in search of prey (Anthony 1997).

Harvest History

There was no reported Arctic fox harvest prior to 2018. For the trapping season of 2018-2019, 53 Arctic foxes were reported harvested in Unit 25 (Spivey 2020). However, harvest numbers may be higher since sealing of Arctic foxes is not required and incidental take in red fox traps is likely. The Alaska trapper report estimates the presence of Arctic fox as scarce in Unit 25 and other units south of the Brooks Range (Spivey 2020).

Effects of the Proposal

If this proposal is adopted, no impacts to the Arctic fox population or user groups is expected as Federally qualified subsistence users can already trap an unlimited number of Arctic foxes on all Federal lands in Unit 25 under the State regulations. Additionally, adoption of this proposal would align Federal and State trapping regulations, reducing the regulatory complexity for users. Incidental take of Arctic foxes on Red fox traps is unavoidable. The change in regulations would increase trapping opportunity for Federal qualified subsistence users and legalize the incidental take of Arctic fox under Federal regulations.

OSM PRELIMINARY CONCLUSION

Support Proposal WP22-53.

Justification

Population dynamics of Arctic fox in Unit 25 are not documented. However, Arctic fox populations in their home ranges seem to be stable. Unit 25 is not within the primary range and habitat for Arctic fox, and any Arctic fox harvested in this unit are likely transient individuals. Federally qualified subsistence users are already able to trap on Federal public lands under the State regulations. Adopting this proposal would provide Federally qualified subsistence users with additional harvest opportunities for Arctic fox trapping under Federal regulations. Additionally, Federal and State regulations for Arctic fox trapping in Unit 25 would be aligned, reducing regulatory complexity, and the incidental take of Arctic fox would become legal under Federal regulations.

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WCR22–22 Executive Summary

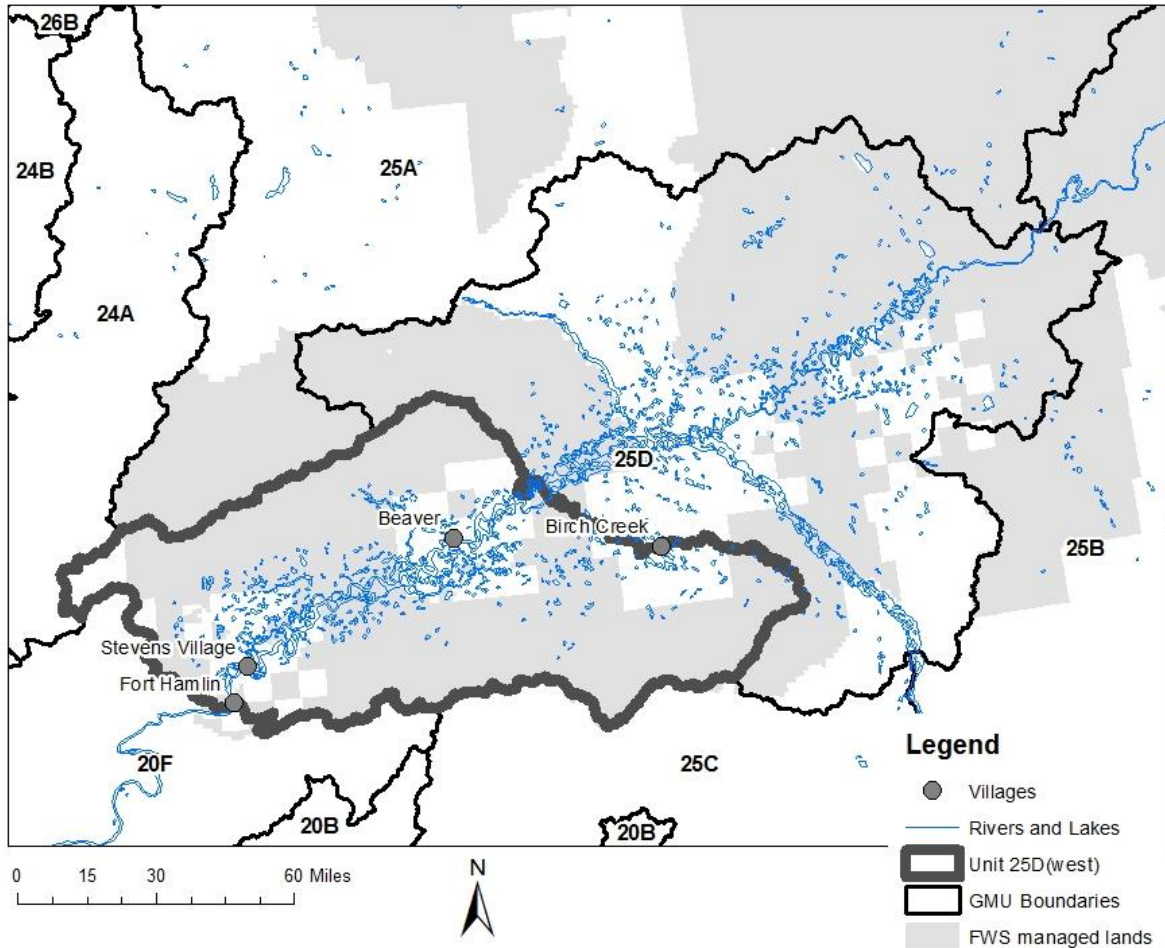
| | |
|---|---|
| Closure Location and Species | Unit 25D (west) —Moose |
| Current Regulation | <p>Unit 25D–Moose</p> <p><i>Unit 25D (west), that portion lying west of a line extending from the Unit 25D boundary on Preacher Creek, then downstream along Preacher Creek, Birch Creek, and Lower Mouth of Birch Creek to the Yukon River, then downstream along the north bank of the Yukon River (including islands) to the confluence of the Hadweenzic River, then upstream along the west bank of the Hadweenzic River to the confluence of Forty and One-Half Mile Creek, then upstream along Forty and One-Half Mile Creek to Nelson Mountain on the Unit 25D boundary—1 bull by a Federal registration permit.</i></p> <p><i>Permits will be available in the following villages: Beaver (25 permits), Birch Creek (10 permits), and Stevens Village (25 permits). Permits for residents of 25D (west) who do not live in one of the three villages will be available by contacting the Yukon Flats National Wildlife Refuge Office in Fairbanks or a local Refuge Information Technician.</i></p> <p><i>Moose hunting on public land in Unit 25D (west) is closed at all times except for residents of Unit 25D (west) hunting under these regulations. The moose season will be closed by announcement of the Refuge Manager Yukon Flats NWR when 60 moose have been harvested in the entirety (from Federal and non-Federal lands) of Unit 25D (west)</i></p> |
| OSM Preliminary Conclusion | Maintain status quo |
| Eastern Interior Alaska Subsistence Regional | |

WCR22-22 Executive Summary

| | |
|---|-------------|
| Advisory Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

FEDERAL WILDLIFE CLOSURE REVIEW
WCR22-22

Closure Location: Unit 25D (west) (Map 1)—Moose



Map 1. Unit 25D (west)

Current Federal Regulation

Unit 25D—Moose

Unit 25D (west), that portion lying west of a line extending from the Unit 25D boundary on Preacher Creek, then downstream along Preacher Creek, Birch Creek, and Lower Mouth of Birch Creek to the Yukon River, then downstream along the north bank of the Yukon River (including islands) to the confluence of the Hadweenzic River, then upstream along the west bank of the Hadweenzic River to the confluence of Forty and One-Half Mile Creek,

Aug. 25-Feb. 28

Unit 25D–Moose

then upstream along Forty and One-Half Mile Creek to Nelson Mountain on the Unit 25D boundary—1 bull by a Federal registration permit.

Permits will be available in the following villages: Beaver (25 permits), Birch Creek (10 permits), and Stevens Village (25 permits). Permits for residents of 25D (west) who do not live in one of the three villages will be available by contacting the Yukon Flats National Wildlife Refuge Office in Fairbanks or a local Refuge Information Technician.

Moose hunting on public land in Unit 25D (west) is closed at all times except for residents of Unit 25D (west) hunting under these regulations. The moose season will be closed by announcement of the Refuge Manager Yukon Flats NWR when 60 moose have been harvested in the entirety (from Federal and non-Federal lands) of Unit 25D (west)

Closure Dates: Year-round

Current State Regulation

Unit 25D–Moose

Unit 25D, (west) of a line extending from the Unit 25D boundary on Preacher Creek, then downstream along the (west) banks Preacher Creek, Birch Creek, and Lower Mouth Birch Creek to the Yukon River, then downstream along the north bank of the Yukon River (including islands) to the confluence of the Hadweenzic River, then upstream along the (west) bank of the Hadweenzic River to the confluence of Forty and One-Half Mile Creek, then upstream along Forty and One-Half Mile Creek to Nelson Mountain on the Unit 25D boundary.

Residents: One TM940 Aug. 25-Feb. 28 bull by permit

Regulatory Year Initiated: 1993

Extent of Federal Public Lands

Unit 25D (west) is comprised of approximately 71% Federal public lands and consists of 100% U.S. Fish and Wildlife Service (FWS) managed lands (**Map 1**).

Customary and Traditional Use Determination

Residents of Unit 25D West have a customary and traditional use determination for moose in Unit 25D, west.

Regulatory History

In 1990, the Federal moose season in Unit 25D (west) ran Aug. 25-Sept. 25, Dec. 1-10, and Feb. 18-28. The harvest limit was one bull by Federal registration permit and only residents of Beaver, Birch Creek, and Stevens Village could hunt under Federal regulations. However, all State residents could hunt moose on Federal public lands during State seasons under State regulations. (Note: There was no open nonresident State moose season).

In 1992, the Federal Subsistence Board (Board) adopted Proposal P92-117 with modification, which specified that Federally qualified subsistence users could hunt moose in Unit 25D (west) under Federal regulations with a State Tier II permit and that the season would be closed when 35 bulls had been harvested. This was done to reduce the administrative burden on Federally qualified subsistence users by allowing them to hunt on State and Federal lands by acquiring one, rather than two permits.

In 1993, the Board adopted Proposal P93-60 with modification to: 1) close moose hunting on Federal public lands in Unit 25D (west) to non-Federally qualified users, 2) modify the open season dates to Aug. 25-Sept. 25 and Nov. 1-Dec. 20, 3) restrict harvest to antlered bulls only, and 4) reduce the quota to 30 antlered bulls as the maximum allowable harvest for the moose population on all lands in GMU 25D (west), clarifying that the quota applied to all (Federal and non-Federal) lands of Unit 25D (west). This was done due to conservation concerns over the declining moose population.

In 1994, the Board adopted Proposal P94-77 with modification to: 1) expand the open season to Aug. 25-Feb. 28, and 2) remove the “antlered” harvest restriction, allowing the harvest of any bull. This was done to better accommodate the needs and traditions of the villages in Unit 25D (west) and because the existing quota insured against overharvesting.

In 1995, the Board adopted Proposal P95-52, allowing the take of moose and caribou in Unit 25 from a snowmachine or motor boat. This was done to alleviate unnecessary restrictions on Federally qualified subsistence users in Unit 25 as this provision was already allowed in other units across the State.

In 1999, the Board adopted Proposal P99-61, which allowed the take of bull moose in Unit 25D (west) outside the open seasons for memorial potlatch and traditional cultural events with the provisions that any harvested moose counts against the quota of 30 bulls and that the user must communicate the name of deceased, number of moose harvested, harvester’s name, and the date and location of harvest to the Yukon Flats National Wildlife Refuge (NWR) manager.

In 2000, the Board adopted Proposal P00-60 with modification to: 1) increase the harvest quota from 30 to 60 moose, and 2) issue 60 permits annually with 25, 25, and 10 permits being issued to residents of Stevens Village, Beaver, and Birch Creek, respectively. This was done due to recent surveys

indicating that the moose population had increased and was able to sustain an increased harvest of bulls.

In 2001, the Board adopted Proposal WP01-43, which expanded the customary and traditional use determination for moose in Unit 25D (west) to include all residents of Unit 25D (west). The 60 permit limit was removed, although the community allocation was retained with the stipulation that residents of Unit 25D (west) who did not live in Stevens Village, Beaver, or Birch Creek could obtain a permit by contacting the Yukon Flats NWR office.

In 2012, the Board adopted Proposal WP12-63, which required edible meat to be left on the bones of caribou and moose harvested in Unit 25 until removed from the field and/or processed for human consumption. This was done to reduce meat spoilage.

The closure of Federal public lands in Unit 25D (west) to moose hunting by non-Federally qualified users has been reviewed in 2006 (WCR05-22), 2009 (WCR08-22), 2013 (WCR12-22), and 2017 (WCR15-22). The Council and OSM recommendation in all past closure reviews has been to maintain the closure or “status quo” due to conservation concerns.

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, similar to regulatory proposals, will be presented to the Councils for a recommendation and then to the Board for a final decision. Previously, closure reviews were presented to Councils who then decided whether to maintain the closure or to submit a regulatory proposal to modify or eliminate the closure.

Closure last reviewed: 2017 – WCR15-22

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 the public lands (other than national parks and park monuments) unless necessary for the conservation of healthy populations of fish and wildlife, for the reasons set forth in §816, to continue subsistence uses of such populations, or pursuant to other applicable law;

Results from population surveys conducted in 1992 estimated that there were 605 moose in Unit 25D (west), which was considerably lower than the population estimate of 1,479 moose in 1986. Although different population estimation methods were used, managers were concerned about the continued viability of this population based on its decline between 1986 and 1992, the low moose density, low survival of yearling cows, high mortality rates of younger aged moose and cows, and under-reporting of the harvest (FWS 1993).

Based on the management goal to limit harvest to no more than 5% of the population (n=605 in 1992), the Board adopted modified Proposal 93-60, which reduced the maximum allowable harvest to 30 bulls and closed moose hunting in Unit 25D (west) to non-Federally qualified users. Combined with the estimated annual subsistence harvest for Stevens Village, Beaver, and Birch Creek, it was determined that there was not a sufficient surplus of moose for harvest by nonresidents or residents living outside of Unit 25D (west) (FSB 1993). Thus, the original closure was implemented for the conservation of a healthy moose population and to ensure continued subsistence use of this population by local residents.

Council Recommendation for Original Closure:

The Council members for the Eastern Interior Alaska Subsistence Regional Advisory Council (Council) had not been selected and finalized by the April 1993 Board meeting, so there was no recommendation. In all subsequent reviews (2005, 2009, 2013), the Council voted to maintain the closure to ensure the continuation of subsistence uses and due to conservation concerns caused by low moose abundance, low density, and a limited harvestable surplus (EIRAC 2005, 2009, 2013, FWS 2013).

State Recommendation for Original Closure:

The State supported modified Proposal 93-60 (see above) due to conservation concerns (FWS 1993).

Biological Background

A Yukon Flats Cooperative Moose Management Plan (Management Plan) was completed in 2002. The Alaska Department of Fish and Game (ADF&G), Division of Wildlife Conservation developed the plan in cooperation with the Yukon Flats Fish and Game Advisory Committee, the Council of Athabascan Tribal Governments (CATG), the Yukon Flats NWR, and the Office of Subsistence Management (ADF&G 2002). The purpose of the plan was to “protect, maintain, and enhance the Yukon Flats moose population and habitat, maintain traditional lifestyles, and provide opportunities for use of the moose resource” (ADF&G 2002).

The Management Plan recommends goals, objectives, strategies, and actions for the moose population, harvest, and predator management (ADF&G 2002). Current State management objectives for moose in Unit 25D were revised for the regulatory years RY15-RY19. The objective to increase the moose population by 2–5% annually was removed because this objective is not measurable based on the precision level associated with population surveys and survey frequency. The objective to conduct ADF&G, Division of Subsistence household surveys was removed because there is no longer funding to conduct these. The objective to reduce illegal and potlatch harvest of cow moose was removed because there is no method to measure this objective. The objective to maintain a minimum of 40 bulls:100 cows in the post hunt population was the only management objective retained from the RY10-RY14 report period, and the only management objective for RY15-RY19(Caikoski 2018).

Moose in Unit 25D (west) have been surveyed regularly (weather and snow conditions permitting) by the Yukon Flats NWR since 1992. Surveys have been conducted in both spring and fall. Fall surveys are preferred as cows and bulls can be differentiated. However, poor snow conditions have precluded

fall surveys in some years. Spring and fall surveys cannot be compared due to variability in survey conditions, moose behavior, distribution, and survival (Lake 2013).

Moose density in Unit 25D (west) has been consistently low over the last 50 years and is among the lowest in Interior Alaska (Lake 2013, Caikoski 2012). Between 1992 and 2018, fall moose population estimates ranged from 418-1,123 moose/year, with an annual average of 645 moose (**Figure 1**). These estimates correspond to an estimated moose density of 0.18-0.49 moose/mi², with an annual average of 0.31 moose/mi² (Lake 2013, 2015; Lake et al. 2018). From 1999-2010, the overall fall moose population appeared to be trending downward; however, the moose population estimate increased significantly in 2015, and the highest estimate on record occurred in 2018 (Lake 2015, Lake et al. 2018, **Figure 1**). While the 2018 point estimate is the highest in survey history, the 90% confidence intervals overlap with those of the 2015 and 1999 point estimates. These recent increases demonstrate that moose numbers can naturally fluctuate over a decade within a low-density equilibrium (Lake et al. 2018).

Between 1999 and 2013, spring moose population estimates ranged from 300-735 moose/year, with an annual average of 530 moose (**Figure 1**). These estimates correspond to an estimated moose density of 0.13-0.32 moose/mi², with an annual average of 0.23 moose/mi². While the spring moose population appears to be trending downward (**Figure 1**), this decline is not statistically significant (Lake 2013).

The 2021 status of the 25D (west) moose population is unknown. Note that snowfall in winter of 2019 – 2020 was above average, however, the potential impacts on the herd have not been assessed. A survey will be conducted to document current herd population status whenever pandemic safety restrictions allow. Despite recent increases in the Unit 25D (west) moose population, conservative harvest management is still recommended (Lake et al. 2018; Bertram 2021 pers comm.).

Between 1992 and 2018, the bull:cow ratio for moose in Unit 25D (west) fluctuated widely, ranging from 31-72 bulls:100 cows/year, with an annual average of 55 bulls:100 cows, reflecting light harvest pressure (Figure 2, Lake 2013, 2015; Lake et al. 2018). The most recent estimate (fall 2018) is well above management objectives (Lake et al. 2018).

Between 1992 and 2018, the calf:cow ratio for moose in Unit 25D (west) ranged from 22-53 calves:100 cows/year, averaging 34 calves:100 cows/year (**Figure 3**; Lake 2013, 2015; Lake et al. 2018). Fall calf:cow ratios of < 20 calves:100 cows, 20-40 calves:100 cows, and > 40 calves:100 cows may indicate declining, stable, and growing moose populations, respectively (Stout 2012). Over the long-term, the calf:cow ratio has exhibited a stable trend. While the fall 2015 ratio was the highest ratio ever recorded, indicating a growing population, the most recent estimate in fall 2018 indicates the population is stable (**Figure 3**; Lake 2015; Lake et al. 2018). Reasons for the high calf:cow ratio in 2015 are unclear, but likely contributed to the observed population increase in 2018 (Lake et al. 2018).

Twinning rates are an indicator of nutritional status but are only available for a few years in Unit 25D (west) from two separate radio-collar studies. Observed twinning rates in 1998 and 1999 (daily

surveys) were 66% and 61%, respectively (Bertram and Vivion 2002). Most recently, Hinkes (2015) and Lake (2016, pers. comm.) determined minimum twinning rates of 19%, 54% and 47% in 2014, 2015 and 2016, respectively. The 2014-2016 twinning rates are considered minimum because surveys were conducted weekly versus daily, increasing the possibility that moose may have already lost a calf between surveys. The reason for the low, minimum twinning rate in 2014 is unknown, but may be related to poorer body condition (low rump fat) measured in November 2013 (Hinkes 2015). However, the other twinning rates indicate good body condition and underutilized habitat (Lake 2016, pers. comm.).

Predators are the primary factor limiting the moose population in Unit 25D (west), and harvest, particularly of cows, may also be an important factor (ADF&G 2002, Caikoski 2012). A calf mortality study conducted by the Yukon Flats NWR found black and brown bears were responsible for 45% and 39% of moose calf mortality, respectively (Bertram and Vivion 2002). Wolves are likely the most important source of mortality after snowfall with elevated kill rates on adult female and young-of-the-year moose in early winter in some years (Lake et al. 2018, ADF&G 2002).

The Management Plan recommended increased harvest of black bears, brown bears, and wolves by local residents as a strategy for increasing the harvestable surplus of moose. As a result of these recommendations, the Alaska Board of Game liberalized predator regulations, including black bear baiting and community harvest, brown bear seasons and harvest limits, and wolf harvest limits (ADF&G 2002). However, harvest intensity on wolves and bears remains light, and public harvest of predators likely has not contributed to the recent observed increases of the Unit 25D (west) moose population (Lake et al. 2018).

In 2008, ADF&G completed an intensive management (IM) plan for Yukon Flats moose. A feasibility assessment of the IM plan determined that: 1) wolf harvest rates by local residents would not be sufficient to reduce the abundance of wolves, and 2) the documented black bear density is the highest in Interior Alaska and harvest by local residents would not be sufficient to reduce abundance (Caikoski 2012).

Habitat

Wildland fire and flood events in the western Yukon Flats maintain early successional shrub communities (Caikoski 2012, Bertram 2015). The quality and availability of these communities for winter moose forage is variable across the Yukon Flats. Stands of new and early to mid-successional stage willows grow in lowlands, wetlands, newly formed river terraces, and upland burned areas. There are also large stands of old growth willow, growing primarily out of the reach for moose (Bertram 2015). Browse habitat does not appear to be limiting moose at their past densities (ADF&G 2002). Current healthy calf production and recruitment, and high parturition and twinning rates indicate good nutritional health and quality winter habitat (Hinkes 2015, Lake 2015, Bertram and Vivion 2002, Caikoski 2012).

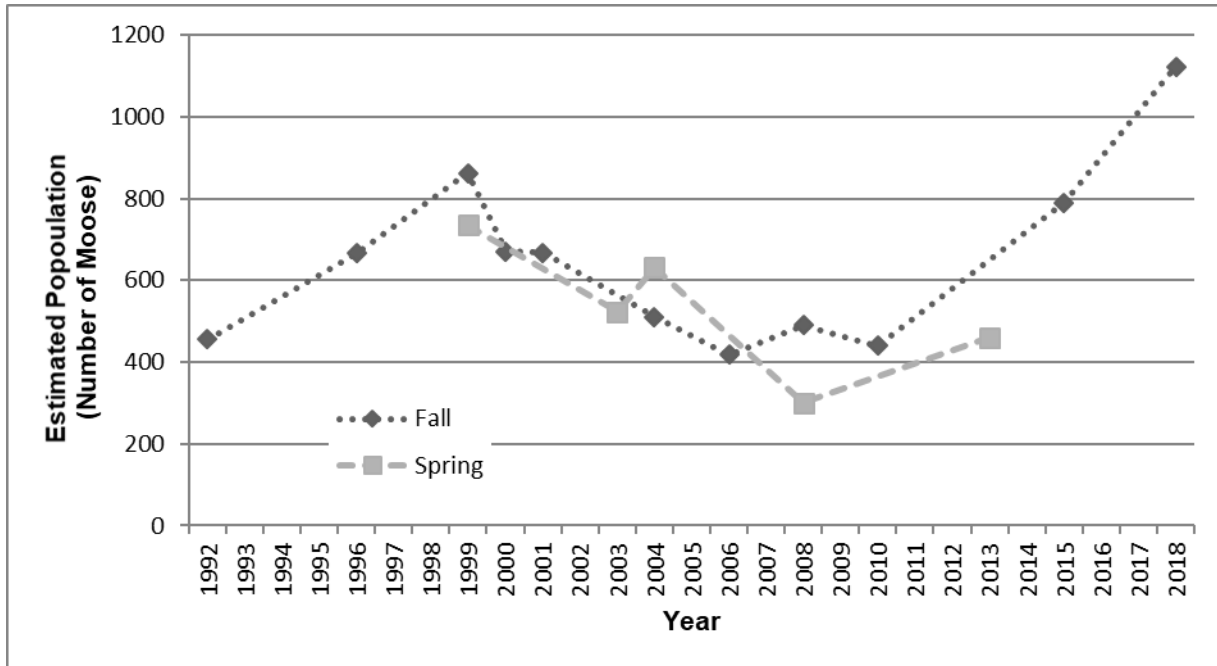


Figure 1. Estimated moose population in Unit 25D (west). Stratified random and regression analysis were used to determine estimates in 1992 and 1996, respectively. GeoSpatial Population Estimator (GSPE) was used in all other years. The sampling area in 1992 and 1996 was 1532mi². The sampling area in all other years was 2269mi² (Lake 2013, 2015; Lake et al. 2018).

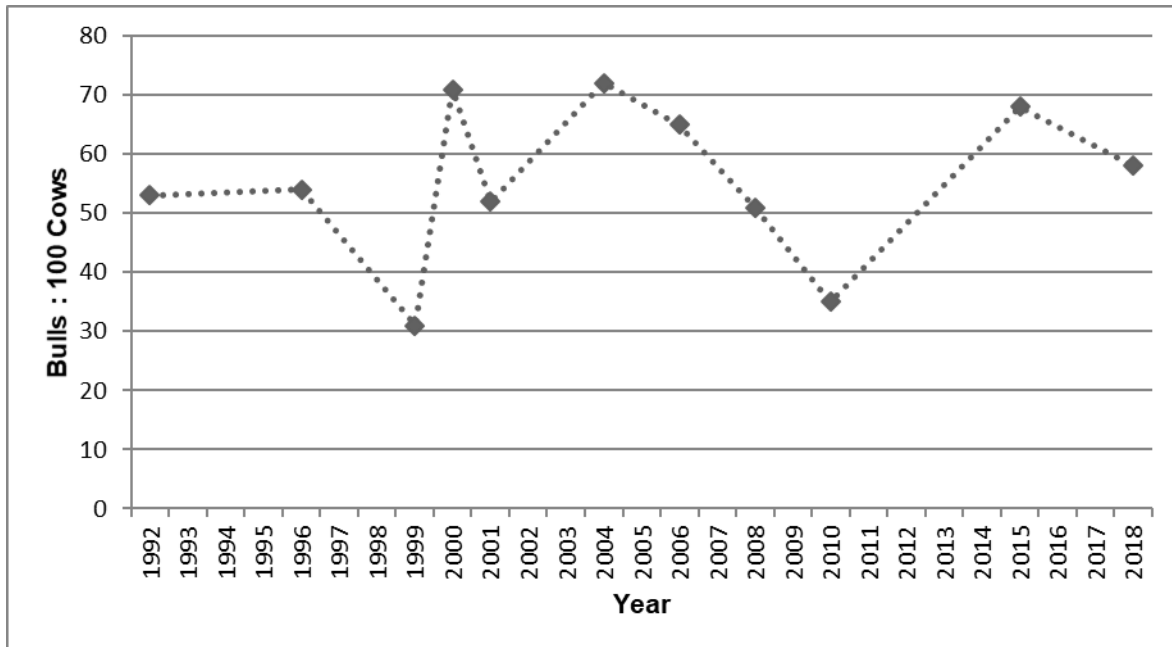


Figure 2. Estimated fall bull:cow ratios for moose in Unit 25D (west). Stratified random and regression analysis were used to determine estimates in 1992 and 1996, respectively. GeoSpatial Population Estimator (GSPE) was used in all other years (Lake 2013, 2015; Lake et al. 2018).

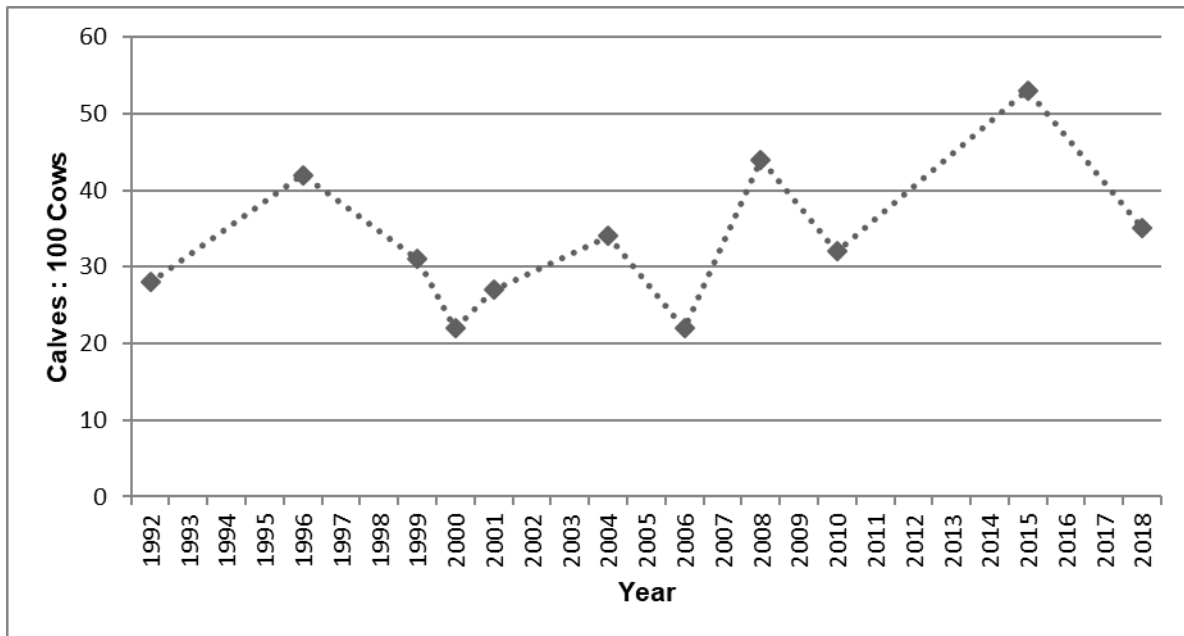


Figure 3. Estimated fall calf:cow ratios for moose in Unit 25D (west). Stratified random and regression analysis were used to determine estimates in 1992 and 1996, respectively. GeoSpatial Population Estimator (GSPE) was used in all other years (Lake 2013, 2015; Lake et al. 2018).

Harvest History

Moose are an important subsistence resource for all communities in the Upper Yukon basin (ADF&G 2002, Stevens and Maracle 2012). Sharing of harvested moose among households is common (Stevens and Maracle 2012). Most moose are harvested in September with a small fraction harvested in August (Stevens and Maracle 2012). Local hunters predominantly access moose hunting areas by boat and hunt within 30 miles of their community (Johnson et al. 2016).

Between regulatory years (RY) 2000 and 2019, total reported moose harvest by State and Federal permits in Unit 25D (west) fluctuated annually, ranging from 4-21 moose/year and averaging 13 moose/year (**Figure 4**). During the same time-period, reported moose harvest by Federal permit ranged from 3-14 moose/year, averaging 8 moose/year (**Figure 4**). On average, 65% of the reported moose harvest occurred by Federal permit, indicating that more moose are harvested on Federal public lands in Unit 25D (west) (**Figure 4**, Caikoski 2012, 2018; ADF&G 2016, 2020; OSM 2016, 2020). Over the same time-period, annual harvest success rates under Federal regulations ranged from 22%-78%, averaging 49%. Between 2000 and 2013, success rates displayed a declining trend, while success rates have trended upward since 2013 (OSM 2020).

Reporting rates by residents of Unit 25D have historically been low. Unreported harvest of moose, particularly illegal harvest of cows has remained a chronic issue (Caikoski 2012). CATG has conducted numerous household surveys of Yukon Flats communities since 1993 (Stevens and Maracle 2012). According to these data, residents of Beaver, Birch Creek, and Stevens Village harvested 9-45 moose/year between 1993 and 2010, with an annual average of 22 moose (**Figure 5**; Stevens and Maracle 2012). These data do not reveal any long-term trends, but rather that harvest fluctuates

annually due to various factors, including weather, water levels, moose distribution, fuel prices, and survey methodology and implementation (Stevens and Maracle 2012).

While the moose population and harvest vary annually, the average population harvest rate between 1993 and 2010 was 3% (575 average moose population, Caikoski 2012; 22 moose harvested/year on average, Stevens and Maracle 2012). On average 24 moose were harvested/year between 2010 and 2014 (Caikoski 2018).

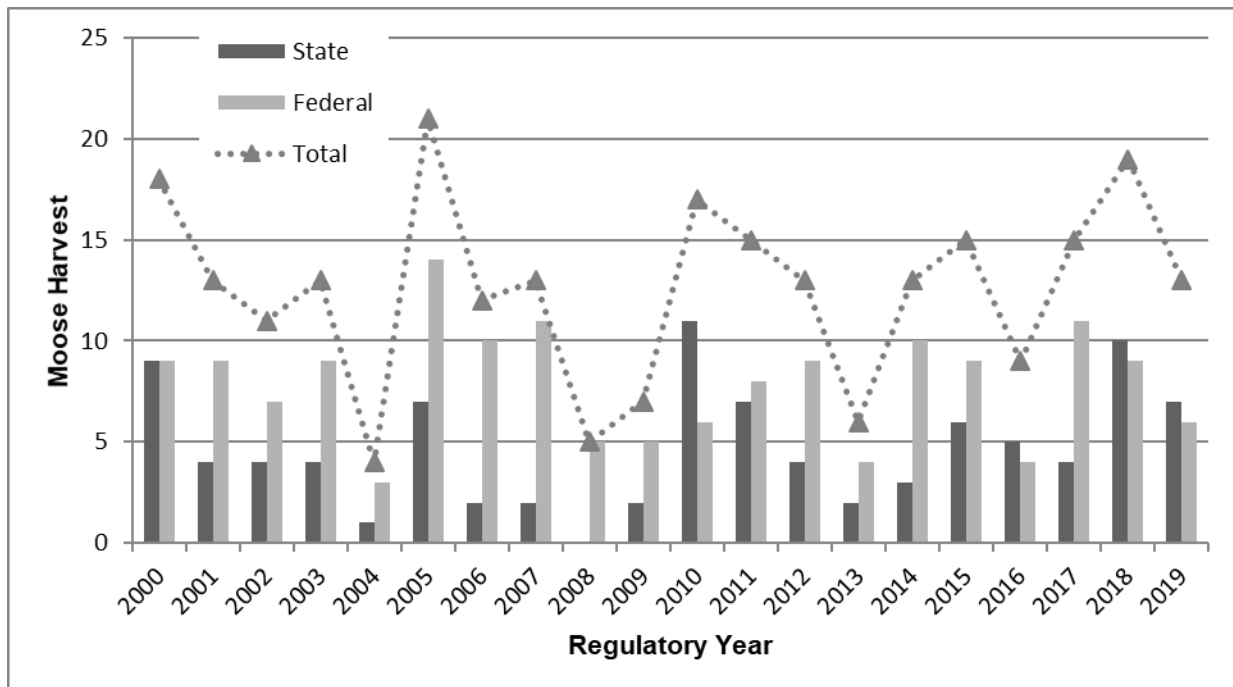


Figure 4. Reported moose harvest by State (TM940) and Federal (FM2505) permit in Unit 25D (west) (Caikoski 2012, 2018; ADF&G 2016, 2020; OSM 2016, 2020).

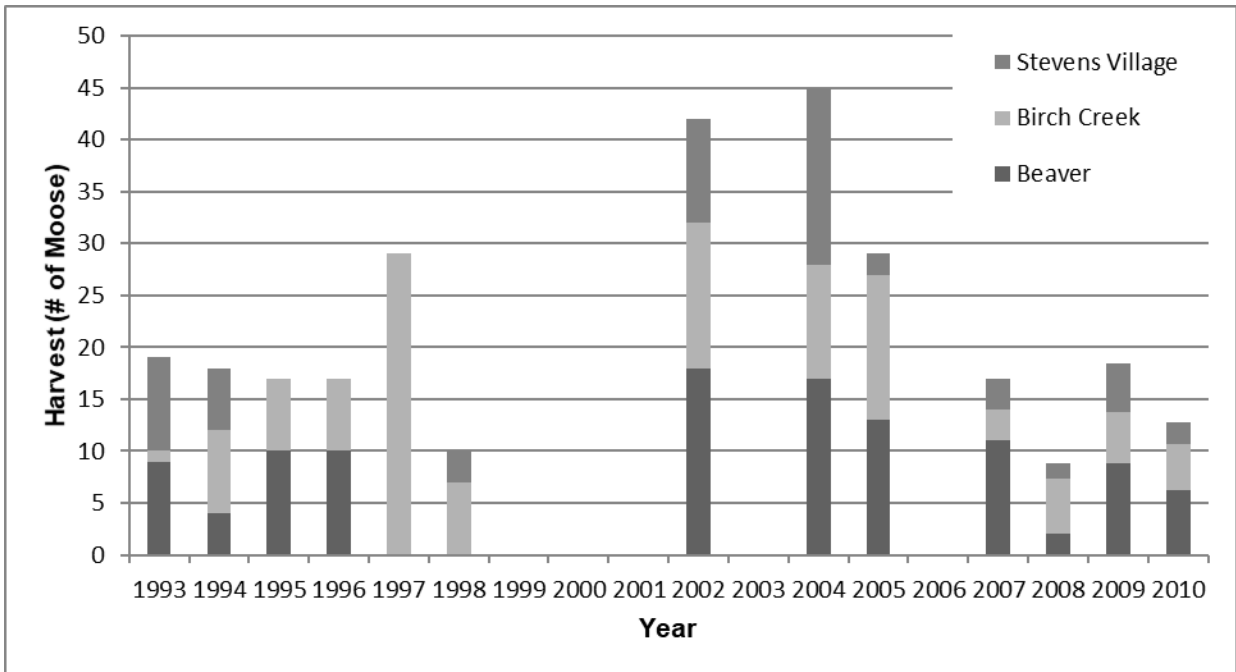


Figure 5. Moose harvest by community as reported from household surveys (Stevens and Maracle 2012).

Effects

Moose are an extremely important subsistence resource for Federally qualified subsistence users in Unit 25D (west). While reported harvest is low, actual harvest is likely considerably higher due to unreported harvests. Eliminating the closure could increase moose harvest to unsustainable levels, especially since the population has not been monitored since 2018 and its current growth trajectory is unknown.

The moose population in Unit 25D (west) has sustained greater reported harvest in the past. However, it likely cannot sustain the increase in harvest that would follow a general State hunting season. The easiest access into the hunt area is along the Yukon River or tributaries that flow into the Yukon River, and that is where the harvest would generally occur. Air taxis might place some hunters on wetlands away from the Yukon, and a few plane owners may hunt away from the Yukon River as well. The population continues to persist at low density, annual harvest is likely underestimated, and calf:cow ratios indicate a recent stable population.

PRELIMINARY OSM CONCLUSION:

- x maintain status quo**
- _ modify or eliminate the closure**

Justification

Moose are a very important subsistence resource to residents of Unit 25D (west) and the closure provides a meaningful subsistence priority as mandated by the Alaska National Interest Lands Conservation Act (ANILCA), Section 815(3). If the closure was lifted, moose harvest may increase to unsustainable levels and competition from non-Federally qualified users would not provide a meaningful subsistence priority to Federally qualified subsistence users. If the closure was extended to all users, residents of Unit 25D (west) may not be able to meet their subsistence needs. Therefore, maintaining the status quo is recommended.

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WP22-33 Executive Summary

| | |
|---|---|
| General Description | Proposal WP22-33 requests eliminating the sealing requirement for black bear in Units 11 and 12. <i>Submitted by: Wrangell-St. Elias National Park Subsistence Resource Commission (WRST SRC)</i> |
| Proposed Regulation | <p>§__.26</p> <p><i>(j) Sealing of bear skins and skulls. (1) Sealing requirements for bear apply to brown bears taken in all Units, except as specified in this paragraph (j), and black bears of all color phases taken in Units 1-7, 1113-17, and 20.</i></p> |
| OSM Preliminary Conclusion | Support Proposal WP22-33. |
| Southeast Alaska Subsistence Regional Advisory Council Recommendation | |
| Southcentral Alaska Subsistence Regional Advisory Council Recommendation | |
| Kodiak/Aleutians Subsistence Regional Advisory Council Recommendation | |
| Bristol Bay Subsistence Regional Advisory Council Recommendation | |
| Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation | |
| Western Interior Alaska Subsistence Regional | |

WP22-33 Executive Summary

| | |
|---|------|
| Advisory Council Recommendation | |
| Seward Peninsula Subsistence Regional Advisory Council Recommendation | |
| Northwest Arctic Subsistence Regional Advisory Council Recommendation | |
| Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation | |
| North Slope Subsistence Regional Advisory Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP22-33

ISSUES

Proposal WP22-33, submitted by the Wrangell-St. Elias National Park Subsistence Resource Commission (WRST SRC), requests eliminating the sealing requirement for black bear in Units 11 and 12.

DISCUSSION

The proponent states that people living in remote locations need to drive to an Alaska Department of Fish and Game (ADF&G) office to have bears sealed. For one SRC member, this is roughly 260 miles or more round-trip. The extra salvage necessary to seal subsistence black bears in Units 11 and 12 is an undue hardship for subsistence hunters who are mainly interested in the meat.

The proponent further states that Federal regulations are currently more stringent than State regulations, which only require harvest tickets, but not sealing. The proponent states that harvest ticket reports provide sufficient harvest information to monitor and protect black bear populations without sealing, and there is not currently a conservation concern for black bear. One SRC member noted that numerous sightings from fall flights indicate Unit 11 has a robust black bear population, while another member has personally harvested two bears in one year out of a small valley and within a couple days, new bears had moved into the area.

The proponent additionally requests that harvest ticket and sealing requirements be included in the unit specific regulations, instead of with the general provisions in the front of the regulations booklet, stating this would be clearer and easier for subsistence users to understand as the current layout of the Federal Subsistence Management Regulations booklet is confusing.

The proponent's request that bear sealing and permit/harvest ticket requirements be more clearly presented in the public regulatory booklet is outside the scope of a regulatory proposal. However, the suggestion has been forwarded to the appropriate reviewer.

Existing Federal Regulation

§__.26

(j) Sealing of bear skins and skulls. (1) Sealing requirements for bear apply to brown bears taken in all Units, except as specified in this paragraph (j), and black bears of all color phases taken in Units 1-7, 11-17, and 20.

Proposed Federal Regulation

§__.26

(j) Sealing of bear skins and skulls. (1) Sealing requirements for bear apply to brown bears taken in all Units, except as specified in this paragraph (j), and black bears of all color phases taken in Units 1-7, ~~11~~13-17, and 20.

Existing State Regulation

5 AAC 92.165. Sealing of bear skins and skulls

(a) Sealing is required for hides and skulls of brown bear taken in any unit in the state, hides and skulls of black and brown bear taken in any unit in the state before the hide or skull is sold, hides and skulls of black bear of any color variation taken from January 1 through May 31, and skulls of black bear of any color variation taken from June 1 through December 31 in Units 1 - 7, 14(A), 14(C), 15 - 17, and 20(B). The seal must remain on the skin until the tanning process has commenced. A person may not possess or transport the untanned skin or skull of a bear taken in a unit where sealing is required, or export from the state the untanned skin or skull of a bear taken anywhere in the state, unless the skin or the skull, or both as required in this section have been sealed by a department representative within 30 days after the taking, or a lesser time if requested by the department

Extent of Federal Public Lands/Waters

Unit 11 is comprised of 87% Federal public lands and consist of 84% National Park Service (NPS) managed lands, 3% U.S. Fish and Wildlife Service (USFWS), and 0.1% Bureau of Land Management (BLM) managed land.

Unit 12 is comprised of 60% Federal public lands and consist of 48% NPS managed lands, 11% USFWS managed lands, and 1% BLM managed lands.

Customary and Traditional Use Determinations

Rural residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12 have a customary and traditional use determination for black bear in Unit 11 north of Sanford River.

Rural residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Nabesna Road (mileposts 25-46), Slana, Tazlina, Tok Cutoff Road (mileposts 79-110), Tonsina, and Unit 11 have a customary and traditional use determination for black bear in Unit 11 remainder.

The Federal Subsistence Board has not made a customary and traditional use determination for black bear in Unit 12. Therefore, all rural residents of Alaska may harvest this species in this unit.

Special requirements of NPS lands: Under the guidelines of ANILCA, NPS regulations identify Federally qualified subsistence users in National Parks and Monuments by: 1) identifying residents zone communities which include a significant concentration of people who have customarily and traditionally use subsistence resources on park lands/ and 2) identifying and issuing subsistence use permits to individuals residing outside of the resident zone communities who have a personal or family history of subsistence use.

Regulatory History

During the Russian Period in Alaska (1799 – 1867), the Russian American Company exported black bear skins to St. Petersburg and Asia (Bockstoce 2009). The sale of black bear skins was generally allowed until 1971 when the State banned the practice of selling black bear skins and implemented mandatory sealing requirements (State of Alaska 1971). Currently, however, black bear hides and skulls may be sold after sealing, but black bear trophies may not be sold (5 AAC 92.200). The State has allowed the sale of handicraft items made from black bear skins since 1998 (5 AAC 92.200), and the Federal Program adopted similar regulations in 2004 (CFR §242.25 (j)).

Since 2008, all Alaska resident hunters must obtain a State harvest ticket and report their hunting efforts. Both units continue to require reporting of any harvest of a black bear. If parts of the black bear are to be sold, sealing is required.

In 2010, the State re-classified black bears as furbearing animals as well as game animals (5AAC 92.9900(a)(32)). Consequently, during State hunts, black bears could be taken with a trap, if trapping regulations were adopted. They have not been adopted.

The Alaska Board of Game (BOG) removed the requirement for getting a bear hide or skull sealed for Unit 11 in regulatory year (RY) 2011/12 and for Unit 12 in RY 2010/11 because the requirement for both harvest tickets and sealing was determined to be redundant (ADF&G BOG 2011, 2011).

Sealing requirements for black bear in Units 11 and 12 have not changed under Federal regulations since the inception of the program in 1990 adopting then current state regulations. Under existing federal regulations, the salvage of the hide and edible meat is required. When sealing is required, hunters must additionally remove the skull from the field.

Biological Background

Unit 11 has not had population surveys conducted. Through field observations and harvest data it is believed that black bear populations are abundant within areas of suitable habitat. NPS biologists estimated there to be 100-200 black bears/1,000 km² around the McCarthy area in 2001 (Robbins 2014). Unit 12 has not had population surveys conducted. Through limited radiotelemetry data, the Unit 12 population was estimated to be 700-1,000 bears in 2012 (Wells 2014).

Harvest History

As much of Unit 11 is National Park and Preserve lands, harvest pressure is primarily limited to Federally qualified subsistence users (Robbins 2014). The number of black bears reported harvested fluctuated each year from 8 – 31 bears annually between 1998 and 2012 (**Figure 1**).

Within Unit 12, there is National Park/Preserve and USFWS lands with historically low human use of black bears, despite liberal hunting regulation (Wells 2014). The reported number of bears harvested fluctuated each year from 23- 68 bears annually between 1995 and 2017.

Circumstantial evidence indicates that berry abundance may affect bear harvest. During years of low berry production, bears are believed to travel more and/or may be more likely attracted to human wildlife kills or food. These behaviors increase the vulnerability of the bears to hunters (Wells 2014). Years with a late spring can delay the emergence of vegetation, which can alter the distribution of the bears, and a hunter's success (Robbins 2014). Local residents primarily harvest bears in the spring, as they are an important meat source.

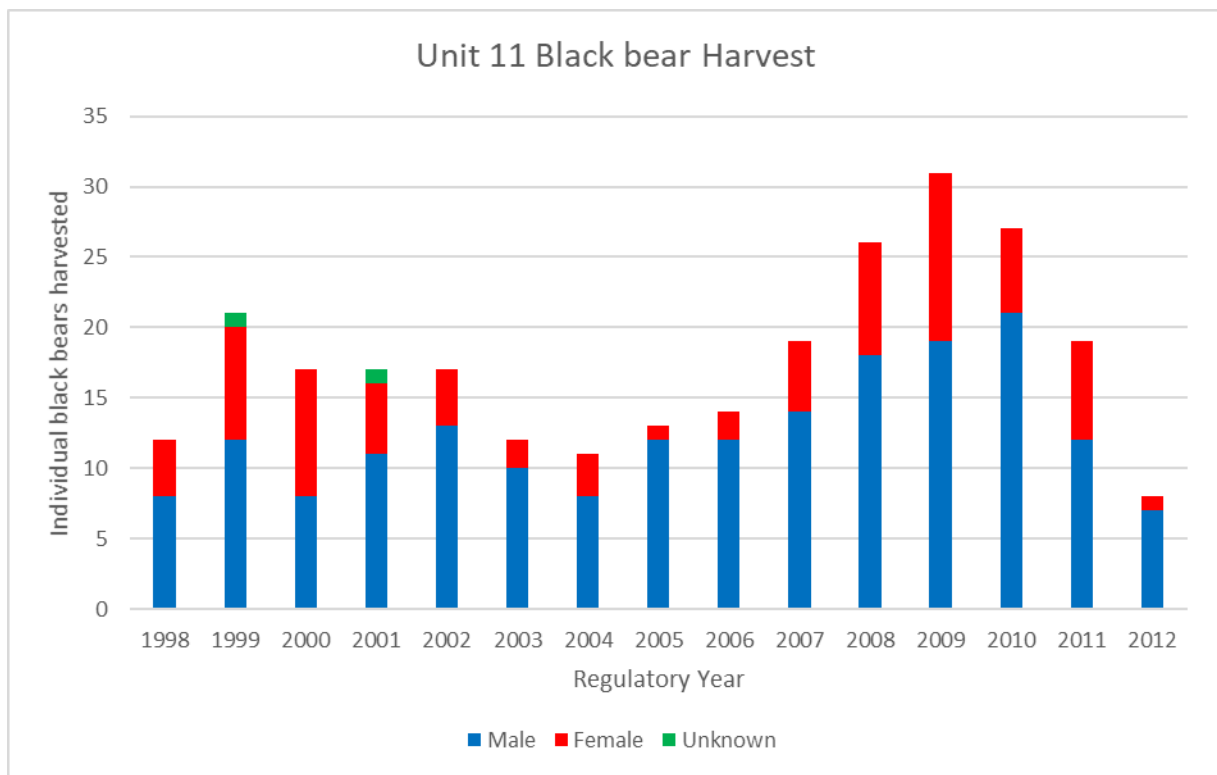


Figure 1. Number of black bears harvested from Unit 11 between 1998 and 2012 (Robbins 2011, 2014; Tobey 2005, 2008).

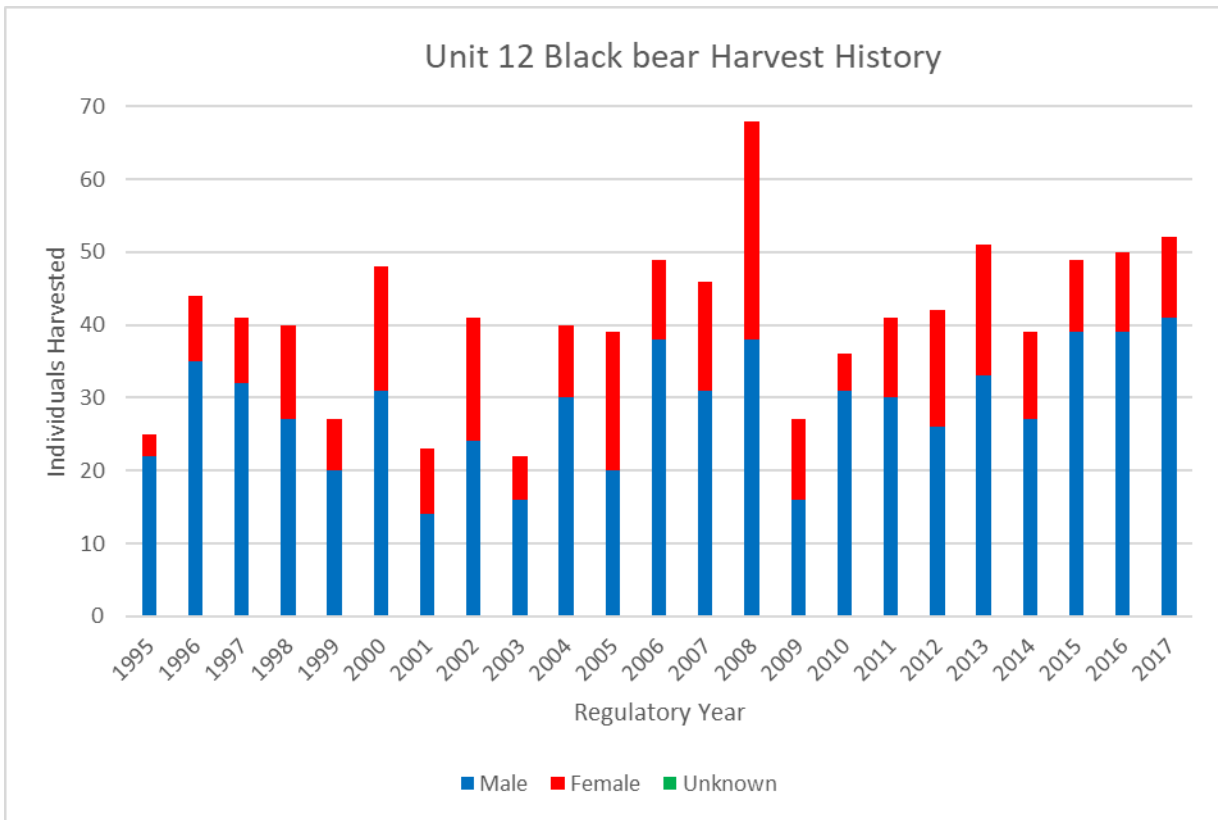


Figure 2. Number of black bears harvested from Unit 12 between 1995 and 2012 (Wells 2014, 2021).

Effects of the Proposal

The proposal, if adopted, would remove the requirement for Federally qualified subsistence users to have the skull and/or skin of a black bear sealed in Units 11 and 12. This proposal would simplify the process of harvesting black bears for Federally qualified subsistence user by removing this unnecessary requirement. Subsistence users would no longer be required to remove the head/skull from the field for sealing and they would no longer need to make special trips to an ADF&G office just to seal bears.

The State removed this requirement over 10 years ago, resulting in Federal regulations being more restrictive, which is contrary to the rural subsistence priority mandated by ANILCA. While Federally qualified subsistence users can hunt under State regulations in parts of these units, they cannot in WRST National Park where only Federal subsistence regulation apply. Therefore, any bear currently harvested within the national park must be sealed. If this proposal is adopted, the State and Federal regulations for sealing would align with each other, reducing regulatory complexity and user confusion.

While current biological data for black bears in these units are lacking, there are no current conservation concerns regarding black bears in Unit 11 or Unit 12 as evidenced through extremely liberal harvest limits and seasons under both State and Federal regulations as well as anecdotal observations from local users.

OSM PRELIMINARY CONCLUSION

Support Proposal WP22-33.

Justification

The sealing requirement causes unnecessary hardship for Federally qualified subsistence users when they harvest a black bear within Unit 11 or Unit 12 and there are no conservation concerns. This proposal would reduce regulatory complexity and user confusion by aligning the State and Federal regulations for both Unit 11 and Unit 12.

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State of Alaska. 1971. *Alaska Game and Guiding Regulations #12*. ADF&G, Juneau. 82 pages.

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Wells, J. J. 2021. Black bear management report and plan, Game Management Units 12 and 20E: Report period 1 July 2013–30 June 2018, and plan period 1 July 2018–30 June 2023. ADF&G, Species Management Report and Plan ADF&G/DWC/SMR&P-2021-12, Juneau, AK.

WP22-34 Executive Summary

| | |
|---|--|
| General Description | Proposal WP22-34 requests to change the salvage requirement to a “bone in” for sheep taken in Units 11 and 12. <i>Submitted by: Seth Williams</i> |
| Proposed Regulation | <p>§__.26(h) Removing harvest from the field.</p> <p><i>(5) You must leave all edible meat on the bones of the front quarters, hind quarters and ribs of sheep harvested in Units 11 and 12 until you remove the meat from the field or process it for human consumption.</i></p> |
| OSM Preliminary Conclusion | Oppose |
| Southcentral Alaska Subsistence Regional Advisory Council Recommendation | |
| Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP22-34

ISSUES

Wildlife Proposal WP22-34, submitted by Seth Wilson of Glennallen, requests to change the salvage requirement to a “bone in” for sheep taken in Units 11 and 12.

DISCUSSION

The proponent states there should be a meat-on-bone salvage requirement for the two front quarters, two rear quarters and ribs for all sheep taken in Units 11 and 12. The proponent states that deboning the meat in the field may lead to waste of meat that is left on the bone. Keeping the meat on the bone also allows for better meat handling, ensuring that all edible meat is cool and dry until it is out of the field.

Existing Federal Regulation

None

Proposed Federal Regulation

§__.26(h) Removing harvest from the field.

(5) You must leave all edible meat on the bones of the front quarters, hind quarters and ribs of sheep harvested in Units 11 and 12 until you remove the meat from the field or process it for human consumption.

Relevant Federal Regulations

§__.25(a) Definitions

Edible meat means the breast meat of ptarmigan and grouse and those parts of caribou, deer, elk, mountain goat, moose, musk oxen, and Dall sheep that are typically used for human consumption, which are: The meat of the ribs, neck, brisket, front quarters as far as the distal (bottom) joint of the radius-ulna (knee), hindquarters as far as the distal joint (bottom) of the tibia-fibula (hock) and that portion of the animal between the front and hindquarters; however, edible meat of species listed in this definition does not include: Meat of the head, meat that has been damaged and made inedible by the method of taking, bones, sinew, and incidental meat reasonably lost as a result of boning or close trimming of the bones, or viscera. For black bear, brown and grizzly bear, “edible meat” means the meat of the front quarter and hindquarters and meat along the backbone (backstrap).

Salvage means to transport the edible meat, skull, or hide, as required by regulation, of a regulated fish, wildlife, or shellfish to the location where the edible meat will be consumed by humans or processed for human consumption in a manner that saves or prevents the edible meat from waste, and preserves the skull or hide for human use.

§__.25(j) Utilization of fish, wildlife, or shellfish.

(3) You must salvage the edible meat of ungulates, bear, grouse, and ptarmigan.

(5) Failure to salvage the edible meat may not be a violation if such failure is caused by circumstances beyond the control of a person, including theft of the harvested fish, wildlife, or shellfish, unanticipated weather conditions, or unavoidable loss to another animal.

§__.26(h) Removing harvest from the field.

(1) You must leave all edible meat on the bones of the front quarters and hind quarters of caribou and moose harvested in Units 9, 17, 18, and 19B prior to October 1 until you remove the meat from the field or process it for human consumption.

(2) You must leave all edible meat on the bones of the front quarters, hind quarters, and ribs of moose harvested in Unit 21 prior to October 1 until you remove the meat from the field or process it for human consumption.

(3) You must leave all edible meat on the bones of the front quarters, hind quarters, and ribs of caribou and moose harvested in Unit 24 prior to October 1 until you remove the meat from the field or process it for human consumption. Meat of the front quarters, hind quarters, or ribs from a harvested moose or caribou may be processed for human consumption and consumed in the field; however, meat may not be removed from the bones for purposes of transport out of the field.

(4) You must leave all edible meat on the bones of the front quarters, hind quarters, and ribs of caribou and moose harvested in Unit 25 until you remove the meat from the field or process it for human consumption.

Existing State Regulation

None

Relevant State Regulations

5 AAC 92.220. Salvage of game meat, furs, and hides

(d) A person taking game not listed in (a) of this section shall salvage for human consumption all edible meat, as defined in 5 AAC 92.990. In addition,

(1) for moose and caribou taken before October 1 in Unit 9(B), Unit 17, Unit 18, those portions of Unit 19(A) within the Holitna/Hoholitna Controlled Use Area, and Unit 19(B), the edible meat of the front quarters and hindquarters must remain naturally attached to the bone until the meat is transported from the field or is processed for human consumption;

(2) for caribou taken before October 1 in Unit 21(A), the edible meat of the front quarters and hindquarters must remain naturally attached to the bone until the meat has been transported from the field or is processed for human consumption;

(3) for moose taken before October 1 in Units 13, 19, 21, 23, 24, and 25, for caribou taken before October 1 in Units 13, 19, 21(A), 21(E), 23, 24, and 25(A), and for bison taken before October 1 in Units 19, 21(A), and 21(E), the edible meat of the front quarters, hindquarters, and ribs must remain naturally attached to the bone until the meat has been transported from the field or is processed for human consumption;

(4) repealed 7/1/2009;

(5) repealed 7/1/2009.

(6) for moose and caribou taken under a community subsistence harvest permit in the area described in 5 AAC 92.074(d), the edible meat of the front quarters, hindquarters, ribs, brisket, neck and back bone must remain naturally attached to the bone until the meat has been transported from the field or is processed for human consumption.

5 AAC 92.990. Definitions

(a) In addition to the definitions in AS 16.05.940, in 5 AAC 84 - 5 AAC 92, unless the context requires otherwise,

(26) "edible meat" means, in the case of a big game animal, except a bear, the meat of the ribs, neck, brisket, front quarters, hindquarters, and the meat along the backbone between the front and hindquarters; in the case of a bear, the meat of the front quarters and hindquarters and meat along the backbone (backstrap); in the case of small game birds, except for cranes, geese, and swan, the meat of the breast; in the case of cranes, geese, and swan, the meat of the breast, back, the meat of the femur and tibia-fibula (legs and thighs), and the meat of the wings, excluding the metacarpals; however, "edible meat" of big game or small game birds does not include meat of the head, meat that has been damaged and made inedible by the method of taking, bones, sinew, incidental meat reasonably lost as a result of boning or a close trimming of the bones, or viscera;

Extent of Federal Public Lands/Waters

Unit 11 is comprised of 86.9% Federal public lands and consist of 83.6% National Park Service (NPS) managed lands and 3.3% U.S. Forest Service (USFS) managed lands.

Unit 12 is comprised of 59.7% Federal public lands and consist of 48.0% NPS managed lands, 10.8% U.S. Fish and Wildlife Service (USFWS) and 0.9% Bureau of Land Management (BLM) managed lands.

Customary and Traditional Use Determinations

Rural residents of Unit 12, Chistochina, Chitina, Copper Center, Dot Lake, Gakona, Glennallen, Gulkana, Healy Lake, Kenny Lake, Mentasta Lake, Slana, McCarthy/South Wrangell/South Park, Tazlina, Tonsina, residents along the Nabesna Road - Mileposts 0-46 (Nabesna Road), and residents along the McCarthy Road - Mileposts 0-62 (McCarthy Road) have a customary and traditional use determination for sheep in Unit 11, north of the Sanford River.

Rural residents of Chisana, Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, McCarthy/South Wrangell/South Park, Tazlina, Tonsina, residents along the Tok Cutoff – Mileposts 79-110 (Mentasta Pass), residents along the Nabesna Road – Milepost 0-46 (Nabesna Road), and residents along the McCarthy Road – Milepost 0-62 (McCarthy Road) have a customary and traditional use determination for sheep in Unit 11, remainder.

Residents of Unit 12, Chistochina, Dot Lake, Healy Lake, and Mentasta Lake have a customary and traditional use determination for sheep 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.

Regulatory History

There is currently no “bone in” requirement for sheep hunters in either Federal or State regulation. Although such regulations exist for moose and caribou in both Federal and State hunts as well as for bison in State hunts, there has never been any Federal Subsistence Board (Board) action for bone in requirements for sheep. Proposals WP12-63 in Unit 25 and WP03-29 in Unit 18 implemented this requirement for moose and caribou to avoid meat spoilage while the animal is transported out of the field.

Current Events

The proponent of this proposal has also submitted the same language to the Alaska Board of Game (BOG) for Unit 11 as Proposal 67 for consideration during their January 2022 meeting (ADF&G 2021).

Effects of the Proposal

If this proposal is adopted, subsistence users harvesting sheep in Units 11 and 12 under Federal regulations would be required to leave the edible meat of the front quarters, hind quarters and ribs on

the bones until the meat was removed from the field or was processed for human consumption. If the BOG does not adopt proposal 67, which is only for Unit 11, and the Board does adopt this proposal, for Units 11 and 12, Federal regulations regarding salvage would be more restrictive than State regulations. Federally qualified subsistence users would still be able to harvest and pack out sheep under State regulations, except within Wrangell-St. Elias National Park, which is only open to subsistence hunting under Federal regulations.

This restriction would burden sheep hunters who would have to pack out extra weight when hunting on foot, potentially resulting in multiple trips. However, this regulation may ensure more meat would be salvaged for subsistence uses. It may also provide an example for the BOG to follow.

If this proposal is not adopted, no effects on subsistence uses, other uses, or wildlife populations are anticipated.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP22-34.

Justification

The proposed regulation would place an undue burden upon subsistence sheep hunters. Most of whom travel by foot many miles just to harvest a Dall sheep. Unless the Federal Subsistence Regional Advisory Councils have reason to support this proposal, there is not enough evidence to justify placing these restrictions on Federally qualified subsistence users. The proposed regulation would apply to only Federally qualified subsistence users harvesting sheep on Federal public lands under Federal regulations, and it would not affect non-Federally qualified users. Federal subsistence wildlife regulations would be more restrictive than State regulations concerning a hunters' responsibility to remove sheep meat from the field.

LITERATURE CITED

Alaska Department of Fish and Game (ADF&G) 2021. Board of Game 2021/2022 Proposal Book. <https://www.adfg.alaska.gov/index.cfm?adfg=gameboard.proposalbook>, accessed June 10, 2021. Boards Support Section. Juneau, AK.

WP22-35 Executive Summary

| | |
|---|---|
| General Description | Wildlife Proposal WP22-35 requests establishing a may-be-announced caribou season in Unit 11 with a harvest limit of one bull by Federal permit and an §804 analysis. <i>Submitted by: the Ahtna Intertribal Resource Commission.</i> |
| Proposed Regulation | <p align="center">Unit 11—Caribou</p> <p><i>Season may be announced when Nelchina caribou are present in Unit 11.</i></p> <p><i>One bull caribou by Federal permit for Federally qualified subsistence users identified through a Section 804 subsistence user prioritization analysis.</i></p> <p align="right">No Federal open season <i>May be announced</i></p> |
| OSM Preliminary Conclusion | <p>Support Proposal WP22-35 with modification 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 via a delegation of authority letter only (Appendix 1).</p> <p>The modified regulation should read:</p> <p align="center">Unit 11—Caribou</p> <p><i>One bull by Federal registration permit</i></p> <p align="right">No Federal open season <i>May be announced</i></p> |
| Southcentral Subsistence Regional Advisory Council | |
| Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS
WP22-35

ISSUES

Wildlife Proposal WP22-35, submitted by the Ahtna Intertribal Resource Commission (AITRC), requests establishing a may-be-announced caribou season in Unit 11 with a harvest limit of one bull by Federal permit and an §804 analysis.

DISCUSSION

The proponent states:

AITRC understands that recent scientific research and assessment has determined that the Mentasta Caribou Herd (MECH) population has stabilized at a level lower than that envisioned by the now outdated Mentasta Caribou Herd Management Plan as necessary in order to resume subsistence caribou hunting opportunities in Unit 11. We understand that the population status of the MECH is not limited by the condition of the habitat within Unit 11 but has stabilized at its current population level most likely because of high levels of predation.

AITRC also understands from Alaska Department of Fish and Game (ADF&G) Area Management Biologist that recent genetic analysis of mitochondrial DNA has demonstrated that the MECH consists of genetically discrete population of cow caribou that have a high fidelity to the Mentasta range, but that the bull caribou cannot be distinguished genetically from those of the adjacent and often overlapping Nelchina Caribou Herd (NCH). Furthermore, AITRC understands that Nelchina bull caribou collar data demonstrate that Nelchina bull caribou frequent the Mentasta herd such that a bulls-only caribou hunt in Unit 11 during times the Nelchina herd is present in Unit 11 would not affect the biological status of the MECH because Mentasta-distinct cow caribou would not be open to hunting.

With this scientific information in mind, and to resume and continue subsistence uses of caribou in Unit 11 within the Ahtna Traditional Use Territory after more than a generation of no hunting, AITRC proposes to establish a limited bull-only caribou hunt in Unit 11 during times when the NCH is present in Unit 11. Because the harvestable surplus of bull caribou may be insufficient to support all Federal subsistence users with a customary and traditional use determination for caribou in Unit 11, AITRC specifically requests that a limited bulls-only caribou hunt be limited through an ANILCA Section 804 Subsistence User Prioritization Analysis to reduce the pool of eligible Federal subsistence users such that only those Federally qualified rural residents most customarily and traditionally dependent upon caribou in Unit 11 are provided the opportunity to receive a Unit 11 Federal permit for a bull caribou

Note: This analysis only considers the establishment of a season and harvest limit. The §804 analysis may be conducted at a later time if a caribou hunt is opened in Unit 11.

Existing Federal Regulation

Unit 11—Caribou

No Federal open season

Proposed Federal Regulation

Unit 11—Caribou

Season may be announced when Nelchina caribou are present in Unit 11. ~~No Federal open season~~ May be announced

One bull caribou by Federal permit for Federally qualified subsistence users identified through a Section 804 subsistence user prioritization analysis.

Existing State Regulation

Unit 11—Caribou

No open season

Extent of Federal Public Lands/Waters

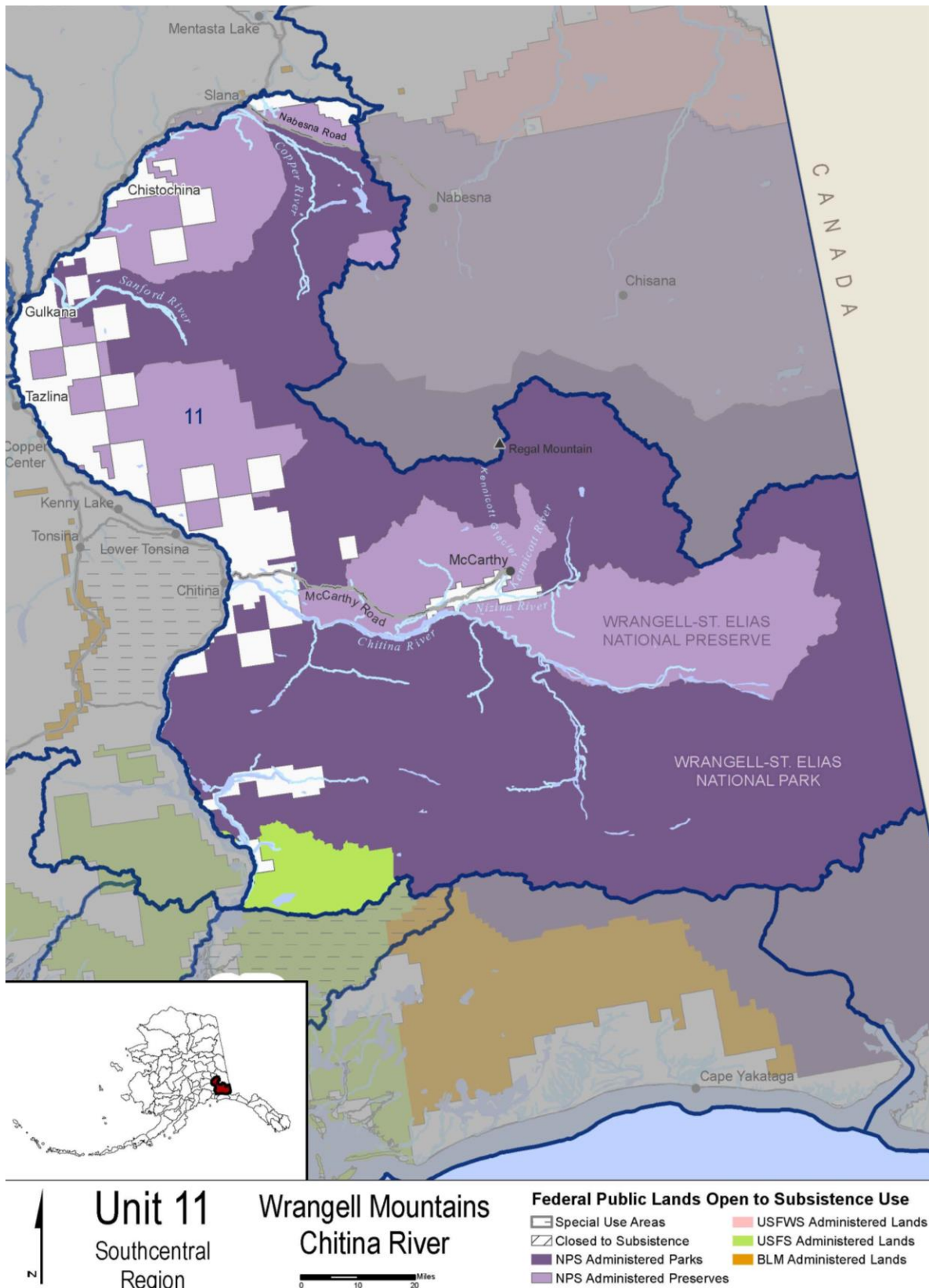
Unit 11 is comprised of 86.8% Federal public lands and consist of 83.5% National Park Service (NPS) managed lands, 3.2% U.S. Forest Service (USFS) managed lands, and 0.1% Bureau of Land Management (BLM) managed lands (**Map 1**).

Customary and Traditional Use Determinations

Rural residents of Units 11, 12, 13A-D, Chickaloon, Healy Lake and Dot Lake have a customary and traditional use determination for caribou in Unit 11, north of the Sanford River.

Rural residents of Units 11, 13A-D, and Chickaloon have a customary and traditional use determination for caribou in Unit 11, remainder.

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.



Map 1. Unit 11

Regulatory History

There has not been a Federal season for caribou hunting in Unit 11 for most of the last three decades, and there have been few proposals to establish one. In 1993, Proposal P93-94 was adopted by the Federal Subsistence Board (Board) to close Federal public lands to caribou hunting in Unit 11. The combination of low caribou numbers and low recruitment were direct indicators of a continuing conservation concern which warranted protection of the small MECH population. Under ANILCA Section 815(3), restricting the taking of fish and wildlife on Federal public lands can be authorized if necessary, for the conservation of healthy populations.

In 1996, Proposal 96-17 submitted by the NPS proposed establishing a limited caribou hunt (15-bull quota) based on the objectives of the Mentasta Caribou Herd Cooperative Management Plan (1995), which was signed by Wrangell-St. Elias National Park and Preserve (WRST), the Alaska Department of Fish and Game (ADF&G), and Tetlin National Wildlife Refuge (NWR). The cooperative plan was also endorsed by both the Southcentral and Eastern Interior Alaska Subsistence Regional Advisory Councils (Councils). The management objectives in the cooperative plan were based on productivity and not the population size. Therefore, the cooperative plan called for establishing a limited hunt despite a declining population due to increased productivity. The Board adopted Proposal P96-17 with modification to reopen the caribou season only to residents of Chitina, Chistochina, Copper Center, Gakona, Gulkana, Mentasta, and Tazlina with a quota of 15 bulls. These communities were identified consistent with the requirements of ANILCA Section 804.

In 1998, Proposal P98-023 was adopted by the Board to close all caribou hunting within Unit 11 because calf recruitment was below the management objectives stated in the Mentasta Caribou Herd Cooperative Management Plan (1995). ADF&G supported the closure because the State season for Mentasta caribou in this area had been closed for several years.

In 2012, the Board rejected Proposal WP12-23, which requested to establish a season of October 21-March 31 for caribou in the portion of Unit 11 within WRST. The Board rejected the proposal because of cited conservation concerns for the MECH, including chronically low numbers, low recruitment, and concerns about incidental take.

Also, in 2012, Proposal WP12-24 submitted by Cheesh' Na Tribal Council was rejected by the Board to establish a season for one bull caribou from Aug. 1– Sept. 30 in Unit 11 by Federal registration permit. The rejection cited conservation concerns for the Mentasta Caribou Herd.

Biological Background

Caribou in Unit 11 may be part of the NCH or MECH as the ranges of these herds overlap (**Map 2**). NCH and MECH are considered distinct herds because females calve in separate areas, although 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).

Nelchina Caribou Herd

The NCH calving grounds and summer range lie within Unit 13. The rut also generally occurs within Unit 13. About 60-95% of the NCH overwinters in Unit 20E, although Nelchina caribou also overwinter in Unit 12 and across northern portions of Units 13 and 11 (Schwanke and Robbins 2013). Wintering areas vary widely from year to year. Sometimes the herd splits into 2 or 3 groups to winter in different areas (Hatcher 2021 pers. comm.). The Nelchina herd range overlaps the Mentasta herd range in Units 20E, 12, and the northern portion of Unit 11 (**Map 2**). The number of Nelchina bulls overwintering in Unit 11 as well as the timing of their arrival/departure into the unit varies from year to year. (Putera 2021, pers. comm.). Winter competition with the Fortymile caribou herd (FCH) in Unit 20E may be impacting the NCH and range conditions. While the location and timing of the NCH calving grounds in Unit 13 remain static, use of other seasonal ranges varies with resource availability and snow cover (Schwanke and Robbins 2013).

State management goals and objectives for the NCH are based on the principle of sustained yield and are as follows (Schwanke and Robbins 2013):

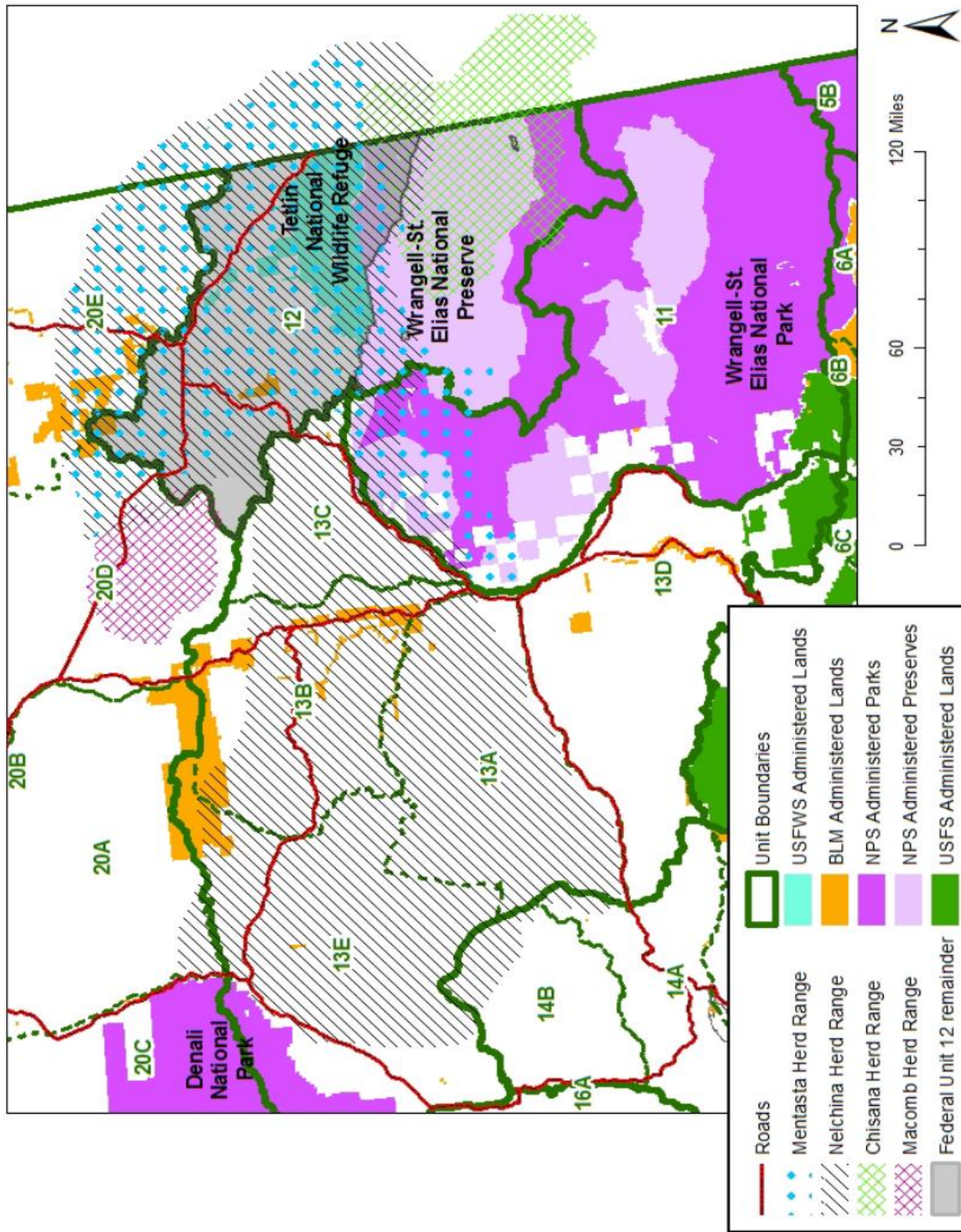
- Maintain a fall population of 35,000–40,000 caribou, with a minimum of 40 bulls:100 cows and 40 calves:100 cows.
- Provide for the annual harvest of 3,000–6,000 caribou.

The State manages the NCH for maximum sustained yield, principally by annual adjustments in harvest quotas. The population of the NCH has fluctuated over time, influenced primarily by harvest (Schwanke and Robbins 2013). Between 2003 and 2019, the NCH population ranged from 31,114 to 53,500 caribou and averaged 40,888 caribou. However, the herd exceeded State population objectives from 2010 to 2017 and in 2019 (**Table 1**). Reduced predation resulting from intensive wolf management programs intended to benefit moose in Unit 13 and the FCH in Units 12 and 20 may have contributed to NCH population increases (Schwanke and Robbins 2013, ADF&G 2021).

The population has fluctuated since climbing to 41,400 animals in 2017 (Rinaldi pers. comm. 2019 as cited in OSM 2020a). In October 2018, the NCH was estimated to be 33,229, which is below the lower State population objective (Hatcher 2020, pers. comm. as cited in OSM 2020a). A combination of liberal hunts throughout their range, severe winter conditions in the eastern part of their range that resulted in high over-winter mortality, emigration of some animals to the FCH, and lower than anticipated productivity reduced the NCH population (Rinaldi pers. comm. 2019 as cited in OSM 2020a). The summer of 2019, the NCH minimum population estimate increased to 53,500 caribou (ADF&G 2019 as cited in OSM 2020a). In October 2019, the population estimate was 46,528 caribou (BLM 2020 as cited in OSM 2020a).

Bull:cow and calf:cow ratios have similarly fluctuated over time. Between 2001 and 2018, the fall bull:cow ratio ranged from 24–64 bulls:100 cows and averaged 40.2 bulls:100 cows. Over the same time period, the fall calf:cow ratio ranged from 19–55 calves:100 cows and averaged 39.1 calves:100 cows (**Table 1**).

From 2008 to 2012, below average fall calf weights and low parturition rates for 3-year-old cows suggested nutritional stress, raising concern for the health of NCH population (Schwanke and Robbins 2013). Schwanke and Robbins (2013) cautioned that without a timely reduction in the NCH population, range quality and long-term herd stability may be compromised.



Map 2. Caribou heard map for Eastern Interior and South Central Alaska

Table 1. Population size and composition of the Nelchina caribou herd (Tobey and Kelleyhouse 2007; ADF&G 2008, 2010, 2018, 2021; Schwanke 2011; Schwanke and Robbins 2013; Robbins 2015, 2016a, 2016b, 2017, pers. comm. as cited in OSM 2020a; Rinaldi 2019, pers. comm. as cited in OSM 2020a; Hatcher 2021, pers. comm.).

| Year | Total bulls:100 cows ^a | Calves:100 cows ^a | Summer Population Estimates ^b | Fall Herd Estimates ^d |
|----------------|-----------------------------------|------------------------------|--|----------------------------------|
| 2003 | 31 | 35 | 31,114 | 30,141 |
| 2004 | 31 | 45 | 38,961 | 36,677 |
| 2005 | 36 | 41 | 36,993 | 36,428 |
| 2006 | 23 ^c | 40 ^c | - | - |
| 2007 | 34 | 35 | 33,744 | 32,569 |
| 2008 | 39 ^c | 40 ^c | - | 33,288 ^c |
| 2009 | 42 | 29 | 33,146 | 33,837 |
| 2010 | 64 | 55 | 44,954 | 48,653 |
| 2011 | 58 | 45 | 40,915 | 41,394 |
| 2012 | 57 | 31 | 46,496 | 50,646 |
| 2013 | 30 | 19 | 40,121 | 37,257 |
| 2014 | 42 | 45 | - | - |
| 2015 | 36 | 45 | 48,700 | 46,816 |
| 2016 | 57 | 48 | 46,673 | 46,673 |
| 2017 | 35 ^c | 35 ^c | - | 41,411 ^c |
| 2018 | 40 | 20 | 35,703 | 33,229 |
| 2019 | 32 | 41 | 53,500 | 46,528 |
| 2020 | 28 ^c | 17 ^c | - | 35,000 ^c |
| Average | 40 | 37 | 40,888 | 39,409 |

^a Fall Composition Counts

^b Summer photocensus

^c Modeled estimate

^d Estimates are derived from summer minimum count data, combined with fall harvest and fall composition survey data.

Mentasta Caribou Herd

The MECH, the primary herd within Unit 11, calves and summers within the upper Copper River Basin and the northern and western flanks of the Wrangell Mountains within WRST (OSM 2018, MECH Mgmt. Plan 1995, **Map 2**). A portion of the MECH disperses across Unit 12 and southern Unit 20E in winter, often intermingling with the NCH (MECH Mgmt. Plan 1995). Barten et al. (2001) found that parturient female caribou 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 nonparturient 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 Cooperative 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 caribou, 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 caribou, only Federally qualified users are allowed to hunt the MECH during the fall season. Below a quota of 30 caribou, a Section 804 analysis will determine the allocation of permits among the Federally qualified subsistence users.

Since 2000, managers at the Tetlin NWR and WRST have used a 20:1 mixing ratio of Nelchina caribou to Mentasta caribou as the minimum threshold for considering winter season openings in Unit 12. The location and movement of NCH and MECH are monitored using aerial surveys of radio-collared caribou as well as information received remotely from satellite collars in recent years. This information is used to determine a reliable mixing ratio of the MECH 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 in the MECH. (Putera 2021, pers. comm.). ADF&G has also deployed a number of GPS/Satellite collars in the NCH.

The MECH population declined from an estimated 3,160 caribou in 1987 to an estimated 479 caribou in 2019 (**Table 2**). The fall population estimate in 2020 was 1150 caribou, however the increase from 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 3 radio collared Nelchina caribou in the Mentasta caribou summer range. The number of caribou observed during the 2021 Mentasta caribou June census dropped back to levels observed in 2019. This supports 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 ratio of 2-6 calves: 100 cows from 1991 to 1993 (OSM 1992) 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 primary predators of neonates and gray wolves mostly preyed on older juvenile caribou. 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, during the same time period, 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 2004 as evidenced by low calf survival (Putera 2021, pers. comm.). Between 1987 and 2020, the bull:cow ratio has fluctuated widely (Putera 2019), ranging from 35-124 bulls:100 cows and averaging 65 bulls:100 cows. June and fall calf:cow ratios fluctuated over the same time period, ranging from 1-38 calves:100 cows and 0-33 calves:100 cows, respectively (**Table 2**, OSM 2018). Low calf survival and high cow mortality from 1987 and 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 79 in 2009 (OSM 2012).

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 70 bulls observed in the fall 2020 survey (**Table 2**). Although observed fall bull:cow ratios appear high, the number of cows observed is small and the bull component likely includes a 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 lichen availability within their 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 a skewed sex ratio and increased young male age structure of reindeer could result in fewer adult females conceiving during the 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 offspring 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) thus, more susceptible to extreme random events versus a migratory and high density ecotype, such as the Nelchina. A key factor in distinguishing between two ecotypes is whether animals were dispersed or aggregated when young were born (Seip 1991, Bergerud 2000). The chronic low calf survival and recruitment for Mentasta caribou 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 and 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).

Table 2 Population size and composition of the Mentasta Caribou Herd (OSM 2012c, 2018; FWS 2018, OSM 2020b., Putera 2021).

| 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 | 2,065 | 248 | 847 | 12 | 41 | 3,160 |
| 1988 | 34 | 1,540 | 277 | 662 | 18 | 43 | 2,480 |
| 1989 | 31 | 1,615 | 727 | 258 | 16 | 45 | 2,600 |
| 1990 | - | - | - | - | - | - | - |
| 1991 | 3 | 1,347 | 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 |
| 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 |
| 2002 | 21 | 190 | 55 | 86 | 29 | 45 | 410 |
| 2003 | 17 | 223 | 38 | 101 | 16 | 46 | 522 |
| 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 |
| 2009 | 12 | 79 | 8 | 68 | 10 | 86 | 421 |
| 2010 | 25 | 88 | 22 | 106 | 25 | 120 | 336 |
| 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 | 124 | - |
| 2017 | 11 | 91 | 18 | 79 | 18 | 87 | 389 |
| 2018 | 10 | 72 | 16 | 66 | 22 | 92 | 470 |
| 2019 | 18 | 113 | 29 | 100 | 26 | 95 | 479 |
| 2020 | 6 | 98 | 18 | 75 | 18 | 77 | 1150 |

^aPrior to 2001, ratios obtained by helicopter. After 2001, includes small bulls that are indistinguishable from cows during fixed-wing flights.

^bObserved high bull:cow ratios likely due to presence of Nelchina bulls.

^cPopulation estimates between 2000 and 2020 are based on a June census of cows corrected for sightability, the fall calf:cow and bull:cow ratio, with 2005-2020 based on a fall ratio of 30 bulls:100 cows. The 2020 estimates includes Nelchina caribou in the summer range.

^d1996 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 Jun–30 Sep).

^e2004 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).

^f2004 population estimate is based on extrapolation from June census, adjusted for average calf survivorship and average bull ratios.

Harvest History

Nelchina Caribou Herd

The NCH is a popular herd to hunt and experiences heavy harvest pressure due to its road accessibility and proximity to Fairbanks and Anchorage. The population limits is attempted to be controlled solely by human harvest, and harvest quotas are adjusted annually in order to achieve State management objectives (Hatcher 2021 pers. comm., Schwanke and Robbins 2013). Over 95% of the NCH harvest occurs in Unit 13. Between 2001 and 2019, harvest from the NCH under State regulations ranged from 793–5,785 caribou/year and averaged 2,334 caribou/year (Robbins 2017, pers. comm. as cited in OSM 2020a, ADF&G 2021). Over the same time period, caribou harvest under Federal regulations for Units 12 and 13 combined ranged from 237–610 caribou/year and averaged 421 caribou/year (OSM 2021).

Mentasta Caribou Herd

The total harvest reported between 1977 and 1989 was 1,294 caribou. Annual harvest ranged from 149 animals harvested in 1977 to 45 animals in 1989 (ADF&G 1993). The average annual harvest for the 13-year period was 100 caribou (ADF&G 1993). Harvest success rates decreased from 43% in 1977 to 19% in 1989. The hunting season for the MECH was closed from 1992 through 1995. There was a small Federal subsistence harvest from 1996–1998 due to 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 harvest was reported for caribou.

There has been no reported harvest from the MECH since 1998 as there has been no State or Federal season for caribou in Unit 11. However, some incidental harvest of Mentasta caribou may take place during winter hunts targeting the NCH in areas of herd overlap in the adjacent units. While the MECH management plan does not specify an appropriate mixing ratio, the 20:1 ratio has been used in the adjacent units to determine winter season openings by the Board since at least 2000 (OSM 2000). The MECH management plan suggests that incidental harvest of Mentasta caribou is usually minimal (MECH Cooperative Management Plan 1995).

Other Alternatives Considered

One alternative considered is to grant 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 Federally public lands in Unit 11. The timing and numbers of the NCH migrating through or wintering in Unit 11 varies year to year and in some years Nelchina caribou are not present in Unit 11. Granting delegated authority to the WRST superintendent would allow harvest and seasons to reflect when the NCH is present and allow use of most current biological data to minimize incidental harvest of Mentasta caribou, while providing for subsistence opportunity.

A delegation to define harvest areas would facilitate opening areas of Unit 11 to harvest where the caribou present are primarily from the Nelchina herd, while avoiding areas with concentrated numbers of Mentasta caribou.

Effects of the Proposal

If this proposal is adopted, the additional harvest is unlikely to have any biological effect on the NCH. However, impacts to the MECH are a conservation concern and deters from the principles in the MECH management plan. The MECH has fallen short over the past 25 years of any metric that would support opening a season. The MECH Cooperative 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.” This metric has not been met for the MECH since 1996. Total calf counts in the fall has averaged around 20 for the last 15 years, far below the metric of 80 calves. The MECH population has leveled off at a lower level than planned through the MECH management Plan 1995. Current low population numbers are indicative of poor recruitment and low survival rates among cohorts within the population. An increased opportunity for incidental harvest could further exacerbate the decline of a population that is currently of conservation concern.

If Proposal WP22-35 is adopted, it would allow a harvest of caribou when the NCH migrates through Unit 11, providing increased subsistence hunting opportunity. While the MECH mixes with the Nelchina herd during migration and over winter, exact numbers and mixing ratios are unknown, which hampers management. The timing of this migration differs from year to year, and the number of Nelchina bulls that mix with the MECH within Unit 11 also varies. It is not possible to visually discern which herd an individual bull may be from. Therefore, incidental harvest of individuals from a population with chronically low productivity is likely, which would have detrimental effects on the MECH. Harvesting MECH caribou to the point where recovery is difficult would ultimately affect subsistence users in the long-term. Based on participation and harvest by Federally qualified subsistence users from 1996-1998, when a very limited open Federal caribou season occurred in Unit 11, harvest from a Unit 11 caribou hunt might be expected to be very low. However, if Nelchina caribou are easily accessible along the Nabesna Road, hunting effort and harvest could be higher than was experienced in 1996-1998.

OSM PRELIMINARY CONCLUSION

Support Proposal WP22-35 **with modification** 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 via a delegation of authority letter only (**Appendix 1**).

The modified regulation should read:

Unit 11—Caribou

One bull by Federal registration permit

No Federal open season

May be announced

Justification

The MECH currently exists in low numbers and their occupation of summer and winter ranges results in small groups distributed as a fragmented population. Because of this, total numbers and composition can be significantly affected by sightability when searching for small groups of caribou over vast terrain. Mixing of Nelchina and Mentasta caribou bulls makes interpreting fall composition surveys difficult. There is limited ability to predict the extent, timing, or frequency of mixing between the two herds and it would be impossible to discern whether the bull was from the Mentasta herd or the Nelchina herd. The possibility of increased winter mortality due to icing events may result in malnutrition and starvation for more susceptible bulls with depleted energy reserves following the rut, furthering the decline of the Mentasta caribou population. In addition, calf production and survival remain critically low and have resulted in low numbers of adult cows and bulls observed during the fall population surveys. Calf production and recruitment in particular remains below the management objective of a running two-year mean calf recruitment greater than 80 calves, as stated in the Mentasta Caribou Herd Cooperative Management Plan 1995. These declines are indicative of low production, poor recruitment, and low survival rates among cohorts within the population.

The timing and mixing rate of the two herds is variable and inconsistent year to year. WRST, in coordination with ADF&G with the use of delegated authority would be able to identify when the NCH are in Unit 11 and allow harvest at times, locations, and levels when there would be minimal potential of incidental harvest of MECH.

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Appendix 1

Wrangell-St. Elias National Park and Preserve
National Park Service
PO Box 439
Copper Center, AK 99573

Dear Superintendent:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the superintendent of the Wrangell-St. Elias National Park and Preserve (WRST) to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Unit 11 for the management of caribou on these lands.

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

DELEGATION OF AUTHORITY

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

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

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

- To announce season dates, harvest quotas, and number of permits to be issued;
- To define harvest areas; and
- To close the Federal hunt early if the harvest quota is reached before the announced season closing date or Nelchina caribou are no longer present.

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

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

The Federal public lands subject to this delegated authority are those within Unit 11.

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

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

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

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

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

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

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

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

6. Support Services: Administrative support for regulatory actions will be provided by the Office of Subsistence Management.

Sincerely,

Anthony Christianson
Chair

Enclosures

cc: Federal Subsistence Board
Assistant Regional Director, Office of Subsistence Management
Deputy Assistant Regional Director, Office of Subsistence Management
Subsistence Policy Coordinator, Office of Subsistence Management
Wildlife Division Supervisor, Office of Subsistence Management
Coordinator, Southcentral Subsistence Regional Advisory Council, USDA – Forest Service
Chair, Southcentral Alaska Subsistence Regional Advisory Council
Chair, Eastern Interior Subsistence Regional Advisory Council
Deputy Commissioner, Alaska Department of Fish and Game
Special Project Coordinator, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

WP22-36 Executive Summary

| | |
|---|--|
| General Description | Proposal WP22-36 requests to codify temporary regulations that expire June 30, 2022, regarding the community harvest system for moose and caribou in Units 11, 12, and 13. <i>Submitted by the Ahtna Intertribal Resource Commission</i> |
| Proposed Regulation | See page 128 |
| OSM Preliminary Conclusion | Support Proposal WP22-36 with modification to modify and clarify regulatory language. See page 128 |
| Southcentral Alaska Subsistence Regional Advisory Council Recommendation | |
| Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP22-36

ISSUE

Wildlife Proposal WP22-36, submitted by the Ahtna Intertribal Resource Commission (AITRC), requests modifications to community harvest systems for moose and caribou in Units 11, 12, and 13. These modifications are the following: (1) allow community members to opt out of a community harvest system thereby retaining their individual harvest limits; (2) define the geographic boundaries of eligible communities as the most recent Census Designated Places established by the U.S. Census Bureau; (3) specify that harvest reporting will take the form of reports collected from hunters by AITRC and submitted directly to the land managers and the Office of Subsistence Management (OSM), rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets; (4) set the harvest quota for the species and units authorized in the community harvest system as the sum of individual harvest limits for those opting to participate in the system; and (5) codify the community harvest systems for moose and caribou in Unit 12.

DISCUSSION

AITRC seeks to codify temporary Federal regulations approved by the Board in July 2020 (WSA20-02) and January 2021 (WSA21-07) concerning Federal community harvest frameworks for moose and caribou in Units 11, 12, and 13, stating that these proposed changes are necessary to fully implement the AITRC-administered community harvest system for caribou and moose in Units 11, 12, and 13. The proponent additionally states that these community harvest systems are a management partnership between the Federal government and the Federally recognized tribes of the Ahtna Traditional Use Territory.

Note: The analyses for Proposals WP22-01 and WP22-02 contain information used in evaluating this proposal.

The Board approved a community harvest system framework (see **Appendix 1**) in January 2021 as part of Special Action WSA21-07 (see Regulatory History section, below). This framework answers questions concerning how the community harvest system will affect hunting under State and Federal seasons and harvest limits and Federal and State permits and State harvest tickets.

Existing Federal Regulation

36 CFR 242 and 50 CFR 100.26(n)(11)(i) Unit 11 specific regulations

(C) For Federally qualified subsistence users living within the Ahtna traditional communities of Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina, a community harvest system for moose is authorized on Federal public lands within Unit 11, subject to a framework to be established by the Federal Subsistence Board.

§____.26(n)(12)(i) Unit 12 specific regulations

No regulation

§____.26(n)(13)(iii) Unit 13 specific regulations

(C) For Federally qualified subsistence users living within the Ahtna traditional communities of Cantwell, Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina, a community harvest system for caribou and moose is authorized on Federal public lands within Unit 13, subject to a framework to be established by the Federal Subsistence Board.

Proposed Federal Regulation

§____.26(n)(11)(i) Unit 11 specific regulations

*(C) For Federally qualified subsistence users living within the Ahtna traditional communities of Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina, a community harvest system for moose is authorized on Federal public lands within Unit 11, subject to a framework to be established by the Federal Subsistence Board. **Animals taken by those opting to participate in this community harvest system do not count toward the harvest limits of any individuals who do not opt to participate in this community harvest system:***

- (1) the boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*
- (2) designated hunters are authorized in this community harvest system;*
- (3) community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system;*
- (4) harvest reporting will take the form of reports collected from hunters by AITRC and submitted directly to land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

§____.26(n)(12)(i) Unit 12 specific regulations

*(D) For Federally qualified subsistence users living within the Ahtna traditional communities of Chistochina and Mentasta Lake, a community harvest system for caribou is authorized on Federal public lands within the customary and traditional use determination area of Unit 12, subject to a framework established by the Federal Subsistence Board. **Animals taken by those opting to participate in this community harvest system do not count***

toward the harvest limits of any individuals who do not opt to participate in this community harvest system.

- (1) the boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*
- (2) designated hunters are authorized in this community harvest system;*
- (3) community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system; and*
- (4) harvest reporting will take the form of reports collected from hunters by AITRC and submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

(E) For Federally qualified subsistence users living within the Ahtna traditional communities of Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina, a community harvest system for moose is authorized on Federal public lands within the customary and traditional use determination area of Unit 12 remainder, subject to a framework established by the Federal Subsistence Board. Animals taken by those opting to participate in this community harvest system do not count toward the harvest limits of any individuals who do not opt to participate in this community harvest system.

- (1) the boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*
- (2) designated hunters are authorized in this community harvest system;*
- (3) community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system; and*
- (4) harvest reporting will take the form of reports collected from hunters by AITRC and submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

(F) For Federally qualified subsistence users living within the Ahtna traditional communities of Chistochina and Mentasta Lake, a community harvest system for moose is authorized on Federal public lands within the customary and traditional use determination area of Unit 12, that portion within the Tetlin National Wildlife Refuge and those lands within the Wrangell-St. Elias National Preserve north and east of a line formed by the

Pickerel Lake Winter Trail from the Canadian border to Pickerel Lake and 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, subject to a framework established by the Federal Subsistence Board. Animals taken by those opting to participate in this community harvest system do not count toward the harvest limits of any individuals who do not opt to participate in this community harvest system.

- (1) the boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*
- (2) designated hunters are authorized in this community harvest system;*
- (3) community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system; and*
- (4) harvest reporting will take the form of reports collected from hunters by AITRC and submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

§____.26(n)(13)(iii) Unit 13 specific regulations

(C) For Federally qualified subsistence users living within the Ahtna traditional communities of Cantwell, Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina, a community harvest system for caribou and moose is authorized on Federal public lands within Unit 13, subject to a framework to be established by the Federal Subsistence Board. Animals taken by those opting to participate in this community harvest system do not count toward the harvest limits of any individuals who do not opt to participate in this community harvest system.

- (1) the boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*
- (2) designated hunters are authorized in this community harvest system;*
- (3) community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system; and*
- (4) harvest reporting will take the form of reports collected from hunters by AITRC and submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

State of Alaska Regulation

The following are State community harvest systems currently in use in Units 11, 12, and 13, the geographic area of focus in this analysis.

Unit 11—Moose

Unit 11 that portion east of the east bank of the Copper River upstream from and including the Slana River drainage [east of the east bank of the Slana River IN HANDY DANDY]—One bull per community harvest permit; however, no more than 100 bulls that do not meet antler restrictions for other resident hunts in the same area may be taken by Tier II permit in the entire community harvest area during the Aug. 10–Sept. 20 season, up to 350 Tier II permits may be issued.

Community Moose (CM) 300 Permit Aug. 10–Sept. 20

Unit 11 remainder—One bull per community harvest permit; however, no more than 100 bulls that do not meet antler restrictions for other resident hunts in the same area may be taken by Tier II permit in the entire community harvest area during the Aug. 10–Sept. 20 season, up to 350 Tier II permits may be issued.

Community Moose (CM) 300 Permit Aug. 10–Sept. 20

Unit 12—Moose

Unit 12 that portion including all drainages into the west bank of the Little Tok River, from its headwaters in Bear Valley at the intersection of the unit boundaries of Units 12 and 13 to its junction with the Tok River, and all drainages into the south bank of the Tok River from its junction with the Little Tok River to the Tok Glacier—One bull per community harvest permit; however, no more than 100 bulls that do not meet antler restrictions for other resident hunts in the same area may be taken in the entire community harvest area during the Aug. 24–28 and Sept. 8–17 seasons.

CM300 Permit Aug. 24–28 Sept. 8–17

Unit 13—Moose

Unit 13—One bull per community harvest permit; however, no more than 100 bulls that do not meet antler

CM300 Permit Aug. 10–Sept. 20 Dec. 1–31

Unit 13—Moose

restrictions for other resident hunts in the same area may be taken by Tier II permit in the entire community harvest area during the Aug. 20 - Sept. 20 season, up to 350 Tier II permits may be issued;

Unit 13—Caribou

Unit 13—Two caribou by community harvest permit only; up to 400 caribou may be taken;

*Community Aug. 10–Sept. 20
Caribou Oct. 21–Mar. 31
(CC) 001
Permit*

Federal Public Lands

Unit 11 is comprised of 87% Federal public lands and consists of 96% National Park Service managed lands and 4% U.S. Fish and Wildlife Service managed lands.

Unit 12 is comprised of 60% Federal public lands and consists of 80% National Park Service managed lands, 18% U.S. Fish and Wildlife Service managed lands, and 2% Bureau of Land Management managed lands.

Unit 13 is comprised of 12% Federal public lands that consist of 49% National Park Service managed lands, 36% Bureau of Land Management managed land and 15% U.S. Fish and Wildlife Service managed lands.

Customary and Traditional Use Determination

Unit 11 Moose

Rural residents of Units 11, 12, 13A–D and Chickaloon, Healy Lake, and Dot Lake have a customary and traditional use determination for moose in Unit 11 north of the Sanford River.

Rural residents of Units 11 and 13A–D and Chickaloon have a customary and traditional use determination for moose in Unit 11 remainder.

Unit 12 Caribou

Rural residents of Unit 12, Chistochina, Dot Lake, Healy Lake, and Mentasta Lake have a customary and traditional use determination for caribou in Unit 12.

Unit 12 Moose

Rural residents of Units 12 and 13C and Dot Lake and Healy Lake have a customary and traditional use determination for moose in Unit 12 that portion within the Tetlin National Wildlife Refuge and those lands within the Wrangell-St. Elias National Preserve north and east of a line formed by the Pickerel Lake Winter Trail from the Canadian border to Pickerel Lake.

Rural residents of Units 12 and 13C and Healy Lake have a customary and traditional use determination for moose 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.

Rural residents of Unit 11 north of 62nd parallel, 12, and 13A-D and Chickaloon, Dot Lake, and Healy Lake have a customary and traditional use determination for moose in Unit 12 remainder.

Unit 13 Caribou

Rural residents of Units 11, 12 (along the Nabesna Road and Tok Cutoff Road, mileposts 79-110), 13, and 20D (excluding residents of Fort Greely) and Chickaloon have a customary and traditional use determination for caribou in Unit 13B.

Rural residents of Units 11, 12 (along the Nabesna Road and Tok Cutoff Road, mileposts 79-110), and 13 and Chickaloon, Dot Lake, and Healy Lake have a customary and traditional use determination for caribou in Unit 13C.

Rural residents of Units 11, 12 (along the Nabesna Road), and 13 and Chickaloon have a customary and traditional use determination for caribou in Units 13A and 13D.

Rural residents of Units 11, 12 (along the Nabesna Road), and 13 and Chickaloon, McKinley Village, and the area along the Parks Highway between mileposts 216 and 239 (excluding residents of Denali National Park headquarters) have a customary and traditional use determination for caribou in Units 13E.

Unit 13 Moose

Rural residents of Unit 13, Chickaloon, and Slana have a customary and traditional use determination for moose in Units 13A and 13D.

Rural residents of Units 13 and 20D (excluding residents of Fort Greely) and Chickaloon and Slana have a customary and traditional use determination for moose in Unit 13B.

Rural residents of Units 12 and 13 and Chickaloon, Healy Lake, Dot Lake, and Slana have a customary and traditional use determination for moose in Unit 13C.

Rural residents of Unit 13, Chickaloon, McKinley Village, Slana, and the area along the Parks Highway between mileposts 216 and 239 (excluding residents of Denali National Park headquarters) have a customary and traditional use determination for moose in Unit 13E.

National Parks and Monuments

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.

Regulatory History

During the 2018/20 regulatory cycle, AITRC submitted three proposals aimed at both creating more opportunities for hunting moose and caribou and providing AITRC with more authority in management of moose and caribou in Units 11, 12, and 13. Proposal WP18-17 requested an extension of the moose season in Unit 11 and delegation of authority to AITRC to issue Federal registration permits to its Tribal members. Proposal WP18-18 requested that the moose season on Federal public lands in Unit 13E and Unit 13 remainder be changed from Aug. 1-Sept. 20 to Aug. 1-Mar. 31. In addition, AITRC requested authorization to distribute Federal registration permits (FM1301) to Federally qualified Tribal members only and that the BLM and Denali National Park and Preserve distribute (FM1301) permits to other Federally qualified subsistence users. AITRC later withdrew Proposal WP18-18.

Proposal WP18-19 led directly into greater discussions about community harvests. It requested that AITRC be allowed to distribute Federal registration permits to Ahtna Tribal members for the Federal caribou season in Units 13A, 13B, and 13 remainder. In addition, the proponent requested that the Ahtna Advisory Committee be added to the list of agencies and organizations consulted by the Bureau of Land Management Glennallen Field Office Manager when announcing the sex of caribou taken in Units 13A and 13B each year.

During its November 6-7, 2017, meeting, the Southcentral Alaska Subsistence Regional Advisory Council (Council) discussed issues related to AITRC's proposals requesting authority to issue Federal registration permits for caribou and moose hunts in Units 11 and 13. In order to alleviate legal concerns about non-Federal entities issuing Federal permits, the Council adopted a modification of Proposal WP18-19 to establish a community harvest system on Federal public lands for caribou and moose in Units 11 and 13 that would be administered by AITRC and open to Federally qualified subsistence users living within the Ahtna traditional use territory (**Figure 1**).

The Council, along with representatives of AITRC and staff from OSM, discussed possible alternatives to what was originally requested in WP18-19 to alleviate legal concerns associated with AITRC

issuing Federal registration permits. During this discussion, a modification was drafted to allow for a hunt via a community harvest system for caribou and moose in Units 11 and 13. In an effort to consolidate the three proposals submitted by AITRC (WP18-17, WP18-18, and WP18-19), hunts for moose in Unit 11 and for caribou and moose in Unit 13 were added to the community harvest system under consideration in Proposal WP18-19.

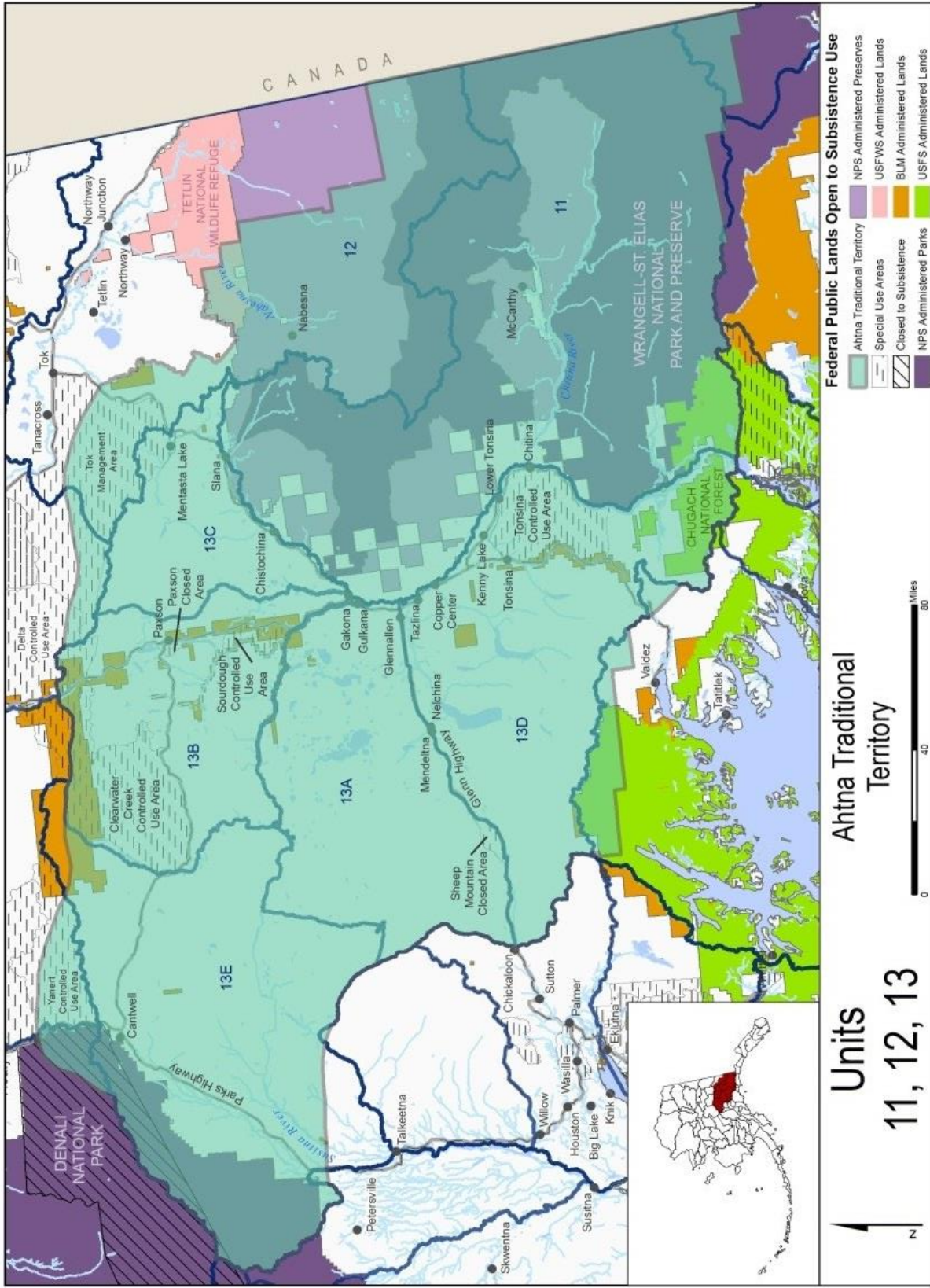


Figure 1. Map showing Ahtna traditional territory (Linnell 2020, pers. comm.).

At its April 2018 meeting, the Board voted to reject Proposal WP18-17 and to defer WP18-19 to its August 2018 work session, pending development of a framework for a community harvest system. In May 2018, AITRC submitted a special action request with a community harvest framework, which after clarification included only Federally qualified subsistence users who were Tribal members living in Ahtna traditional territory. This request was rejected due to its invalid eligibility requirements.

At its August 2018 work session, the Board agreed to meet with AITRC and to present a community harvest framework for discussion purposes. This framework was developed and presented to the Board at its April 2020 meeting.

In April 2020, the Board adopted deferred Proposal WP18-19 with modification. The modification was to name individual communities within the Ahtna traditional use territory authorized to harvest caribou and moose in Unit 13 and moose in Unit 11 as part of a community harvest system, subject to a framework established by the Board under unit specific regulations.

The Board and AITRC have since been working on refining the community harvest system. In July 2020, the Board approved Wildlife Special Action WSA20-02 with modification. Special Action WSA20-02 requested the development of an AITRC-administered community harvest system for moose and caribou in Units 11, 12, and 13 for eight Ahtna traditional communities for the 2020/21 regulatory year. The modification was to (1) name individual communities authorized to participate in the community harvest system on Federal public lands in Units 11, 12, and 13, specifically eight Ahtna traditional communities of Cantwell, Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina; (2) define geographic boundaries of eligible communities as the most recent Census Designated Places (CDPs) established by the United States Census Bureau; (3) extend this action through the end of the wildlife regulatory cycle, June 30, 2022; (4) specify that harvest reporting will take the form of reports collected from hunters by AITRC and submitted directly to land managers and OSM, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets; and (5) set the harvest quota for the species and units authorized in the community harvest system as the sum of individual harvest limits for those opting to participate in the system.

In January 2021, the Board approved Special Action WSA20-07, which requested an exception to §____.26(e)(2) for the AITRC-administered community harvest system for moose and caribou in Units 11, 12, and 13 for the 2020-2022 regulatory cycle. §____.26(e)(2) states, “. . . Except . . . as otherwise proved for by this part, an animal taken as part of a community harvest limit counts toward every community member's harvest limit for that species taken under Federal or State of Alaska regulations.” This meant that the harvest limits of all residents of a community are affected whether or not they choose to participate in the community harvest system. The Office of Subsistence Management has been working with AITRC, the National Park Service and the Bureau of Land Management to develop a framework for a community harvest system for moose and caribou in Units 11, 12 and 13 for the 2020/21 regulatory year as directed by the Board. In developing this framework, OSM realized the conflict with §____.26(e)(2) and the need to provide an exception under unit-specific regulations. The Board approved Special Action WSA20-07 to allow AITRC to effectively administer the recently approved community hunts in accordance with existing Federal regulations and

to prevent unintentional and unnecessary restrictions from being placed on any community members who choose not to participate in the community harvest system.

In January 2021, the Board also approved the community harvest system framework for the AITRC-administered community harvest system in Units 11, 12 and 13 (see **Appendix 1**).

AITRC is comprised of representatives of eight Ahtna tribal communities of Cantwell, Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake and Tazlina. All are located in Unit 13. Cantwell residents do not have a customary and traditional use determination for either moose or caribou in Unit 12 and are therefore not eligible to participate in any Unit 12 moose or caribou hunts. The remaining seven communities have a customary and traditional use determination for moose in Unit 12, although five have a determination for only portions of Unit 12. Only Chistochina and Mentasta Lake have a customary and traditional use determination for caribou in Unit 12, so they are the only Ahtna tribal communities eligible to participate in Unit 12 caribou hunts.

Current Events Involving the Species

Wildlife Proposal WP22-01, submitted by the Office of Subsistence Management (OSM), requests clarification of who is and who is not a participant in a community harvest system and how that affects community and individual harvest limits.

Wildlife Proposal WP22-02, submitted by the Office of Subsistence Management (OSM), requests removing language from general and unit specific wildlife regulation prohibiting the use of a designated hunter if the recipient is a member of a community operating under a community harvest system.

Cultural Knowledge and Traditional Practices

See the Cultural Knowledge and Traditional Practices section in the Proposal WP22-01 analysis.

Other Alternatives Considered

If the Board adopts Proposals WP22-01 and WP22-02 or adopts Proposal WP22-36 as submitted, then the Board should also approve the following modification to framework item 16 associated with this community harvest system (see framework in **Appendix 1**). The modification is to clarify that participants and non-participants in a community harvest system may designate someone else to harvest moose or caribou on their behalf under a Federal subsistence designated hunter permit. The Council may want to further consider this alternative.

The modification to framework item 16 could read:

16. Are designated hunters authorized within the community harvest system?

- ~~No~~ **Yes**. Residents of communities operating under a community harvest system – whether or not they register for the community harvest system – may ~~not~~ designate someone else to harvest moose or caribou on their behalf under a Federal subsistence designated hunter permit.

~~If a Federally qualified subsistence user who resides in a community operating under a community harvest system would like someone else to hunt on their behalf, they have the option of registering for the community harvest system.~~

- Residents of communities operating under a community harvest system may serve as a Federal designated hunter for a Federally qualified subsistence hunter who lives in a community that is not operating under a community harvest system, subject to applicable regulatory requirements.

Effects of the Proposal

If this proposal is adopted, then community harvest frameworks in codified regulations for moose and caribou in Units 11 and 13 will be modified. These modifications (1) allow community members to opt out of a community harvest system thereby retaining their individual harvest limits; (2) define the geographic boundaries of eligible communities as the most recent Census Designated Places established by the U.S. Census Bureau; (3) specify that harvest reporting will take the form of reports collected from hunters by AITRC and submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets; and (4) set the harvest quota for the species and units authorized in the community harvest system as the sum of individual harvest limits for those opting to participate in the system.

Additionally, new community harvest frameworks for Unit 12 moose and caribou will be added to codified regulations. These changes will enable AITRC to fully and effectually implement the community harvest systems for moose and caribou in these units. Effects to nonsubsistence uses, moose and caribou in Units 11, 12, and 13 are not anticipated.

If this proposal is not adopted, then temporary regulations describing community harvest frameworks in Units 11 and 13 for moose and caribou will expire June 30, 2022. These provisions describing frameworks that clarify the intent of the Board will not be added to codified regulations leading to confusion when AITRC and Federal managers try to use these community harvest systems. Additionally, community harvest systems for moose and caribou in Unit 12 will not be added to codified regulations.

Most importantly, this will negatively affect community members wishing to opt out of one or more of these community harvest systems and who will not be able to designate another Federally qualified subsistence user to harvest moose or caribou on their behalf. Effects to nonsubsistence uses, moose, and caribou in Units 11, 12, and 13 are not anticipated.

OSM PRELIMINARY CONCLUSION

Support Proposal WP22-36 with **modification** to modify and clarify regulatory language.

The modified regulations should read:

§ ____ .26(n)(11)(i) Unit 11 specific regulations

(C) For Federally qualified subsistence users living within the Ahtna traditional communities of Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina, a community harvest system for moose is authorized on Federal public lands within Unit 11, subject to a framework ~~to be~~ established by the Federal Subsistence Board.

- (1) The boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*
- (2) The community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system;*
- (3) Harvest reporting will take the form of reports collected from hunters by AITRC and will be submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

§ ____ .26(n)(12)(i) Unit 12 specific regulations

(D) For Federally qualified subsistence users living within the Ahtna traditional communities of Chistochina and Mentasta Lake, a community harvest system for caribou is authorized on Federal public lands within the customary and traditional use determination area of Unit 12, subject to a framework established by the Federal Subsistence Board.

- (1) The boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*
- (2) The community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system; and*
- (3) Harvest reporting will take the form of reports collected from hunters by AITRC and will be submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

(E) For Federally qualified subsistence users living within the Ahtna traditional communities of Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina, a community harvest system for moose is authorized on Federal public lands within the customary and traditional use determination area of Unit 12 remainder, subject to a framework established by the Federal Subsistence Board.

- (1) The boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*
- (2) The community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system; and*
- (3) Harvest reporting will take the form of reports collected from hunters by AITRC and will be submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

(F) For Federally qualified subsistence users living within the Ahtna traditional communities of Chistochina and Mentasta Lake, a community harvest system for moose is authorized on Federal public lands within the customary and traditional use determination area of Unit 12, that portion within the Tetlin National Wildlife Refuge and those lands within the Wrangell-St. Elias National Preserve north and east of a line formed by the Pickerel Lake Winter Trail from the Canadian border to Pickerel Lake and 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, subject to a framework established by the Federal Subsistence Board.

- (1) The boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*
- (2) The community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system; and*
- (3) Harvest reporting will take the form of reports collected from hunters by AITRC and will be submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

§ ____ .26(n)(13)(iii) Unit 13 specific regulations

(C) For Federally qualified subsistence users living within the Ahtna traditional communities of Cantwell, Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina, a community harvest system for caribou and moose is authorized on Federal public lands within Unit 13, subject to a framework ~~to be~~ established by the Federal Subsistence Board.

- (1) The boundaries of the communities are the most recent Census Designated Places (CDPs) as defined by the U.S. Census Bureau;*

- (2) *The community harvest quota for the species and units authorized in the community harvest system is the sum of individual harvest limits for those opting to participate in the system; and*
- (3) *Harvest reporting will take the form of reports collected from hunters by AITRC and will be submitted directly to the land managers and the Office of Subsistence Management, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets.*

Justification

These regulation changes are necessary to enable AITRC and Federal managers to fully and effectually implement these community harvest systems on a long-term basis. These proposed regulations have already been approved by the Board in temporary regulations through June 30, 2022, when they will sunset. The Board should acknowledge these efforts by adopting these changes into codified regulations.

As the frameworks have already been established and approved by the Board, the term “to be” can be deleted from codified regulations in Units 11 and 13. The exception to 50 CFR 100.26(e)(2) provided through WSA2-07 are addressed on a statewide basis through Proposal WP22-01. Therefore, the provision, “Animals taken by those opting to participate in this community harvest system do not count toward the harvest limits of any individuals who do not opt to participate in this community harvest system” is not necessary in unit-specific regulations. Similarly, the provision, “designated hunters are authorized in this community harvest system” is not needed as this issue is also being addressed on a statewide basis through Proposal WP22-02.

LITERATURE CITED

Linnell, K. 2020. Executive Director Ahtna Intertribal Resource Commission. Personal communication: by email July 18, 2020.

APPENDIX 1

**UNITS 11, 12, AND 13 COMMUNITY HARVEST SYSTEM FRAMEWORK
APPROVED BY THE BOARD IN JANUARY 2021**

AITRC Community Harvest System Framework

This document describes the framework for the community harvest system administered by the Ahtna Intertribal Resource Commission (AITRC), identifies Federal agency points of contact, and describes AITRC's responsibilities as the community harvest system administrator.

1. Who is eligible to register in the AITRC-administered community harvest system?

All Federally qualified individuals whose primary permanent residence is within any of the eight named communities – Cantwell, Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina – are eligible to register in the community harvest system. The only criteria for determining eligibility to register in the community harvest system are Federal qualification and the location of the applicant's primary permanent residence.

2. How is community residency determined?

Eligibility to participate in Federal subsistence harvest opportunities is based on the physical location of one's primary permanent residence. The most recent census designated place (CDP) boundaries drawn by the US Department of Commerce, Bureau of the Census, will be used to determine community boundaries. Maps showing the location of these boundaries are available online (www.ahtnatribal.org/harvest) and from AITRC.

3. How do I register for the community harvest system?

Contact the community harvest system administrator, the Ahtna Intertribal Resource Commission, at (907) 822-4466 or harvest@ahtnatribal.org, or visit their office at Mile 187 Glenn Highway to register.

4. Am I required to register for the community harvest system if I live in one of the eligible communities?

No. Registration in the community harvest system is optional for Federally qualified residents of the eligible communities. You may register in the community harvest system for moose and/or caribou. You may choose either to register in the community harvest system or to participate in hunts under the regular Federal subsistence regulations applicable to those areas (see question 6).

5. If I register for the community harvest system, may I participate in other Federal subsistence hunts?

Yes. You may participate in Federal subsistence hunts that do not overlap with the species and units governed by the community harvest system for which you have registered.

6. What lands are included in the community harvest system?

The community harvest system applies to all Federal public lands open for subsistence uses in Units 11, 12 and 13, subject to restrictions in question 9. (The lands included in the community harvest system are the same lands that are included in a regular Federal subsistence hunt.)

7. What seasons apply to registrants in the community harvest system?

The seasons for the community harvest system are the same as those that apply to people hunting under the existing Federal regulations for those areas. Refer to the Federal subsistence regulations booklet for more details.

8. What is the community harvest quota for the AITRC-administered community harvest system?

The community harvest quota for the AITRC-administered community harvest system is the sum of individual harvest limits for the included species and hunt areas that otherwise would have been available to community harvest system registrants had they chosen to hunt under the regular Federal Subsistence hunting regulations.

9. If I register in the community harvest system, where am I allowed to hunt?

- Community harvest system registrants may only hunt on Federal public lands within Units 11, 12, and 13 where their community or area of permanent residence has a customary and traditional use determination established by the Federal Subsistence Board for the species to be harvested. Refer to the Federal subsistence regulations booklet for more details.
- Additionally, National Park Service regulations limit hunting on lands designated as National Parks (but not National Preserves) to people who live in resident zone communities, live within the National Park, or hold a subsistence eligibility permit issued pursuant to 36 Code of Federal Regulations (CFR) 13.440. This means that only residents of Cantwell may hunt in that portion of Unit 13E that falls within Denali National Park and only residents of Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina may hunt within Wrangell-St. Elias National Park.

10. Is a hunting license required to register in the community harvest system?

Persons 18 years of age or older must hold a current State of Alaska resident hunting license in order to register for the community harvest system. A hunting license is not required for those less than 18 years old. Registrants 60 years of age and older or disabled veterans may have a permanent ID card issued by the Alaska Department of Fish and Game instead of an annual hunting license.

11. Are any other Federal or State registration permits or harvest tickets required?

No. Registrants in the community harvest system will receive a hunt registration and, if they choose to hunt, a harvest report from AITRC. Only the community harvest system registration and harvest report are required.

12. Can registrants in the community harvest system hunt for moose or caribou under State of Alaska regulations? And if so, do any special rules apply?

Registration in the community harvest system does not preclude someone from hunting moose or caribou under State of Alaska regulations; however, any moose or caribou harvested by community harvest system registrants under State regulations would count against the community harvest system quota. Community harvest system registrants who harvest a moose or caribou under State regulations must submit the required State harvest report to the State and also must submit their AITRC-issued community harvest report to AITRC about the harvest under State regulations for inclusion in the harvest quota calculation within 5 days of harvest.¹

13. What are the responsibilities of registrants in the community harvest system?

Registrants must carry their individual hunt registration while hunting. A separate AITRC-issued harvest report form is required and must be in the hunter's possession for each animal harvested. When an animal is harvested, the date of harvest should be marked on the form before leaving the field. Registrants are required to submit harvest reports to AITRC on the form provided within 5 days of a successful harvest or within 15 days of the end of the season if unsuccessful.

Upon registration, registrants will receive harvest reports for moose and caribou equal to the individual limits that would have applied under Federal subsistence regulations. Registrants may hunt for themselves or may transfer the harvest report forms issued to them to another registrant.

14. How are eligibility questions and law enforcement concerns to be addressed?

If AITRC has questions about the eligibility of an applicant who provides the requested residency documentation or other concerns of a law enforcement nature, those questions and concerns shall immediately be forwarded to the Federal agency points of contact.

¹ Moose and caribou harvests by community harvest system registrants under State of Alaska regulations count towards the community harvest quota because the community harvest quota is the sum of the individual harvest limits of community harvest system registrants and under 50 CFR 100.25(c)(1) Federal subsistence and State of Alaska harvest limits can't be accumulated.

15. Can I register for the community harvest system if I have already been issued a Federal subsistence moose or caribou permit for lands within the community harvest system area?

Eligible hunters must choose each year between either (1) registering in the community harvest system for moose and/or caribou or (2) hunting for those species under the regular Federal subsistence regulations applicable to those areas.

The Board recognizes that permits have already been issued for the 2020/21 season. Users who have already received permits for the regular 2020/21 Federal subsistence hunts and have not yet harvested any animals under these permits but wish to register in the community harvest system, may turn the Federal permits in to the issuing agency or AITRC within two weeks after authorization of the community harvest system. Once the Federal permits have been turned in, the individual will then be eligible to register in the community harvest system.

16. Are designated hunters authorized within the community harvest system?*

- No. Residents of communities operating under a community harvest system – whether or not they register for the community harvest system – may not designate someone else to harvest moose or caribou on their behalf under a Federal subsistence designated hunter permit.² If a Federally qualified subsistence user who resides in a community operating under a community harvest system would like someone else to hunt on their behalf, they have the option of registering for the community harvest system.
- Residents of communities operating under a community harvest system may serve as a Federal designated hunter for a Federally qualified subsistence hunter who lives in a community that is not operating under a community harvest system, subject to applicable regulatory requirements.

17. Are there any rules that I need to know about access when participating in the community harvest system?

Agency specific access rules apply to community harvest system registrants. Hunters planning to use off-road vehicles (ORVs) including all-terrain vehicles (ATVs), tracked vehicles, and “side-by-sides” as well as aircraft should contact the appropriate land manager for information about allowed means of subsistence access.

² 50 CFR 100.25(e) “*Hunting by designated harvest permit.* If you are a Federally qualified subsistence user (recipient), you may designate another Federally qualified subsistence user to take deer, moose, and caribou, and in Units 1-5, goats, on your behalf **unless you are a member of a community operating under a community harvest system** or unless unit-specific regulations in §100.26 preclude or modify the use of the designated hunter system or allow the harvest of additional species by a designated hunter....” (emphasis added).

18. Who are the Federal land management agency points of contact?

Bureau of Land Management – Glennallen Field Office:

Marnie Graham, Field Manager

mgraham@blm.gov

(907) 822-3217 (main office)

(907) 822-7318 (desk)

(907) 795-5761 (cell)

National Park Service – Denali National Park and Preserve

Amy Craver, Subsistence Manager/Cultural Anthropologist

amy_craver@nps.gov

(907) 644-3604 (desk)

National Park Service – Wrangell-St. Elias National Park and Preserve

Barbara Cellarius, Cultural Anthropologist/Subsistence Coordinator

barbara_cellarius@nps.gov

(907) 822-5234 (main office)

(907) 822-7236 (desk)

(907) 205-0157 (cell)

U.S. Fish and Wildlife Service – Tetlin National Wildlife Refuge

Tim Lorenzini, Supervisory Park Ranger

timothy_lorenzini@fws.gov

(907) 883-9409 (desk)

(907) 505-0858 (cell)

Office of Subsistence Management

Lisa Maas, Acting Policy Coordinator/Wildlife Biologist

Lisa_Maas@fws.gov

subsistence@fws.gov

(907) 786-3888 (main office)

(907) 786-3357 (desk)

AITRC's responsibilities as the community harvest system administrator:

- Register all eligible Federally qualified residents of the eligible communities who apply to register in the community harvest system.
- Collect sufficient information about registrants that they can be contacted if there are changes to the hunt conditions or to ensure that harvest reporting takes place.
- Verify residency in an eligible community as part of the registration process, and record how residency was verified (for example, vouched for by a community official (including the name of the official), Alaska driver's license, recent utility bill, voter registration card, or rental or mortgage receipt).
- Verify that registrants 18 years of age or older hold a current State of Alaska resident hunting license or permanent ID card (those 60 years of age or older or disabled veterans) and record the license number as part of the registration process.
- Provide registrants with a document, which identifies the hunter by name or with a unique number that is keyed to name in AITRC's records, to be carried while hunting that verifies their registration in the community harvest system.
- Provide a list of newly registered community harvest system registrants to the Federal agency points of contact on a weekly basis.
- Provide registrants with general information regarding eligible Federal public lands and hunt areas, customary and traditional use determinations, seasons, and harvest limits.
- Inform the registrants that they are required to submit harvest reports to AITRC within 5 days of a successful harvest or within 15 days of the end of the season if unsuccessful. Harvest reports must include the following information for each animal harvested:
 - Species: Moose or Caribou
 - How many days did you hunt? _____
 - How did you get to hunt area? (primary method of getting to where you started walking) (A) Airplane (B) Horse/Dog Sled (C) Boat (D) Airboat (E) Snow Machine (F) 3-4 Wheeler (G) Other off road vehicle (H) Highway vehicle (I) No vehicle used
 - Unit Hunted _____
 - Subunit Hunted _____
 - Hunt Area Hunted _____
 - Specific Harvest Location (for example road or trail and mile marker or a geographic feature or waterbody name)

 - Did you Harvest an animal? Yes ___ No ___
 - If yes, Date of Harvest (mm/dd/yy) ____/____/____
 - Sex of animal: Male ___ Female ___

- Following applies to Moose harvest only:
 - A. Was animal Spike/Fork? Yes ___ No___
 - B. Antler Spread(inches): _____
 - C. Number of brow tines: L _____ R _____
- Track harvest success, including any harvests by registrants under State of Alaska regulations, to ensure that total harvests by community harvest system registrants do not exceed the cumulative harvest limits of the individuals registered in the community harvest system (i.e., the community harvest system quota).
- Administer the community harvest quota and individual harvest reports.
- Provide harvest report information to Federal agency points of contact on a weekly basis unless otherwise specified in these conditions.
- For hunt areas where the Federal Subsistence Board had delegated authority to a local Federal land manager to manage harvest using a quota, provide harvest information to the Federal agency points of contact no later than the next business day after it is submitted to AITRC. As of the 2020-2022 regulatory cycle, these hunt areas are as follows:
 - Chisana caribou herd hunt in 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. Delegated Federal manager is the Superintendent of Wrangell-St. Elias National Park and Preserve.
 - Winter moose hunt (Nov. 20 to Jan 20) in Unit 11, that portion south and east of a line running along the north bank of the Chitina River, the north and west banks of the Nizina River, and the west bank of West Fork of the Nizina River, continuing along the western edge of the West Fork Glacier to the summit of Regal Mountain. Delegated Federal manager is the Superintendent of Wrangell-St. Elias National Park and Preserve.
- Follow up with hunters regarding more specific harvest locations if requested to do so by the Federal manager in cases where the harvest locations are not sufficiently detailed for the Federal manager's needs.
- Follow up with registrants who have not submitted harvest reports within 15 days of the close of the season, including those individuals that registered but were unsuccessful or did not hunt. These data should be provided to the Federal agency points of contact within 30 days of the close of the season.
- Participate in an annual review of the community harvest system as required in 50 CFR 100.6(e).

WP22-01 Executive Summary

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|-----------------------------------|--|
| <p>General Description</p> | <p>Proposal WP22-01 requests clarification of who is and who is not a participant in a community harvest system and how that affects community and individual harvest limits. <i>Submitted by: the Office of Subsistence Management</i></p> |
| <p>Proposed Regulation</p> | <p>§____.25 Subsistence taking of fish, wildlife, and shellfish: general regulations</p> <p><i>(c) Harvest limits</i></p> <p>...</p> <p><i>(5) Fish, wildlife, or shellfish taken by a participant in a community harvest system counts toward the community harvest limit or quota for that species as well as individual harvest limits, Federal or State, for each participant in that community harvest system, however, the take does not count toward individual harvest limits, Federal or State, of any non-participant. Fish, wildlife, or shellfish taken by someone who is not a participant in a community harvest system does not count toward any community harvest limit or quota.</i></p> <p><i>(i) For the purposes of this provision, all residents of the community are deemed participants in the community harvest unless the Board-approved framework requires registration as a prerequisite to harvesting or receiving any fish, wildlife, or shellfish pursuant to that community harvest, in which case only those who register are deemed participants in that community harvest.</i></p> <p>§____.26 Subsistence taking of wildlife</p> <p><i>(e) Possession and transportation of wildlife.</i></p> <p>...</p> <p><i>(2) An animal taken under Federal or State regulations by any member of a community with an established community harvest limit for that species counts toward the community harvest limit for that species. Except for wildlife taken pursuant to §____.10(d)(5)(iii) or as otherwise provided for by this part, an animal taken as part of a community harvest limit counts toward every community member's</i></p> |

WP22-01 Executive Summary

| | |
|---|---|
| | <i>harvest limit for that species taken under Federal or State of Alaska regulations.</i> |
| OSM Preliminary Conclusion | Support |
| Southeast Alaska Subsistence Regional Advisory Council Recommendation | |
| Southcentral Alaska Subsistence Regional Advisory Council Recommendation | |
| Kodiak/Aleutians Subsistence Regional Advisory Council Recommendation | |
| Bristol Bay Subsistence Regional Advisory Council Recommendation | |
| Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation | |
| Western Interior Alaska Subsistence Regional Advisory Council Recommendation | |
| Seward Peninsula Subsistence Regional Advisory Council Recommendation | |
| Northwest Arctic Subsistence Regional Advisory Council Recommendation | |

WP22-01 Executive Summary

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|---|-------------|
| Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation | |
| North Slope Subsistence Regional Advisory Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS
WP22-01

ISSUES

Wildlife Proposal WP22-01, submitted by the Office of Subsistence Management (OSM), requests clarification of who is and who is not a participant in a community harvest system and how that affects community and individual harvest limits.

Discussion

The proponent requests specific language clarifying who is and who is not a participant in a community harvest system and how this relates to individual and community harvest limits. While developing the framework for a community harvest system in summer 2020, Ahtna Intertribal Resource Commission (AITRC) representatives and Federal agency staff realized that current Federal regulations stipulate that any animals harvested under a community harvest limit count toward the harvest limits of every community member whether or not they choose to participate in the community harvest system. This provision is perceived as unfair to community members who are not interested in participating in a community harvest system because their individual harvest limits are met involuntarily by participants in the community harvest system.

This proposal would affect community and individual harvest limits as well as define who is and who is not a participant in a community harvest system for wildlife, fish, and shellfish, statewide. In addition to clarifying who is and who is not a participant in a community harvest system, the intent of this proposal is to allow community members who opt out of a community harvest system to retain their individual harvest limits.

Note: While the proposal as submitted listed the proposed regulations under §100.25(c)(2), the proponent clarified their intention was to create a separate section for these regulations as §100.25(c)(5).

Existing Federal Regulation

**36 CFR 242.25 and 50 CFR 100.25 Subsistence taking of fish, wildlife, and shellfish:
general regulations**

(c) Harvest limits

§____.26 Subsistence taking of wildlife

(e) Possession and transportation of wildlife.

...

(2) An animal taken under Federal or State regulations by any member of a community with an established community harvest limit for that species counts towards the community harvest

limit for that species. Except for wildlife taken pursuant to §____.10(d)(5)(iii)¹ or as otherwise provided for by this part, an animal taken as part of a community harvest limit counts toward every community member's harvest limit for that species taken under Federal or State of Alaska regulations.

Proposed Federal Regulation

§____.25 Subsistence taking of fish, wildlife, and shellfish: general regulations

(c) Harvest limits

...

(5) Fish, wildlife, or shellfish taken by a participant in a community harvest system counts toward the community harvest limit or quota for that species as well as individual harvest limits, Federal or State, for each participant in that community harvest system, however, the take does not count toward individual harvest limits, Federal or State, of any non-participant. Fish, wildlife, or shellfish taken by someone who is not a participant in a community harvest system does not count toward any community harvest limit or quota.

(i) For the purposes of this provision, all residents of the community are deemed participants in the community harvest unless the Board-approved framework requires registration as a prerequisite to harvesting or receiving any fish, wildlife, or shellfish pursuant to that community harvest, in which case only those who register are deemed participants in that community harvest.

§____.26 Subsistence taking of wildlife

(e) Possession and transportation of wildlife.

...

(2) An animal taken under Federal or State regulations by any member of a community with an established community harvest limit for that species counts toward the community harvest limit for that species. Except for wildlife taken pursuant to §____.10(d)(5)(iii) or as otherwise provided for by this part, an animal taken as part of a community harvest limit counts toward every community member's harvest limit for that species taken under Federal or State of Alaska regulations.

State of Alaska Regulations

State general regulations describing its community harvest program are in **Appendix 1**.

¹ §____.10(d)(5)(iii) *The fish and wildlife is taken by individuals or community representatives permitted a one-time or annual harvest for special purposes including ceremonies and potlatches;*

Federal Public Lands

Federal public lands comprise approximately 54% of Alaska statewide and consist of 36% U.S. Fish and Wildlife Service managed lands, 28% Bureau of Land Management managed lands, 25% National Park Service managed lands, and 11% U.S. Forest Service managed lands.

Customary and Traditional Use Determination

This is a statewide proposal for wildlife, fish, and shellfish.

Regulatory History

In 1991, after extensive public comment on the Federal Subsistence Management Program's first Temporary Rule, the Federal Subsistence Board (Board) committed to addressing community harvest limits and alternative permitting processes (56 Fed. Reg. 123, 29311 [June 26, 1991]).

In 1992, responding to approximately 40 proposals requesting community harvest systems and numerous public comments requesting alternative permitting systems, the Board supported the concept of adjusting seasons and harvest limits based on customs and traditions of a community (57 Fed. Reg. 103, 22531–2 [May 28, 1992]). The Board said specific conditions for the use of a particular harvest reporting system may be applied on a case-by-case basis and further development and refinement of guidelines for alternative permitting systems would occur as the Federal Subsistence Management Program evolved (57 Fed. Reg. 104, 22948 [May 29, 1992]). These regulations at _____.6 were modified to state that intent more clearly:

§_____.6 Licenses, permits, harvest tickets, tags, and reports²

(f) The Board may implement harvest reporting systems or permit systems where:

(1) The fish and wildlife is taken by an individual who is required to obtain and possess pertinent State harvest permits, tickets, or tags, or Federal permits, harvest tickets, or tags;

(2) A qualified subsistence user may designate another qualified subsistence user to take fish and wildlife on his or her behalf;

(3) The fish and wildlife is taken by individuals or community representatives permitted a one-time or annual harvest for special purposes including ceremonies and potlatches;

(4) The fish and wildlife is taken by representatives of a community permitted to do so in a manner consistent with the community's customary and traditional practices.

In 1993, the Board adopted Proposal P93-12, which clarified that community harvest limits and individual harvest limits may not be accumulated, community harvest systems will be adopted on a

² Subsequently moved to §____.10(d)(5) *Federal Subsistence Board—Power and Duties*.

case-by-case basis and defined under unit-specific regulations, and wildlife taken by a designated hunter for another person, counts toward the individual harvest limit of the person for whom the wildlife is taken. These new regulations specified that for wildlife, after taking your individual harvest limit, you may not continue to harvest in areas outside of your community harvest area (58 Fed. Reg. 103, 31255 [June 1, 1993]). These new regulations were the following:

§____.25 Subsistence taking of wildlife³

(c) Possession and transportation of wildlife

(1) Except as specified in §____.25(c)(3)(ii) [below] or (c)(4) [trapping regulations], or as otherwise provided, no person may take a species of wildlife in any Unit, or portion of a Unit, if that person's total statewide take of that species has already been obtained under Federal and State regulations in other Units, or portions of other Units.

(2) An animal taken under Federal or State regulations by any member of a community with an established community harvest limit for that species counts toward the community harvest for that species. Except for wildlife taken pursuant to §____.6(f)(3) [above], an animal taken by an individual as part of a community harvest limit counts toward that individual's bag limit for that species taken under Federal or State regulations for areas outside of the community harvest area.

(3) Individual bag limits (i) bag limits authorized by §____.25 and in State regulations may not be accumulated; (ii) Wildlife taken by a designated hunter for another person pursuant to §____.6(f)(2) [above], counts toward the individual bag limit of the person for whom the wildlife is taken.

In 1993, “community harvest systems” were adopted by the Board simply by adding the use of designated hunters to unit-specific regulations for Unit 25 West moose and Unit 26A sheep (58 FR 103, 31252–3 [June 1, 1993]). In this way, designated harvesters and resource quotas became a common method for allocating harvests communally.

In 1996, administrative clarification was made at §____.25(c)(2) to better represent the Board's intent (61 Fed. Reg. 147, 39711 [July 30, 1996]). Before this clarification was made, a member of a community with a community harvest limit who had not taken an individual harvest limit could take an individual harvest limit after the community had met its harvest limit. The effect of the clarification was that members of community in a community harvest system can harvest only as part of the community harvest system:

³ Subsequently moved to §____.26 *Taking of wildlife*.

§____.25 Subsistence taking of wildlife

(c) Possession and transportation of wildlife

...

*(2) An animal taken under Federal or State regulations by any member of a community with an established community harvest limit for that species counts toward the community harvest for that species. Except for wildlife taken pursuant to §____.6(f)(3) [above], an animal taken ~~by an individual~~ as part of a community harvest limit counts toward ~~that individual's bag limit~~ **every community member's harvest limit** for that species taken under Federal or State regulations for areas outside of the community harvest area.*

Later, the language “or as otherwise provided for by this part” was added to the provision. The effect was to allow an exceptions to the provision if the exception was placed in regulation:

*(2) An animal taken under Federal or State regulations by any member of a community with an established community harvest limit for that species counts towards the community harvest limit for that species. Except for wildlife taken pursuant to §____.10(d)(5)(iii) **or as otherwise provided for by this part**, an animal taken as part of a community harvest limit counts toward every community member's harvest limit for that species taken under Federal or State of Alaska regulations.*

In April 2020, the Board adopted deferred Proposal WP18-19 with modification, which added a community harvest system for moose in Unit 11 and caribou and moose in Unit 13 to unit-specific regulations. The modification was to name individual communities within the Ahtna traditional use territory authorized to harvest moose in Units 11 and caribou and moose in Unit 13 as part of a community harvest system, subject to a framework established by the Board under unit-specific regulations (see Existing Federal Regulation section in Proposal WP22-36 analysis).

In July 2020, the Board approved Wildlife Special Action Request WSA20-02 with modification to: (1) name individual communities authorized to participate in the community harvest system on Federal public lands in Units 11, 12, and 13, specifically, the eight Ahtna traditional communities of Cantwell, Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina; (2) define the geographic boundaries of eligible communities as the most recent Census Designated Places established by the U.S. Census Bureau; (3) extend these actions through the end of the wildlife regulatory cycle (June 30, 2022); (4) specify that harvest reporting will take the form of reports collected from hunters by AITRC and be submitted directly to the land managers and OSM, rather than through Federal registration permits, joint State/Federal registration permits, or State harvest tickets; and (5) set the harvest quota for the species and units authorized in the community harvest system as the sum of individual harvest limits for those opting to participate in the system (OSM 2020).

In January 2021, the Board approved Wildlife Special Action WSA20-07 temporarily adding the following language to unit-specific regulations for moose and caribou in Units 11, 12, and 13:

“Animals taken by those opting to participate in this community harvest system do not count toward the harvest limits of any individuals who do not opt to participate in this community harvest system.” At this meeting, the Board also approved a community harvest system framework that describes additional details about implementation of the system (see analysis of Proposal WP22-36 Appendix 1) (OSM 2021).

Currently, the following community harvest systems are codified in Federal regulations: Lime Village for Unit 19 caribou and moose; Nikolai for Unit 19 sheep; the community of Wales for Unit 22 muskoxen; Anaktuvuk Pass for Units 24 and 26 sheep; Unit 25 black bear with a State community harvest permit; Ninilchik for Kasilof River and Kenai River community gillnets for salmon; and Cantwell, Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta Lake, and Tazlina for moose in Unit 11 and caribou and moose in Unit 13.

Current Events Involving the Species

Proposal WP22-36, submitted by AITRC, requests the Board adopt existing temporary regulations for regarding the community harvest system for moose and caribou in Unit 11, 12, and 13.

Cultural Knowledge and Traditional Practices

Community harvest and designated harvester provisions provide recognition of the customary and traditional practices of sharing and redistribution of harvests. A host of research supports a need for these alternative permitting systems in Federal subsistence regulations to harmonize fundamental harvesting characteristics of rural Alaskan communities with the Federal Subsistence Management Program. Family-based production is the foundation of the mixed subsistence-cash economy found in rural Alaskan communities (cf. Wolfe 1981, 1987; Wolfe and Walker 1987; Wolfe et al. 1984). Family-based production is when two or more individual households linked by kinship distribute the responsibility to harvest, process, and store wild resources based on factors such as skills and abilities, availability of able workers, sufficient income to purchase harvesting and processing technology, and other factors. Units of family-based production typically contain at least one “super-household” that produces surpluses of wild foods (Wolfe 1987). On a statewide basis, about 30% of households in a community are super-households that produce about 70% or more of the community’s wild food harvest (Sahlins 1972; Andrews 1988; Magdanz, Utermohle, and Wolfe 2002; Sumida 1989; Sumida and Andersen 1990). Conversely, 20% to 30% of households in units of family-based production did not produce enough food to feed members of that household (Sahlins 1972). Inequalities in individual and household production levels are equalized via processes of distribution (sharing and feasting) and exchange (trade and barter).

Recent studies on disparities in household food production demonstrate that super-households participate heavily in food-sharing. Wolfe et al. (2007) looked at household food production in 67 rural Alaska communities representing Aleut, Athabascan, Inupiat, Tlingit-Haida, and Yup’ik cultural groups. The majority of these communities were comprised of mostly Alaska Native households with at least one Native head of household, although communities in Southeast Alaska were ethnically mixed. The researchers found that there were household variables commonly associated with levels of

food production throughout these communities. Household variables including higher levels of income, participation in commercial fishing, and households with three or more adult males over 15 years of age were associated with higher levels of food production. Households in which there was a single or elder head of household were associated with lower levels of food production. Most remarkably, the study also demonstrated that high-producing households gave the most food to others and giving to other households may be a primary motivation for over-production. Wolfe et al. (2007) further recommended that policy and management regulations account for food production and sharing practices within Alaskan mixed subsistence-cash communities. They wrote:

The findings about the concentration of subsistence harvests also have social policy implications for the management of hunts and fisheries. Annual and daily bag limits that require that individuals or households harvest at equal levels, as is common for sport fishing and sport hunting, operate from different principles from those operating in subsistence systems. In the subsistence system, individuals and households commonly are not equivalent producers. Instead, a relatively small segment of high-producers harvest most of the fish or game. The average harvests among community households may be in line with bag and harvest limits required for conservation reasons, but the actual production is concentrated in a small number of households. Flexible regulations that allow for this type of concentrated harvest would be most compatible with the actual patterns of subsistence production (Wolfe et al. 2007:29).

Community harvest and designated harvester systems in use in the Federal Subsistence Management Program are intended to provide some flexibility in harvest regulations to make legal the activities of super-households in rural communities. Supporting the distribution of wild foods in villages allows people to continue their subsistence way of life.

Effects of the Proposal

If this proposal is adopted, then Federal regulations will recognize that the Board, when approving the framework for a community harvest system, may allow community members to choose whether they want to participate in the community harvest system or retain their individual harvest limits. The Federal regulations will specify that fish, wildlife, or shellfish harvested under a community harvest system will not count against the individual harvest limits of non-participants. Similarly, fish, wildlife, or shellfish harvested by non-participants will not count against the harvest limit set for the community harvest system. Effects to nonsubsistence uses, wildlife, fish, and shellfish, statewide, are not anticipated.

If this proposal is not adopted, then Federal regulations will continue to stipulate that any harvest within a community harvest system also counts toward the individual harvest limit of every community member regardless of whether they participate in the community harvest system. Additionally, the Board's authority to approve community harvest frameworks, and to allow community members to opt in or opt out of a community harvest, will not be clearly stated. Effects to nonsubsistence uses, wildlife, fish, and shellfish, statewide, are not anticipated.

OSM PRELIMINARY CONCLUSION

Support Proposal WP22-01.

Justification

Subsistence users and others will find these regulations less confusing and easier to use. In this way, the proposed regulatory changes provide more equitable harvest options and opportunities for subsistence users. They also prevent unintentional and unnecessary restrictions from being placed on any community members who choose not to participate in a community harvest system, and clarifies a current oversight in Federal regulation.

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APPENDIX 1

STATE OF ALASKA COMMUNITY HARVEST PROGRAM

5 AAC 92.074. Community subsistence harvest hunt areas

(a) The commissioner or the commissioner's designee may, under this section and 5 AAC 92.052, issue community-based subsistence harvest permits and harvest reports for big game species where the Board of Game (board) has established a community harvest hunt area under (b) of this section and 5 AAC 92.074.

(b) The board will consider proposals to establish community harvest hunt areas during regularly scheduled meetings to consider seasons and bag limits for affected species in a hunt area. Information considered by the board in evaluating the proposed action will include

(1) a geographic description of the hunt area;

(2) the sustainable harvest and current subsistence regulations and findings for the big game population to be harvested;

(3) a custom of community-based harvest and sharing of the wildlife resources harvested in the hunt area by any group; and

(4) other characteristics of harvest practices in the hunt area, including characteristics of the customary and traditional pattern of use found under 5 AAC 99.010(b).

(c) If the board has established a community harvest hunt area for a big game population, residents of the community or members of a group may elect to participate in a community harvest permit hunt in accordance with the following conditions:

(1) a person representing a group of 25 or more residents or members may apply to the department for a community harvest permit by identifying the community harvest hunt area and the species to be hunted, and by requesting that the department distribute community harvest reports to the individuals who subscribe to the community harvest permit; the community or group representative must

(A) provide to the department the names of residents or members subscribing to the community harvest permit and the residents' or members' hunting license numbers, permanent hunting identification card numbers, or customer service identification numbers, or for those residents or members under 18 years of age, the resident or member's birth date;

(B) ensure delivery to the department of validated harvest reports from hunters following the take of individual game animals, records of harvest information for

individual animals taken, and collected biological samples or other information as required by the department for management;

(C) provide the department with harvest information, including federal subsistence harvest information, within a specified period of time when requested, and a final report of all game taken under the community harvest permit within 15 days of the close of the hunting season or as directed in the permit; and

(D) make efforts to ensure that the applicable customary and traditional use pattern described by the board and included by the department as a permit condition, if any, is observed by subscribers including meat sharing; the applicable board finding and conditions will be identified on the permit; this provision does not authorize the community or group administrator to deny subscription to any community resident or group member;

(E) from July 1, 2014 until June 30, 2018, in the community harvest hunt area described in 5 AAC 92.074(d) , permits for the harvest of bull moose that do not meet the antler restrictions for other resident hunts in the area will be limited to one permit for every three households in the community or group. Beginning July 1, 2018, in the community harvest hunt area described in 5 AAC 92.074(d) , permits for the harvest of bull moose that do not meet the antler restrictions for other resident hunts in the area will be distributed to participants using the scoring criteria described in 5 AAC 92.070.

(2) a resident of the community or member of the group who elects to subscribe to a community harvest permit

(A) may not hold a harvest ticket or other state hunt permit for the same species where the bag limit is the same or for fewer animals during the same regulatory year; however, a person may hold harvest tickets or permits for same-species hunts in areas with a larger bag limit following the close of the season for the community harvest permit, except that in Unit 13, prior to July 1, 2018, only one caribou may be retained per household, and on or after July 1, 2018, up to two caribou may be retained per household;

(B) may not subscribe to more than one community harvest permit for a species during a regulatory year;

(C) must have in possession when hunting and taking game a community harvest report issued by the hunt administrator for each animal taken;

(D) must validate a community harvest report immediately upon taking an animal; and

(E) must report harvest and surrender validated harvest reports within five days, or sooner as directed by the department, of taking an animal and transporting it to the place of final processing for preparation for human use and provide information and biological samples required under terms of the permit;

(F) must, if the community harvest hunt area is under a Tier II permit requirement for the species to be hunted, have received a Tier II permit for that area, species, and regulatory year.

(G) participants in the community harvest hunt area described in 5 AAC 92.074(d) must commit to participation for two consecutive years. This does not apply to participants that applied in 2016 for the 2018 regulatory year.

(3) in addition to the requirements of (1) of this subsection, the community or group representative must submit a complete written report, on a form provided by the department, for the community or group participating in the community harvest hunt area described in 5 AAC 92.074(d), that describes efforts by the community or group to observe the customary and traditional use pattern described by board findings for the game populations hunted under the conditions of this community harvest permit; in completing the report, the representative must make efforts to collect a complete report from each household that is a member of the community or group that describes efforts by the household to observe the customary and traditional use pattern using the eight elements described in this paragraph; a copy of all household reports collected by the community or group representative shall be submitted to the department as a part of the representative's written report; complete reports must include information about efforts to observe the customary and traditional use pattern of the game population, as follows:

(A) Element 1: participation in a long-term, consistent pattern of noncommercial taking, use, and reliance on the game population: the number of years of taking and use of the game population; and involvement of multiple generations in the taking and use of the game population; and use of areas other than the community subsistence hunt area for harvest activities;

(B) Element 2: participation in the pattern of taking or use of the game population that follows a seasonal use pattern of harvest effort in the hunt area: the months and seasons in which noncommercial harvest activities occur in the hunt area;

(C) Element 3: participation in a pattern of taking or use of wild resources in the hunt area that includes methods and means of harvest characterized by efficiency and economy of effort and cost: costs associated with harvests; and methods used to reduce costs and improve efficiency of harvest; and number of species harvested during hunting activities;

(D) Element 4: participation in a pattern of taking or use of wild resources that occurs in the hunt area due to close ties to the area: number of years of taking and use of the game population; and involvement of multiple generations in the taking and use of the game population; and variety of harvesting activities that take place in the hunt area; and evidence of other areas used for harvest activities;

(E) Element 5: use of means of processing and preserving wild resources from the hunt area that have been traditionally used by past generations: complete listing of the parts of the harvested game that are used; and preservation methods of that game; and types of foods and other products produced from that harvest;

(F) Element 6: participation in a pattern of taking or use of wild resources from the hunt area that includes the handing down of knowledge of hunting skills, values, and lore about the hunt area from generation to generation: involvement of multiple generations in the taking and use of the game population; and evidence of instruction and training;

(G) Element 7: participation in a pattern of taking of wild resources from the hunt area in which the harvest is shared throughout the community: amount of harvest of the game population that is shared; and evidence of a communal sharing event; and support of those in need through sharing of the harvest of the game population; and

(H) Element 8: participation in a pattern that includes taking, use, and reliance on a wide variety of wild resources from the hunt area: the variety of resource harvest activities engaged in within the hunt area; and evidence of other areas used for harvest activities.

(d) Seasons for community harvest permits will be the same as those established for other subsistence harvests for that species in the geographic area included in a community harvest hunt area, unless separate community harvest hunt seasons are established. The total bag limit for a community harvest permit will be equal to the sum of the individual participants' bag limits, established for other subsistence harvests for that species in the hunt area or otherwise by the board. Seasons and bag limits may vary within a hunt area according to established

subsistence regulations for different game management units or other geographic delineations in a hunt area.

(e) Establishment of a community harvest hunt area will not constrain nonsubscribing residents of the community or members of the group from participating in subsistence harvest activities for a species in that hunt area using individual harvest tickets or other state permits authorized by regulation, nor will it require any resident of the community or member of the group eligible to hunt under existing subsistence regulations to subscribe to a community harvest permit.

(f) The department may disapprove an application for a community subsistence harvest permit from a community or group that has previously failed to comply with requirements in (c)(1) and (3) of this section. The failure to report by the community or group representative under (c)(1) and (3) of this section may result in denial of a community subsistence harvest permit during the following regulatory year. The department must allow a representative the opportunity to request a hearing if the representative fails to submit a complete report as required under (c)(1) and (3) of this section. A community or group aggrieved by a decision under this subsection will be granted a hearing before the commissioner or the commissioner's designee, if the community or group representative makes a request for a hearing in writing to the commissioner within 60 days after the conclusion of the hunt for which the person failed to provide a report. The commissioner may determine that the penalty provided under this subsection will not be applied if the community or group representative provides the information required on the report and if the commissioner determines that

(1) the failure to provide the report was the result of unavoidable circumstance; or

(2) extreme hardship would result to the community or group.

(g) A person may not give or receive a fee for the taking of game or receipt of meat under a community subsistence harvest permit.

(h) Nothing in this section authorizes the department to delegate to a community or group representative determination of the lawful criteria for selecting who may hunt, for establishing any special restrictions for the hunt and for the handling of game, and for establishing the terms and conditions for a meaningful communal sharing of game taken under a community harvest permit.

(i) In this section,

(1) "fee" means a payment, wage, gift, or other remuneration for services provided while engaged in hunting under a community harvest permit; and does not include reimbursement for actual expenses incurred during the hunting activity within the scope of the community harvest permit, or a non-cash exchange of subsistence-harvested resources.

(2) a "community" or "group" is a mutual support network of people who routinely (at least several times each year) provide each other with physical, emotional, and nutritional assistance in a multi-generational and inter/intra familial manner to assure the long-term welfare of individuals, the group, and natural resources they depend on; for purposes of this regulation, a "community" or "group" shares a common interest in, and participation in uses of, an identified area and the wildlife populations in that area, that is consistent with the customary and traditional use pattern of that wildlife population and area as defined by the board.

WP22-02 Executive Summary

| | |
|---|---|
| General Description | Proposal WP22-02 requests to remove language from designated hunting regulations prohibiting the use of a designated hunter permit by a member of community operating under a community harvest system. <i>Submitted by the Office of Subsistence Management.</i> |
| Proposed Regulation | See page 173 |
| OSM Preliminary Conclusion | Support |
| Southeast Alaska Subsistence Regional Advisory Council Recommendation | |
| Southcentral Alaska Subsistence Regional Advisory Council Recommendation | |
| Kodiak/Aleutians Subsistence Regional Advisory Council Recommendation | |
| Bristol Bay Subsistence Regional Advisory Council Recommendation | |
| Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation | |
| Western Interior Alaska Subsistence Regional Advisory Council Recommendation | |
| Seward Peninsula Subsistence Regional Advisory Council Recommendation | |

WP22-02 Executive Summary

| | |
|---|-------------|
| Northwest Arctic Subsistence Regional Advisory Council Recommendation | |
| Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation | |
| North Slope Subsistence Regional Advisory Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP22-02

ISSUES

Wildlife Proposal WP22-02, submitted by the Office of Subsistence Management (OSM), requests to remove language from designated hunting regulations prohibiting the use of a designated hunter permit by a member of community operating under a community harvest system.

DISCUSSION

While developing the framework for a community harvest system in summer 2020, Ahtna Intertribal Resource Commission (AITRC) representatives realized that residents of communities in a community harvest system cannot designate another person to harvest on their behalf, pursuant to Federal designated hunter regulations. AITRC and Federal agency staff perceived this provision as unfair to community members who choose not to participate in a community harvest system because their options for acquiring their individual harvest limits are curtailed involuntarily.

The proponent clarified that the intent of this proposal is to allow members of a community with a community harvest system to designate a hunter to harvest on their behalf to fulfill either their individual harvest limit or to count toward the community harvest limit depending on whether or not they choose to participate in the community harvest system.

Existing Federal Regulation

36 CFR 242 and 50 CFR 100.25(e) Hunting by designated harvest permit

If you are a Federally qualified subsistence user (recipient), you may designate another Federally qualified subsistence user to take deer, moose, and caribou, and in Units 1-5, goats, on your behalf unless you are a member of a community operating under a community harvest system or unless unit-specific regulations in §____.26 preclude or modify the use of the designated hunter system or allow the harvest of additional species by a designated hunter. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no more than two harvest limits in his/her possession at any one time except for goats, where designated hunters may have no more than one harvest limit in possession at any one time, and unless otherwise specified in unit-specific regulations in §____.26.

§____.26(n)(6)(ii) Unit 6 specific regulations

(D) A federally qualified subsistence user (recipient) who is either blind, 65 years of age or older, at least 70 percent disabled, or temporarily disabled may designate another federally qualified subsistence user to take any moose, deer, black bear, and beaver on his or her behalf in Unit 6, and goat in Unit 6D, unless the recipient is a member of a community operating

under a community harvest system. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients, but may have no more than one harvest limit in his or her possession at any one time.

§ _____.26(n)(9)(iii) Unit 9 specific regulations

(E) For Units 9C and 9E only, a federally qualified subsistence user (recipient) of Units 9C and 9E may designate another federally qualified subsistence user of Units 9C and 9E to take bull caribou on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must obtain a designated hunter permit and must return a completed harvest report and turn over all meat to the recipient. There is no restriction on the number of possession limits the designated hunter may have in his/her possession at any one time.

(F) For Unit 9D, a federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take caribou on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no more than four harvest limits in his/her possession at any one time.

§ _____.26(n)(10) Unit 10 specific regulations

(iii) In Unit 10—Unimak Island only, a federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take caribou on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no more than four harvest limits in his/her possession at any one time.

§ _____.26(n)(22)(iii) Unit 22 specific regulations

(E) A federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take musk oxen on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must get a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients in the course of a season, but have no more than two harvest limits in his/her possession at any one time, except in Unit 22E where a resident of Wales or Shishmaref acting as a designated hunter may hunt for any number of recipients, but have no more than four harvest limits in his/her possession at any one time.

§ _____.26(n)(23)(iv) Unit 23 specific regulations

(D) For the Baird and DeLong Mountain sheep hunts—A federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take sheep on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for only one recipient in the course of a season and may have both his and the recipients' harvest limits in his/her possession at the same time.

(F) A federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take musk oxen on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must get a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients, but have no more than two harvest limits in his/her possession at any one time.

§ _____.26(n)(26)(iv) Unit 26 specific regulations

(C) In Kaktovik, a federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take sheep or musk ox on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no more than two harvest limits in his/her possession at any one time.

(D) For the DeLong Mountain sheep hunts—A federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take sheep on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for only one recipient in the course of a season and may have both his and the recipient's harvest limits in his/her possession at the same time.

Proposed Federal Regulation

§ _____.25(e) Hunting by designated harvest permit

If you are a Federally qualified subsistence user (recipient), you may designate another Federally qualified subsistence user to take deer, moose, and caribou, and in Units 1-5, goats, on your behalf ~~unless you are a member of a community operating under a community harvest system or~~ unless unit-specific regulations in §100.26 preclude or modify the use of the designated hunter system or allow the harvest of additional species by a designated hunter. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no

more than two harvest limits in his/her possession at any one time except for goats, where designated hunters may have no more than one harvest limit in possession at any one time, and unless otherwise specified in unit-specific regulations in §100.26.

§ _____.26(n)(6)(ii) Unit 6 specific regulations

(D) A federally qualified subsistence user (recipient) who is either blind, 65 years of age or older, at least 70 percent disabled, or temporarily disabled may designate another federally qualified subsistence user to take any moose, deer, black bear, and beaver on his or her behalf in Unit 6, and goat in Unit 6D, ~~unless the recipient is a member of a community operating under a community harvest system.~~ The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients, but may have no more than one harvest limit in his or her possession at any one time.

§ _____.26(n)(9)(iii) Unit 9 specific regulations

(E) For Units 9C and 9E only, a federally qualified subsistence user (recipient) of Units 9C and 9E may designate another federally qualified subsistence user of Units 9C and 9E to take bull caribou on his or her behalf ~~unless the recipient is a member of a community operating under a community harvest system.~~ The designated hunter must obtain a designated hunter permit and must return a completed harvest report and turn over all meat to the recipient. There is no restriction on the number of possession limits the designated hunter may have in his/her possession at any one time.

(F) For Unit 9D, a federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take caribou on his or her behalf ~~unless the recipient is a member of a community operating under a community harvest system.~~ The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no more than four harvest limits in his/her possession at any one time.

§ _____.26(n)(10) Unit 10 specific regulations

(iii) In Unit 10—Unimak Island only, a federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take caribou on his or her behalf ~~unless the recipient is a member of a community operating under a community harvest system.~~ The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no more than four harvest limits in his/her possession at any one time.

§ _____.26(n)(22)(iii) Unit 22 specific regulations

(E) A federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take musk oxen on his or her behalf ~~unless the recipient is a member of a community operating under a community harvest system~~. The designated hunter must get a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients in the course of a season, but have no more than two harvest limits in his/her possession at any one time, except in Unit 22E where a resident of Wales or Shishmaref acting as a designated hunter may hunt for any number of recipients, but have no more than four harvest limits in his/her possession at any one time.

§ _____.26(n)(23)(iv) Unit 23 specific regulations

(D) For the Baird and DeLong Mountain sheep hunts—A federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take sheep on his or her behalf ~~unless the recipient is a member of a community operating under a community harvest system~~. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for only one recipient in the course of a season and may have both his and the recipients' harvest limits in his/her possession at the same time.

(F) A federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take musk oxen on his or her behalf ~~unless the recipient is a member of a community operating under a community harvest system~~. The designated hunter must get a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients, but have no more than two harvest limits in his/her possession at any one time.

§ _____.26(n)(26)(iv) Unit 26 specific regulations

(C) In Kaktovik, a federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take sheep or musk ox on his or her behalf ~~unless the recipient is a member of a community operating under a community harvest system~~. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no more than two harvest limits in his/her possession at any one time.

(D) For the DeLong Mountain sheep hunts—A federally qualified subsistence user (recipient) may designate another federally qualified subsistence user to take sheep on his or her behalf ~~unless the recipient is a member of a community operating under a community harvest system~~. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for only one recipient in the course of a season and may have both his and the recipient's harvest limits in his/her possession at the same time.

Existing State Regulation

The State of Alaska provides for the transfer of harvest limits from one person to another through its proxy hunting program (5 AAC 92.011; see **Appendix 1**). **Table 1** is a side-by-side comparison of the State’s proxy system to the Federal designated hunter system.

Table 1. State of Alaska Proxy System compared to Federal Designated Hunter System.

| State of Alaska Proxy System | Federal Subsistence Management Program Designated Hunter System |
|--|--|
| Applies where there is an open State harvest season. | Applies to Federal public lands when there is an open Federal harvest season. |
| Applies to caribou, deer, and moose. | Applies to caribou, deer, moose, and in Units 1–5, goats, as well as other species identified in unit-specific regulations. |
| Available to a hunter who is blind, physically or developmentally disabled (requires physician’s affidavit), or 65 years of age or older | Available to Federally qualified subsistence users. |
| Either the recipient or the hunter may apply for the authorization. | Recipient obtains a permit or harvest ticket and designates another Federally qualified subsistence user to harvest on his/her behalf. Designated hunter obtains a Federal designated hunter permit. |
| No person may be a proxy for more than one recipient at a time. | A person may hunt for any number of recipients, but may have no more than two harvest limits in his/her possession at any one time. |
| Antler destruction is required. | No antler destruction is required. |

Federal Public Lands

Federal public lands comprise approximately 54% of Alaska statewide and consist of 36% U.S. Fish and Wildlife Service managed lands, 28% Bureau of Land Management managed lands, 25% National Park Service managed lands, and 11% U.S. Forest Service managed lands.

Customary and Traditional Use Determination

This is a statewide proposal regarding wildlife.

Regulatory History

In 1991, after extensive public comment on the Federal Subsistence Management Program’s first Temporary Rule, the Federal Subsistence Board committed to addressing community harvest limits and alternative permitting processes (56 Fed. Reg. 123, 29411 [June 26, 1991]).

In 1992, responding to approximately 40 proposals requesting community harvest systems and numerous public comments requesting alternative permitting systems, the Board supported the concept of adjusting seasons and harvest limits based on customs and traditions of a community (57 Fed. Reg. 103, 22531–2 [May 28, 1992]). The Board said specific conditions for the use of a particular harvest reporting system may be applied on a case-by-case basis and further development and refinement of guidelines for alternative permitting systems would occur as the Federal Subsistence Management Program evolved (57 Fed. Reg. 104, 22948 [May 29, 1992]). These regulations at _____.6 were modified to state that intent more clearly:

§ _____.6 Licenses, permits, harvest tickets, tags, and reports¹

(f) The Board may implement harvest reporting systems or permit systems where:

(1) The fish and wildlife is taken by an individual who is required to obtain and possess pertinent State harvest permits, tickets, or tags, or Federal permits, harvest tickets, or tags;

(2) A qualified subsistence user may designate another qualified subsistence user to take fish and wildlife on his or her behalf;

(3) The fish and wildlife is taken by individuals or community representatives permitted a one-time or annual harvest for special purposes including ceremonies and potlatches;

(4) The fish and wildlife is taken by representatives of a community permitted to do so in a manner consistent with the community's customary and traditional practices.

In 1993, the Board adopted Proposal P93-12, which clarified that community harvest limits and individual harvest limits may not be accumulated, community harvest systems will be adopted on a case-by-case basis and defined under unit-specific regulations, and wildlife taken by a designated hunter for another person, counts toward the individual harvest limit of the person for whom the wildlife is taken. These new regulations specified that for wildlife, after taking your individual harvest limit, you may not continue to harvest in areas outside of your community harvest area (58 Fed. Reg. 103, 31255 [June 1, 1993]). These new regulations were the following:

§ _____.25 Subsistence taking of wildlife²

(c) Possession and transportation of wildlife

(1) Except as specified in § _____.25(c)(3)(ii) [below] or (c)(4) [trapping regulations], or as otherwise provided, no person may take a species of wildlife in any Unit, or portion of a Unit, if that person's total statewide take of that species has already been obtained under Federal and State regulations in other Units, or portions of other Units.

¹ Subsequently moved to § _____.10(d) *Federal Subsistence Board—Power and Duties.*

² Subsequently moved to § _____.26 *Taking of wildlife.*

(2) An animal taken under Federal or State regulations by any member of a community with an established community harvest limit for that species counts toward the community harvest for that species. Except for wildlife taken pursuant to §____.6(f)(3) [above], an animal taken by an individual as part of a community harvest limit counts toward that individual's bag limit for that species taken under Federal or State regulations for areas outside of the community harvest area.

(3) Individual bag limits (i) bag limits authorized by §____.25 and in State regulations may not be accumulated; (ii) Wildlife taken by a designated hunter for another person pursuant to §____6(f)(2) [above], counts toward the individual bag limit of the person for whom the wildlife is taken.

In 1993, community harvest strategies were adopted by the Board simply by adding the use of designated hunters into unit-specific regulations for Unit 25 West moose and Unit 26C sheep (58 Fed. Reg. 103, 31252–3 [June 1, 1993]). In this way, designated harvesters and resource quotas became a common method for allocating harvests communally.

Unit 25(D)(West)—. . . 1 antlered moose by a Federal registration permit. Alternate permits allowing for designated hunters are available to qualified applicants who reside in Beaver, Birch Creek, or Stevens Village. Moose hunting on public land in this portion of Unit 25(D)(West) is closed at all times except for residents of Beaver, Birch Creek and Stevens Village during seasons identified above. The moose season will be closed when 30 antlered moose have been harvested in the entirety of Unit 25D West (58 Fed. Reg. 103, 31287 [June 1, 1993]).

Unit 26(C)—3 sheep per year; the Aug. 10–Sept 20 season is restricted to 1 ram with 7/8 cur1 horn or larger. A State registration permit is required for the Oct. 1–Apr. 30 season, except for residents of the City of Kaktovik. Kaktovik residents may harvest sheep in accordance with a Federal community harvest strategy for Unit 26(C) which provides for the take of up to two bag limits of 3 sheep by designated hunter. Procedures for Federal permit issuance and community reporting will be mutually developed by Kaktovik and Federal representatives prior to the season opening. Open season: Aug. 10–Sept. 30 and Oct. 1–Apr. 30 (58 Fed. Reg. 103, 31289 [June 1, 1993]).

In 1994, the Board rejected four proposals concerning the use of designated hunters to harvest wildlife for others and redirected staff to work with Regional Advisory Councils and develop regulations for the 1995/96 regulatory year that address designated harvesters on a state-wide basis (59 Fed. Reg. 29033, June 3, 1994).

In October 1994, a Designated Hunter Task Force published its report describing four options for alternative permitting systems (OSM 1994).

In 1996, administrative clarification was made at §____.25(c)(2) to better represent the Board’s intent (61 Fed. Reg. 147, 39711 [July 30, 1996]). Before this clarification was made, a member of a community with a community harvest limit who had not taken an individual harvest limit could take an individual harvest limit after the community had met its harvest limit. The effect of the clarification was that members of community in a community harvest system can harvest only as part of the community harvest system:

§____.25 Subsistence taking of wildlife

(c) Possession and transportation of wildlife

...

*(2) An animal taken under Federal or State regulations by any member of a community with an established community harvest limit for that species counts toward the community harvest for that species. Except for wildlife taken pursuant to §____.6(f)(3) [above], an animal taken ~~by an individual~~ as part of a community harvest limit counts toward ~~that individual’s bag limit~~ **every community member’s harvest limit** for that species taken under Federal or State regulations for areas outside of the community harvest area.*

Later, the language “or as otherwise provided for by this part” was added to the provision. The effect was to allow an exception to the provision if the exception was placed in regulation:

*(2) An animal taken under Federal or State regulations by any member of a community with an established community harvest limit for that species counts towards the community harvest limit for that species. Except for wildlife taken pursuant to §____.10(d)(5)(iii) **or as otherwise provided for by this part**, an animal taken as part of a community harvest limit counts toward every community member's harvest limit for that species taken under Federal or State of Alaska regulations.*

In 2001, administrative clarifications were added to regulations at §____.25(e) *Hunting by designated harvest permit*. New provisions stipulated that a designated hunter recipient may not be a member of a community operating under a community harvest system, reflecting §____.25(c)(2), above (66 Fed. Reg. 122, 33758 [June 25, 2001]). These new provisions were the following:

§____.25 Subsistence taking of fish, wildlife, and shellfish: general regulations³

(e) Hunting by designated harvest permit

(1) As allowed by §____.26 [Subsistence taking of wildlife], if you are a Federally-qualified subsistence user, you (beneficiary) may designate another Federally-qualified

³ §____.25 was formerly *Subsistence taking of wildlife* that was moved to §____.26 to make room for these *general regulations*.

subsistence user to take wildlife on your behalf unless you are a member of a community operating under a community harvest system.

(2) The designated hunter must obtain a designated hunter permit and must return a completed harvest report.

(3) You may not designate more than one person to take or attempt to take fish on your behalf at one time.

(4) The designated hunter may hunt for any number of recipients but may have no more than two harvest limits in his/her possession at any one time, unless otherwise specified in §____.26.

After 1994, the Board recommenced adopting designated harvester provisions in unit-specific regulations through 2002.

Prior to 2003, the Board adopted designated hunter regulations for 21 unit-specific hunts. In 2003, the Board established the statewide designated hunter system, based on Regional Advisory Council recommendations, providing opportunities for subsistence users to receive deer, caribou, and moose from designated hunters, subject to unit-specific regulations to include other species and special provisions (68 Fed. Reg. 38466 [June 27, 2003]). Where Councils agreed with these general statewide provisions, then unit-specific regulations were rescinded unless they included other species or special provisions.

In April 2020, the Board adopted deferred Proposal WP18-19 with modification to establish a community harvest system moose in Units 11 and caribou and moose in Unit 13 that will be administered by the Ahtna Intertribal Resource Commission (AITRC). The modification was to name individual communities within the Ahtna traditional use territory authorized to harvest caribou and moose in Unit 13 and moose in Unit 11 as part of a community harvest system, subject to a framework established by the Board under unit specific regulations. While developing the framework for the community harvest system over the summer of 2020, AITRC representatives and Federal agency staff realized that current Federal regulations prevent the use of designated hunters by any community member whether or not they choose to participate in the community harvest system (OSM 2020). In January 2021, the Board approved the community harvest system framework that describes additional details about implementation of the system (OSM 2021a).

Harvest History

The Designated Hunter Permit database is maintained at the Office of Subsistence Management. **Table 2** describes the use of the designated hunter system since 2002 when the permit system was implemented. Designated hunters have reported harvesting caribou, deer, moose, sheep, goats, and muskoxen. Most of the reported harvest by designated hunters is for deer (84%, or 4,717,), and most of those are taken from Southeast Alaska (Units 1–5). Designated hunter harvests of caribou account for 12% (658 caribou), and moose 4% (212 moose).

Table 2. Use of Federal designated hunter system based on completed harvest reports 2002-2020 cumulative, by species and management unit (OSM 2021b).

| Management Unit | Number of Animals Harvested by Designated Hunters 2002-2020 |
|-------------------|---|
| Caribou | |
| 9 | 4 |
| 12 | 109 |
| 13 | 477 |
| 17 | 8 |
| 18 | 6 |
| 20 | 31 |
| Unknown | 23 |
| Total | 658 |
| Dall Sheep | |
| 23 | 3 |
| Deer | |
| 1 | 57 |
| 2 | 146 |
| 3 | 1,178 |
| 4 | 22 |
| 6 | 0 |
| 8 | 10 |
| 2 | 727 |
| 4 | 1,836 |
| 5 | 11 |
| 6 | 3 |
| 8 | 672 |
| Unknown | 55 |
| Total | 4,717 |
| Moose | |
| 1 | 9 |
| 3 | 9 |
| 5 | 34 |
| 6 | 36 |
| 11 | 7 |
| 12 | 1 |
| 13 | 67 |
| 15 | 18 |
| 18 | 3 |
| 19 | 12 |
| 21 | 2 |
| 24 | 5 |
| 25 | 1 |
| 26 | 2 |
| Unknown | 6 |
| Total | 212 |

Continued on next page.

| Management Unit | Number of Animals Harvested by Designated Hunters 2002-2020 |
|--------------------------------------|--|
| <i>Continued from previous page.</i> | |
| Management Unit | Number of Animals Harvested by Designated Hunters 2002-2020 |
| Mountain Goats | |
| 1 | 1 |
| 4 | 5 |
| Total | 6 |
| Muskoxen | |
| 22 | 3 |

Cultural Knowledge and Traditional Practices

See the Cultural Knowledge and Traditional Practices section in the Proposal WP22-01 analysis.

Effects of the Proposal

If this proposal is adopted, then Federal designated hunter regulations will no longer preclude members of communities with a community harvest system from designating another person to take wildlife on their behalf to fulfill either their individual harvest limit or count toward the community harvest limit, pursuant to Federal designated hunter regulations. Effects to nonsubsistence uses or wildlife are not anticipated.

If this proposal is not adopted, then Federal designated hunting regulations will continue to preclude residents of communities in a community harvest system from designating another person to take wildlife on their behalf, even though some residents may choose not to participate in the community harvest system. Effects to nonsubsistence uses or wildlife are not anticipated.

OSM PRELIMINARY CONCLUSION

Support Proposal WP22-02.

Justification

The intent of the proposed regulation change is to allow members of a community with a community harvest system to designate another person to harvest on their behalf to meet either their individual harvest limit or count toward the community harvest limit, pursuant to Federal designated harvester regulations. Therefore, the statements in general and unit-specific regulations addressed by this proposal, WP22-02, will no longer be relevant and should be removed. Additionally, these regulatory changes will provide more equitable harvest options and opportunities for subsistence users.

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APPENDIX 1

STATE PROXY HUNTING REGULATIONS

5 AAC 92.011. Taking of game by proxy

(a) A resident hunter (the proxy) holding a valid resident hunting license may take specified game for another resident (the beneficiary) who is blind, physically or developmentally disabled, or 65 years of age or older, as authorized by AS 16.05.405 and this section.

(b) Both the beneficiary and the proxy must possess copies of a completed proxy authorization form issued by the department. The completed authorization must include

(1) names, addresses, hunting license numbers, and signatures of the proxy and the beneficiary;

(2) number of the required harvest ticket report or permit harvest report;

(3) effective dates of the authorization; and

(4) signature of the issuing agent.

(c) A proxy authorization may not be used to take a species of game for a beneficiary for more than the length of the permit hunt season listed on the proxy authorization or for the maximum length of the species general season listed on the proxy authorization.

(d) A person may not be a proxy

(1) for more than one beneficiary at a time;

(2) more than once per season per species in Unit 13;

(3) for Tier II Caribou in Unit 13, unless the proxy is a Tier II permittee;

(4) for more than one person per regulatory year for moose in Units 20(A) and 20(B).

(e) Repealed 7/26/97.

(f) A proxy who takes game for a beneficiary shall, as soon as practicable, but not later than 30 days after taking game, personally deliver all parts of the game removed from the field to the beneficiary.

(g) Except for reporting requirements required by (h) of this section, a proxy who hunts or kills game for a beneficiary is subject to all the conditions and requirements that would apply to the beneficiary if the beneficiary personally hunted or killed the game.

(h) Reporting requirements for proxy and beneficiary are as follows:

(1) if the proxy takes the bag limit for the beneficiary, the proxy shall provide the beneficiary with all the information necessary for the beneficiary to complete and return the harvest ticket report or permit harvest report, as required by regulation, to the department within the time periods specified for such reports; the beneficiary is responsible for the timely return of the harvest ticket and permit harvest reports;

(2) if the proxy is unsuccessful or does not take the bag limit for the beneficiary, the proxy shall provide the beneficiary with any information necessary for the beneficiary to complete and return the harvest ticket report or permit harvest report, as required by regulation, to the department within the time periods specified for such reports; the beneficiary is responsible for the timely return of the harvest ticket and permit harvest reports;

(3) the department may require the proxy to complete a proxy hunter report issued with the authorization form and mail it to the department within 15 days after the effective period of the authorization.

(i) A person may not give or receive remuneration in order to obtain, grant, or influence the granting of a proxy authorization.

(j) A proxy participating in a proxy hunt must remove at least one antler from the skull plate or cut the skull plate in half, on an antlered animal, for both the proxy's animal and the beneficiary's animal before leaving the kill site, unless the department has established a requirement that complete antlers and skull plates must be submitted to the department.

(k) Proxy hunting under this section is only allowed for

(1) caribou;

(2) deer;

(3) moose in Tier II hunts, any-bull hunts, and antlerless moose hunts; and

(4) emperor geese.

(l) Notwithstanding (k) of this section, proxy hunting is prohibited in the following hunts where the board has determined that the use of the proxy would allow circumvention of harvest restrictions specified by the board, or where the board has otherwise directed:

(1) Unit 20(E) moose registration hunts and Units 20(B), 20(D), 20(E), 20(F), and 25(C) Fortymile and White Mountains caribou registration hunts;

(2) Units 21(B), 21(C), 21(D), and 24 moose hunts if either the proxy or the beneficiary holds a drawing permit for Units 21(B), 21(C), 21(D), or 24 moose hunts;

(3) Units 9(A) and 9(B), unit 9(C), that portion within the Alagnak River drainage, and units 17(B), 17(C), 18, 19(A), and 19(B) caribou hunts from August 1 through October 31;

(4) Unit 5(A) deer hunts from October 15 through October 31;

(5) Unit 20(D), within the Delta Junction Management Area, the moose drawing hunt for qualified disabled veterans.

| ICTP21-02 Executive Summary | |
|--|---|
| General Description | Proposal ICTP21-02 requests an individual customary and traditional use determination for salmon in the Batzulnetas Area of the Copper River drainage/Prince William Sound Area. In areas managed by the National Park Service where subsistence uses are allowed, customary and traditional use determinations may be made on an individual basis. <i>Submitted by Kathryn Martin.</i> |
| Proposed Regulation | <p>Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments</p> <p><i>§ .16 Customary and traditional use process</i></p> <p><i>(a) The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the National Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.</i></p> <p>Customary and Traditional Use Determination Salmon -- Batzulnetas Area: Waters of the Copper River and Tanada Creek between National Park Service regulatory markers.</p> <p><i>Residents of Mentasta Lake and Dot Lake, and Kathryn Martin.*</i></p> <p>*Note: Names of individuals do not appear in regulation booklets, they are on a list maintained by the respective National Park Service subsistence manager.</p> |
| National Park Service Recommendation | |
| Southcentral Subsistence Regional Advisory Council Recommendation | |
| Eastern Interior Subsistence Regional Advisory Council Recommendation | |
| Wrangell-St. Elias National Park Subsistence Resource Commission Recommendation | |
| Public Comments | |

DRAFT STAFF ANALYSIS ICTP21-02

ISSUES

Proposal ICTP21-02, submitted by Kathryn Martin of Tazlina, requests an individual customary and traditional use determination for salmon in the Batzulnetas Area of the Copper River drainage/Prince William Sound Area within Wrangell-St. Elias National Park.

DISCUSSION

The proponent has a personal and family history of customary and traditional use of salmon in the Batzulnetas Area of the Copper River drainage/Prince William Sound Area within Wrangell-St. Elias National Park. She is from Mentasta Lake Village, which is a resident zone community of Wrangell-St. Elias National Park and has a customary and traditional use determination for salmon in the Batzulnetas Area (see **Figure 1**), and currently lives in Tazlina, which is similarly a resident zone community but does not have a customary and traditional use determination for salmon in the Batzulnetas Area.

To be eligible to engage in subsistence uses, Federal subsistence regulations require that rural Alaska residents live in a community or area that has a customary and traditional use determination for the desired species and harvest area (50 CFR 100.5(b)). They also state that the National Park Service (NPS) may further regulate eligibly to engage in subsistence on NPS-managed lands (50 CFR 100.5(d)). According to NPS regulations, in order to qualify as a local rural resident eligible to engage in subsistence uses within a National Park or National Monument, a person must live in a resident zone community, live within the boundaries of the park or monument, or hold a §13.440 subsistence eligibility permit (36 CFR 13.420, 430). If a person qualifies as a local rural resident as described in the previous sentence, but lives in a community or area without a customary and traditional use determination for the species they wish to hunt or fish, they may submit a proposal to the Federal Subsistence Board for an individual customary and traditional use determination.

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

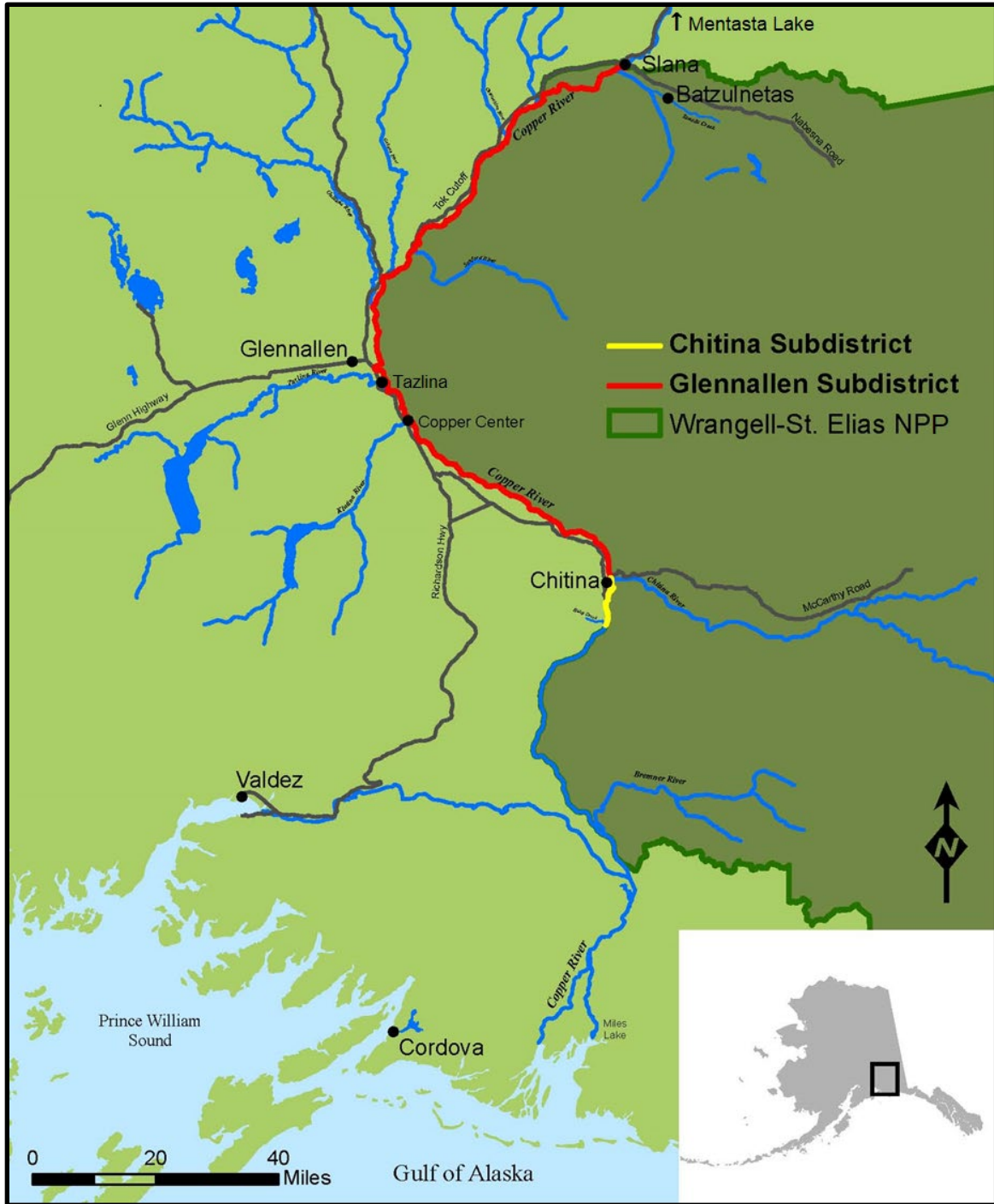


Figure 1: Federal subsistence fisheries on upper Copper River drainage.

Existing Federal Regulation

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

36 CFR 13.410 Applicability.

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

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

50 CFR 100.16 Customary and traditional use process.

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

Individual Customary and Traditional Use Determinations

| Customary and Traditional Use Determination—Salmon | |
|--|--|
| <i>Batzulnetas Area: Waters of the Copper River and Tanada Creek between National Park Service regulatory markers.</i> | <i>Residents of Mentasta Lake and Dot Lake</i> |

Proposed Federal Regulation

| Customary and Traditional Use Determination—Salmon | |
|---|---|
| <i>Batzulnetas Area: Waters of the Copper River and Tanada Creek between National Park Service regulatory markers</i> | <i>Residents of Mentasta Lake and Dot Lake, and Kathryn Martin.¹</i> |

¹ Names of individuals do not appear in regulation booklets; they are on a list maintained by the respective National Park Service subsistence manager.

Extent of Federal Public Lands/Waters

For purposes of this discussion, the phrase “Federal public waters” is defined as those waters described under 50 CFR 100.3. The Batzulnetas Area is located within the Prince William Sound Fishery Management Area. It consists of waters of the Copper River between National Park Service regulatory markers located near the mouth of Tanada Creek, and in Tanada Creek between National Park Service regulatory markers identifying the open waters of the creek. The Batzulnetas Area is located within Wrangell-St. Elias National Park.

Background

Batzulnetas is an important traditional salmon fishing site in the headwaters of the Copper River. The area near the confluence of Tanada Creek with the Copper River was called Batzulnetas by American military explorer Lt. Henry A. Allen after the Athabascan chief, or *kaska*, *Bets’ulnii Ta’*, who he met there during his travels in Alaska in 1885 (Allen 1887; Kari 1986:116). The importance of the location for salmon fishing is reflected in the traditional Ahtna name for one of the three named localities now collectively known as Batzulnetas. *Nataelde* or “roasted salmon place” refers to a specialty prepared by the men of the village (Reckord 1983:203). The other localities were called *C’ecenn’ gha* or “by the stumps” and *C’ecaegge* or “river mouth” (Simeone 2014:20).

At the beginning of the 20th century, there were two separate family-based communities in the Batzulnetas area. Charley Sanford and his family lived on Tanada Creek at *Nataelde*, while Billy Henry and his family lived at *C’ecaegge* along the Copper River just below the mouth of Tanada Creek (Simeone 2014:21). The Batzulnetas area was occupied until the 1940s, when the occupants relocated so that their children could attend school, but they continued to fish at Batzulnetas (Miller 2018). The descendants of Charley Sanford, including Katie John, who was Sanford’s daughter and Kathryn Martin’s grandmother, settled in Mentasta Lake Village, while those of Billy Henry settled in the Upper Tanana community of Dot Lake. This is relevant because Dot Lake and Mentasta Lake are the two communities that are recognized in the existing Federal Subsistence Program customary and traditional use determination for salmon in the Batzulnetas Area.

The State of Alaska closed the Copper River above Slana along with the Copper River tributaries to subsistence fishing in 1964, reportedly to allow additional escapement to the spawning grounds, to protect fish from being overharvesting on the spawning grounds, and to manage the growth of the fishery (ADF&G 1966:207, cited in Simeone and Valentine 2007:78; Simeone and Fall 2003:28). Katie John of Mentasta was subsequently the lead plaintiff in a series of lawsuits and other legal actions, beginning in 1985, seeking to resume subsistence fishing at Batzulnetas. As a result of the decisions on these lawsuits, the federal government issued regulations identifying waters in Alaska under federal subsistence management in 1999, including the Batzulnetas Area (Miller 2018; see also 64 Fed. Reg. 5, 1276-1313 [January 8, 1999]). Mentasta and Dot Lake – the primary villages to which Batzulnetas residents relocated in the 1940s – were the two communities identified in the original Federal Subsistence Program customary and traditional use determination specifically for the Batzulnetas Area (FSB 2000; OSM

2000). During the December 2000 meeting of the Federal Subsistence Board, it was noted that “access and use of the Batzulnetas fishery is traditionally limited to land owned by residents of Mentasta Lake and Dot Lake who are the sole users of this fishery” (FSB 2000: 00186).

Regulatory History

Requests for individual customary and traditional use determinations began almost as soon as the Federal Subsistence Board assumed management authority for subsistence on Federal public lands in 1990. Many of the initial individual customary and traditional use proposals were held up for years because of a huge backlog of proposals for community customary and traditional use determinations and lack of clarity as to whether or not individual customary and traditional use determinations were within the purview of the Federal Subsistence Board (Norris 2002: 229-232). In 1999, the Board finally addressed several proposals for individual customary and traditional use determinations. The Department of the Interior’s Office of the Solicitor affirmed that the Board “had sufficient legal authority under ANILCA to make customary and traditional use determinations for NPS administered lands on an individual basis” (Norris 2002: 232).

Since that affirmation, a handful of small number of individual customary and traditional use determinations have been made and the process for making them has been clarified. Later in 1999 the Board recognized one individual customary and traditional use determination for Denali National Park and several from Wrangell St. Elias National Park (Norris 2002: 232, FSB 1999: 222-243). The Board also denied some of these proposals due to lack of sufficient information exemplifying the eight factors (Norris 2002: 232; FSB 1999: 222-243). In 2010, the Board approved an additional individual customary and traditional use determination, in this case for Kevin Mayo of Healy (WP10-31). In January 2021 the Federal Subsistence Board adopted a revised policy on individual customary and traditional use determinations to follow the procedures described in the National Park Service’s “Standard Operating Procedures for Issuance of Subsistence Eligibility Permits and Individual Customary and Traditional Use Determinations.” The new policy allows for proposals to be submitted on a continuous basis, and also provides for concurrent application for 13,440 Subsistence Eligibility Permits. Subsequently, Blaine Mayo of Healy submitted Proposal ICTP21-01, which requests an individual customary and traditional use determination for moose in Unit 13E for himself, his wife, and children (NPS 2021). The Board approved this request during its August 2021 work session (FSB 2021).

Eight Factors for Determining Individual Customary and Traditional Use

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

1. Does the applicant have a long-term, consistent pattern of use of these resources, excluding interruptions beyond their control?
2. Does the applicant have a pattern of use for these resources recurring in specific seasons for many years?

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

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

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

Integrated Discussion of the Eight Factors

Kathryn Martin’s family has fished for salmon and harvested other subsistence resources at Batzulnetas for many generations, including her great grandfather Charlie Sanford, her grandmother Katie John, and her mother Eva John.² Batzulnetas is the location of the family’s traditional fish camp. Katie John, and now her descendants, own a Native Allotment at Batzulnetas, which reflects the importance of this site to the family. As mentioned earlier in this analysis, their ability to fish at the site was disrupted by a State of Alaska regulation that went into effect in 1964 prohibiting subsistence fishing on Copper River tributaries and on the main stem of the Copper River above the mouth of the Slana River. Their ability to fish there

² Discussion in this section is based primarily on Martin 2021a and 2021b.

was subsequently restored following a series of lawsuits in which Kathryn's grandmother Katie John was the lead plaintiff.

Kathryn Martin lived in Mentasta Lake Village, which has a customary and traditional use determination for salmon in the Batzulnetas area, from 1971 to 2005. She has harvested resources at Batzulnetas on an annual basis starting in 1992 and continues to do so. In 2005 she moved outside of Mentasta for work and thus lost her eligibility to fish for salmon at Batzulnetas under federal regulations; however, she continues to return to Batzulnetas to harvest other resources and to participate in the culture camp that takes place on her grandmother's Native Allotment. In addition to fishing for salmon, Ms. Martin has harvested moose, berries, firewood, roots, and steam bath rocks in the Batzulnetas area. Batzulnetas is located within Wrangell-St. Elias National Park about 2 miles south of the Nabesna Road and is accessed by highway vehicle and all-terrain vehicle (or ATV). Salmon are harvested using fish wheel and dip net – subsistence harvest methods characterized by efficiency and economy of effort – from May to September. As a migratory species, the harvest season depends on when salmon are present in the area.

Ms. Martin currently harvests salmon in the Glennallen Subdistrict of the Copper River, for which she has a customary and traditional use determination as a resident of Tazlina. She mostly fishes in the Tazlina area using a fish wheel owned by relative. She preserves the salmon for future use by her family and other family members by drying, jarring and freezing, and she shares with family members who aren't able to harvest or preserve salmon themselves. She also makes stink head (*nelk'oli*, fermented fish heads), which she says “no one really does ... anymore, but people still eat it” (Martin 2021a; see also Simeone and Kari 2002). She regularly picks berries in July and August, which she jars and freezes, and hunts moose and caribou, which she dries and freezes. The family hunts moose in June and July under a cultural and educational permit for the Batzulnetas Culture Camp and hunts caribou in September through March.

Kathryn learned fishing skills and values from her grandparents Katie John and Fred John Sr., her aunt Ruth Hicks, and her great uncle Huston Sanford. She shares what she knows about preserving salmon with her family, including her children, nieces, nephews and grandchildren, as well as others that want to learn, by taking them with her to harvest, process, and put away the fish. An important venue for sharing knowledge is the annual Batzulnetas Culture Camp which takes place at her grandmother's Native Allotment at Batzulnetas.

Effects of the Proposal

If adopted, this proposal would recognize Kathryn Martin's customary and traditional use of salmon at Batzulnetas and allow her to resume fishing at a site where her family has fished for generations. Because this customary and traditional use determination is for a single individual with a history of salmon harvests in the area, the effects on other users should be minimal.

NPS PRELIMINARY CONCLUSION

Support Proposal ICTP21-02

Justification

Ms. Martin provided substantial information about her and her family's customary and traditional use of salmon at Batzulnetas that exemplifies the eight factors for customary and traditional use determinations. The applicant exhibits a long-term pattern of use of salmon at Batzulnetas. This pattern has been repeated for many years and through several generations. Methods and means of harvest are characterized by efficiency and economy of effort. Knowledge of handling, preparing, and preserving salmon is shared among and between generations. Salmon is regularly shared with family members. The applicant demonstrates a pattern of subsistence use that includes reliance of a wide variety of wild resources that provide the applicant and her family with cultural, economic, social and nutritional benefits. All eight of the factors associated with determining customary and traditional uses are evident. For these reasons, there is substantial evidence to support the issuance of an individual customary and traditional use determination for the applicant.

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

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

*(*For determination of subsistence eligibility under the provisions of 36 CFR 13.440.)*

To be completed by the relevant Subsistence Coordinator:

Date: July 20, 2021

Applicant Name: Kathryn Martin

Analyst Name: Barbara Cellarius

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

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

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

See accompanying analysis.

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

1. Synopsis of the applicant's pattern of use¹ specifically in the national park or monument for which the permit is requested, including the following:
 - a. Species harvested,
 - b. Specific locations where the use occurred,
 - c. Years during which the subsistence uses took place, and
 - d. Whether aircraft was used for access.
2. Does the pattern of use begin prior to the signing of the Alaska National Interest Lands Conservation Act (ANILCA)?

¹ There may be variation by region and/or park on what constitutes a "pattern of use." Generally, there should exist evidence of repeated past attempts to access and harvest subsistence resources within the boundaries of the park or monument. SRCs may be consulted in defining a "pattern of use" for their region.

3. Does the applicant have a pattern of use established while as a resident of a resident zone community after the passage of ANILCA?

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

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

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


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

- There is substantial evidence to support the issuance of a Subsistence Eligibility Permit

- There is substantial evidence to support the issuance of an Individual Customary and Traditional Use Determination for (species and location) salmon in the Batzulnetas Area, Upper Copper River, Prince William Sound Fishery Management Area.
- There is NOT substantial evidence to support the issuance a Subsistence Eligibility Permit
- There is NOT substantial evidence to support the issuance an Individual Customary and Traditional Use Determination for (species and location) _____

Brief Justification:

Kathryn Martin provided substantial information about her and her family’s customary and traditional use of salmon at Batzulnetas that exemplifies the eight factors for customary and traditional use determinations. The applicant exhibits a long-term pattern of use of salmon at Batzulnetas. This pattern has been repeated for many years and through several generations. Methods and means of harvest are characterized by efficiency and economy of effort. Knowledge of handling, preparing, and preserving salmon is shared among and between generations. Salmon is regularly shared with family members. The applicant demonstrates a pattern of subsistence use that includes reliance of a wide variety of wild resources that provide the applicant and her family with cultural, economic, social and nutritional benefits. All eight of the factors associated with determining customary and traditional uses are evident. For these reasons, there is substantial evidence to support the issuance of an individual customary and traditional use determination for the applicant.

Signature of Analyst: **BARBARA CELLARIUS**  Digitally signed by BARBARA CELLARIUS
 Date: 2021.08.04 14:25:03 -08'00' Date: August 4, 2021



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

Federal Subsistence Board

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



FOREST SERVICE

AUG 23, 2021

In Reply Refer To
OSM 21044.LG

Eastern Interior Field Office Manager
Bureau of Land Management
222 University Avenue
Fairbanks, Alaska 99709

To Eastern Interior Field Office Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the manager of the Bureau of Land Management (BLM) Eastern Interior Field Office to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Units 20E, 20F and 25C for the management of caribou on these lands.

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

DELEGATION OF AUTHORITY

1. Delegation: The BLM Eastern Interior Field Office manager is hereby delegated authority to issue emergency or temporary special actions affecting caribou on Federal lands as outlined under the **Scope of Delegation**. In preparing special actions, BLM will consult with the NPS Yukon-Charley Rivers Preserve Superintendent and attempt to achieve concurrence. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulation at 36 CFR 242.19 and 50 CFR 100.19.

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

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

To modify or restrict harvest limits, including sex restrictions, season dates, and methods and means for caribou on Federal public lands in Units 20E, 20F and 25C. Prior to any modifications to any methods and means, you will seek pre-approval from OSM to assure that such modifications are allowed under the existing Code of Federal Regulations.

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

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

The Federal public lands subject to this delegated authority are those within Units 20E, 20F and 25C.

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

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

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19,

(2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected Federally qualified subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Board for consideration. You will maintain a record of all special action requests and rationale for your decision. A copy of this record will be provided to the Administrative Records Specialist in OSM no later than sixty days after development of the document.

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

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

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

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

You may defer a special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of Federal subsistence users or is particularly controversial. This option should be exercised judiciously and may be initiated only when sufficient time allows for it.

Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that a special action request may best be handled by the Board, subsequently rescinding the delegated regulatory authority for the specific action only.

6. Support Services: Administrative support for regulatory actions will be provided by OSM.

Sincerely,



Anthony Christianson
Chair

Enclosures

cc: Federal Subsistence Board

Assistant Regional Director, Office of Subsistence Management
Deputy Assistant Regional Director, Office of Subsistence Management
Subsistence Policy Coordinator, Office of Subsistence Management
Wildlife Division Supervisor, Office of Subsistence Management
Regulations Division Supervisor, Office of Subsistence Management
Eastern Interior Alaska Subsistence Council Coordinator,
Office of Subsistence Management
Chair, Eastern Interior Alaska Subsistence Regional Advisory Council
Superintendent, Yukon-Charley Rivers National Preserve
Deputy Commissioner, Alaska Department of Fish and Game
Special Projects Coordinator, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

Central & Southwest Region

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Regionwide / Multiple Units

PROPOSAL 1

5 AAC 85.045. Hunting seasons and bag limits for moose.

Shift to later moose hunting seasons in Units 13 and 14 as follows:

Solution: Shift hunting windows later in the year for impacted areas such as mine in Unit 13 and 14, whereas the hunting season ends on September 20th. Ending the moose season near October 9th would allow cooler temperatures to set in, and also aid in the ease of meat preservation.

What is the issue you would like the board to address and why? Moose hunting in Alaska needs to be moved back later in the season. Why: Alaska's climate has changed or shifted to where September months are not conducive to hunting, whereas temperatures are warmer than in years past. This has a negative effect on moose activities. Warmer temperatures will keep moose bedded down in the day and less active, it has also been observed that the rut is being delayed by warmer temperatures. These changes have put hunters at a growing and compounding disadvantage.

PROPOSED BY: Sean McKenney (EG-F20-017)

PROPOSAL 2

5 AAC 85.055. Hunting seasons and bag limits for Dall sheep.

Establish registration archery seasons for Dall sheep in Units 9B, 11, 13, 14A, 14B and 16 as follows:

Regulatory language: (for Units 9B, 11, 13, 14A, 14B and 16)

Resident: One ram, with full curl horn or larger, by bow and arrow only from August 1 - August 5, by registration permit available at <http://adfg.alaska.gov>. Certified bowhunters only.

Nonresident: One ram, with full curl horn or larger, by bow and arrow only, every four regulatory years from August 1 - August 5, by registration permit available at <http://adfg.alaska.gov>. Certified bowhunters only.

*** Optional addition: Any hunter participating in this registration archery hunt may only hunt sheep with bow and arrow during this regulatory year in the unit where they took advantage of the archery season, including during the general season from August 10 - September 21.

What is the issue you would like the board to address and why? There is an increasing interest in bowhunting opportunities for Dall sheep in Alaska but, aside from very low odds draw tags, there are currently no archery seasons or areas for sheep hunting in the Central/Southwest Region. This is a proposal for a resident and nonresident, August 1 – August 5 registration archery season for full curl Dall Sheep in Units 9B, 11, 13, 14A, 14B and 16.

opportunity to harvest more of this surplus of black bears will have no negative effect on the population.

PROPOSED BY: Dan Montgomery (EG-F20-047)

PROPOSAL 8

5 AAC 84.270. Furbearer trapping.

Shorten coyote trapping season in Units 9, 13, 14B, 16 and 17 as follows:

Unit 9 (October 1 - April 30) November 10 - March 31

Units 13 and 16 (October 15 - April 30) November 10 - March 31

Units 14B and 17 (November 10 - April 30) November 10 - March 31

What is the issue you would like the board to address and why? Shorten the coyote trapping season. Coyotes are harvested for fur not food. Current seasons were set for various reasons one being the hope lamb predation would be reduced. There is no data to support this that I know of. Coyote fur is better in November and March than October and April. Aligning the opening date of coyote season with most other furbearers will help eliminate by-catch problems. Citations have been issued for failure to salvage and/or surrender other furbearers taken during early coyote season.

PROPOSED BY: Tom Lessard

(EG-F20-021)

PROPOSAL 9

5 AAC 84.270. Furbearer trapping

Extend the wolf trapping season in Units 13 and 16 as follows:

October 15th – May 31st [April 30th].

What is the issue you would like the board to address and why? Extend the season for wolves in Units 13 and 16 to May 31st.

Snow conditions in these units many times allow for travel by snowmachine far past the current season closure. This would give trappers the ability to extend their season during late snow years and potentially allow for trapping areas that would have normally been closed but their snow conditions allow for travel. Hides would still be in great condition at this time of year and would allow for potential access into areas that would be extremely difficult to reach during the middle of winter. This season already has no limit on wolves, therefore there is no biological concern.

PROPOSED BY: Herb Mansavage

(HQ-F20-013)

caribou hunt in Unit 13 (CC001). Allow all members of a household participating in the community subsistence caribou hunt to each to obtain a harvest report and bag limit.

These changes are requested in order to address the fact that one caribou per households is not enough to provide for customary and traditional harvest and uses of caribou by Alaska residents living in Unit 13.

PROPOSED BY: Ahtna Intertribal Resource Commission (HQ-F20-027)

PROPOSAL 64

5 AAC 92.220. Salvage of game meat, furs, and hides.

Eliminate the salvage requirement for hide of moose for Alaska residents aged 60 years and older participating in the community subsistence moose hunt in Unit 13 and make it optional as follows:

Amend 5 AAC 92.220(a)(6) as follows:

In addition to (d) of this section, the heart, liver, kidneys, and fat of caribou taken in 5 AAC 92.074(d) must be salvaged, and the head, heart, liver, kidneys, stomach and hide of moose taken in 5 AAC 92.074(d) must be salvaged, **except that moose hide salvage is optional for Alaska residents aged 60 years or older;**

What is the issue you would like the board to address and why? Eliminate the salvage requirement for hide of moose taken in the community subsistence moose hunt in 5 AAC 92.074(d) for Alaska residents aged 60 years and older, and instead make this salvage optional. This request is submitted on behalf of a number of Ahtna elders who indicated that the hide is too heavy for them to salvage at their ages.

PROPOSED BY: Ahtna Intertribal Resource Commission (HQ-F20-025)

PROPOSAL 65

5 AAC 92.220. Salvage of game meat, furs, and hides.

Eliminate the moose hide salvage requirement for hunters aged 62 years and older participating in the community subsistence moose hunt in Unit 13 and make it optional as follows:

HUNT TERMS AND CONDITIONS

Therefore, all participants in the Copper Basin moose community subsistence harvest hunt must salvage for human consumption: 1. the head, heart, liver, kidneys, stomach, and hide.

1(a). Transporting hide from the field is optional for CM300 participants who are 62 years and older.

2. meat of the forequarters, hindquarters, ribs, brisket, neck, and back bone must remain naturally attached to the bones until delivered to the place where it is processed for human consumption.

What is the issue you would like the board to address and why? Revise the CM300 hunt conditions requirement that transporting moose hide from the field is optional for CM300 hunters who are 62 years and older.

Carrying hide from the field is difficult for older hunters. Moose hide is extremely heavy and large to carry from the field. Hunters 62 years and older should have the option to either leave moose hide in the field or haul it from the field.

PROPOSED BY: Ahtna Tene Nene' (EG-F20-037)

PROPOSAL 66

5 AAC 92.050(a)(4)(I). Required permit hunt conditions and procedures.

Clarify the Unit 13 Tier I subsistence caribou permit condition that members of a household may not hunt caribou or moose in any other state hunts in other locations as follows:

Add words: “any member of the household obtaining a Unit 13 Tier I subsistence permit in a regulatory year for caribou may not hunt caribou or moose in any **State** authorized hunt in any other location in the state during that regulatory year.”

What is the issue you would like the board to address and why? Clarify regulation. Existing ambiguity in regulatory wording leads to a lack of agreement and understanding of the regulations.

Currently a regulatory condition of Unit 13 Tier I subsistence caribou permit states: “any member of the household obtaining a Unit 13 Tier I subsistence permit in a regulatory year for caribou may not hunt caribou or moose in any other location in the state during that regulatory year.”

This has been interpreted to include limitations on federal subsistence hunts. In the federal subsistence hunt qualified rural residents can hunt moose and caribou in Units 11, 12 and 13. So if a federally qualified rural resident gets a Tier I state caribou tag, there is a question as to if that federally qualified rural resident could participate in a federal subsistence moose hunt in a different unit in which they qualify.

As the Board of Game regulatory authority covers state authorized hunts, there seems to be questionable legal validity for the state to place limits on federal subsistence hunt opportunities for which they have no legal control.

This interpretation leads to confusion, may create the legal liability for future lawsuits, and seems arbitrary in nature.

Simply adding the words: in any state authorized hunt.... would clarify this issue.

PROPOSED BY: Copper Basin Advisory Committee (EG-F19-158)

PROPOSAL 67

5 AAC 92.220. Salvage of game meat, furs, and hides.

Change the salvage requirements for sheep taken in Unit 11 as follows:

I would like to see a meat-on-bone salvage requirement for the two front quarters and two rear quarters and ribs for all sheep taken from Unit 11.

What is the issue you would like the board to address and why? There should be a meat-on-bone salvage requirement for sheep coming from the Wrangell Mountains. Through casual conversations with enforcement personnel and personal observation, I fear there might be a trend towards light sheep in the Wrangell Mountains. A stricter salvage requirement would aid enforcement activities and ensure that the resource is adequately used.

Boning out sheep meat in the field is a very common practice for sheep hunters. It saves the hunter weight and space in their pack for the hike out of the field. Unfortunately, careless or novice hunters can do a poor job removing all the edible meat from the bones. If they are inspected, the enforcement officer has to recreate a full sheep from a bag of scraps. It seems that it would be hard to issue a citation for a light bag without locating the kill site.

Furthermore, meat on the bone is easier to keep dry and cool. Alaska mountain weather is unpredictable and wet, particularly later in the season. Hunters also have a long trip out. Keeping the meat on the bone would ensure that it is in good quality when it arrives to the place it will be processed.

PROPOSED BY: Seth Wilson (EG-F20-137)

PROPOSAL 68

5 AAC 85.020. Hunting seasons and bag limits for brown bear.

Extend the general season for brown bear by bow and arrow only for residents and nonresidents within Unit 11 as follows:

Unit 11: **July 1 – August 9 by bow and arrow only; or** August 10 - June 30, one bear every regulatory year.

What is the issue you would like the board to address and why? Extending the general season for bow and arrow only would give more hunters the opportunity to spend time in the field pursuing bears within Unit 11 without having a negative impact on the resource. According to the Alaska Department of Fish and Game, only four of 55 brown bears were taken with a bow in the last five years. These reported archery harvests show the extremely low impact to the population.

PROPOSED BY: Alaskan Bowhunters Association (EG-F20-097)

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PROPOSAL 135

5 AAC 92.085. Unlawful methods of taking big game; exceptions.

Repeal the restriction on the use of aircraft for locating Dall sheep for hunting as follows:

Repeal 5 AAC 92.085(8): [AND FROM AUG 10 THROUGH SEPT 20, AIRCRAFT MAY NOT BE USED BY OR FOR ANY PERSON TO LOCATE DALL SHEEP FOR HUNTING OR DIRECT HUNTERS TO DALL SHEEP DURING THE OPEN SHEEP HUNTING SEASON, HOWEVER AIRCRAFT OTHER THAN HELICOPTERS MAY BE USED BY AND FOR SHEEP HUNTERS TO PLACE AND REMOVE HUNTERS AND CAMPS, MAINTAIN EXISTING CAMPS, AND SALVAGE HARVESTED SHEEP.]

What is the issue you would like the board to address and why?

5 AAC 92.085(8) regarding the use of aircraft during sheep season to locate and spot sheep for harvest.

5 AAC 92.085(8) stemmed from a board generated proposal commonly known as Proposal 207 that came out of nowhere and had little support from the public and Advisory Committees. Even the Alaska Wildlife Troopers say it is virtually unenforceable. Yet it has the potential – regardless of the caveats in the regulation – to make pilots act in unsafe ways they may not normally over fears of being turned in for spotting sheep.

The Board of Game (board) determined that using aircraft to spot sheep from the air in order to potentially harvest was unethical. Even though the board allows for the spotting of caribou from the air and same day land and shoot in an area. How is that “ethical” but the spotting of sheep from the air and the same-day-airborne restriction in place is not? This regulation was put in effect for the entire August 10 – September 20 sheep season. However, this regulation was never applied to the youth hunt season August 1–5. That is not at all consistent with the intent of the regulation when one group of sheep hunters is unfairly perceived as different from another.

PROPOSED BY: Fairbanks Fish and Game Advisory Committee (EG-F20-064)

PROPOSAL 136

5 AAC 92.085. Unlawful methods of taking big game; exceptions.

Rescind the restriction on use of aircraft for locating Dall sheep for hunting as follows:

This language in 5 AAC 92.085(8) should be rescinded:

[FROM AUGUST 10 TO SEPTEMBER 20, AIRCRAFT MAY ONLY BE USED TO PLACE HUNTERS AND CAMPS, MAINTAIN EXISTING CAMPS, AND SALVAGE MEAT AND TROPHIES WHILE USED FOR THE PURPOSE OF DALL SHEEP HUNTING. USING AN AIRCRAFT FOR THE PURPOSE OF SPOTTING SHEEP OR LOCATING DALL SHEEP DURING THE OPEN SEASON IS PROHIBITED.]

What is the issue you would like the board to address and why? The Matanuska Valley AC believes that the language that was adopted from Proposal 207, in March of 2015, that restricts the use of aircraft while hunting sheep, should be rescinded. The present language reads:

"From August 10 to September 20 aircraft may only be used to place hunters and camps, maintain existing camps, and salvage meat and trophies while used for the purpose of Dall sheep hunting. Using an aircraft for the purpose of spotting sheep or locating Dall sheep during the open season is prohibited."

After this proposal was adopted by the Board of Game (board), our AC had unprecedented attendance at its next meeting, and everyone was very upset by the action. Subsequently, on May 28 of 2015, the board held a special meeting at the request of two of its members, to reconsider and rescind Proposal 207’s language. Proposal 207 was a board generated proposal, that they produced on their own, not at the request of anyone from the public, and which didn’t address any biological concerns. Nobody had ever proposed these kind of extreme restrictions before. At the May 28 special meeting there were 224 public comments on this proposal; 184 were in opposition to it and wanted to see it rescinded, while only 27 were in support of it. All three of the largest ACs (Anchorage, Mat Valley and Fairbanks), representing over half of the state’s population, voted unanimously to rescind Proposal 207. Despite this overwhelming opposition, the board retained Proposal 207, ignoring the public’s will. The Alaska Wildlife Troopers said from the very beginning that these restrictions were unenforceable, and to our knowledge no one has ever been cited for a violation of them. The issues the proposer purported to address with Proposal 207 were already addressed by other statutes regarding harassing, chasing or herding animals with an airplane.

Proposals to rescind what started as Proposal 207 have been brought forward in 2016 and 2017 and both times the public has supported rescinding the restrictions by a 2 to 1 margin, but were ignored by a small board majority. We believe that, in the absence of any biological concern being addressed, the public should be listened to, and the overwhelming majority want Proposal 207 language rescinded. The board has rejected applying these same restrictions to all other game species, in Proposal 70 introduced at the statewide meeting in Fairbanks in 2016, and should reject the restrictions for sheep also.

PROPOSED BY: Matanuska Valley Fish and Game Advisory Committee (HQ-F20-009)

PROPOSAL 137

5 AAC 92.085. Unlawful methods of taking big game; exceptions.

Repeal the restriction on the use of aircraft for locating Dall sheep for hunting as follows:

Amend 5 AAC 92.085(8) by deleting the language set forth below, commonly referred to as Proposal 207:

[(8) ... FROM AUGUST 10 THROUGH SEPTEMBER 20 AIRCRAFT MAY NOT BE USED BY OR FOR ANY PERSON TO LOCATE DALL SHEEP FOR HUNTING OR DIRECT HUNTERS TO DALL SHEEP DURING THE OPEN SHEEP HUNTING SEASON, HOWEVER, AIRCRAFT OTHER THAN HELICOPTERS MAY BE USED BY AND FOR SHEEP HUNTERS TO PLACE AND REMOVE HUNTERS AND CAMPS, MAINTAIN EXISTING CAMPS, AND SALVAGE HARVESTED SHEEP.]

What is the issue you would like the board to address and why? The pertinent part of 5 AAC 92.085(8) states as follows:

[(8) ... from August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season, however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep.]

I am a law-abiding citizen, a pilot and a sheep hunter. For many reasons that I will state below I find this regulation (commonly referred to as Proposal 207) wrongfully applied to our state sheep hunting regulations.

For the youth sheep hunt August 1-5 there is no restriction as to when you can fly. During this time frame there are also many outfitters flying their area prior to the season looking and scouting for sheep. Why can a pilot fly and hunt with a youth hunter during this time frame but five days later all of a sudden it is illegal?

This regulation is extremely vague in the sense that there is no way possible to tell what animal a pilot saw or even looked for from an aircraft. I could easily have bear, sheep, goat and caribou harvest tickets with me during sheep season. There is nothing stopping me from flying around and scouting for caribou during this time frame. How will someone know what animals I was looking for or what animal I saw? Can I fly around and see a herd of caribou I intend to hunt and land and go hunt them the next day and if I see a sheep be afraid to shoot it?

One of the main reasons I am writing this proposal to change this regulation is to be a voice for your average hard-working pilot in Alaska. Flying is extremely dangerous with many variables and deaths each and every year. We do not need to restrict or limit the way a pilot should be able to fly and cause unnecessary risks to be placed upon them creating more danger than they already face.

I would like to describe a couple of very realistic scenarios for the pilot who owns his own airplane and plans to use it for sheep hunting. Please take note that the purpose of having an airplane is for the pilot to distance himself from other hunters and outfitters. I never want to land at an airstrip

because I know that there has been hunting pressure there and airplanes are likely to return to that know location to hunt sheep. My objective is to distance myself from others by utilizing my hours of preseason research, aviation skill set and my airplane to find area where I can hunt and not worry about running into others.

Example 1-

A pilot follows all rules and regulations to not fly during sheep season and does his scouting and flying all in the month of July. He finds an adequate place with some sheep and a location he can safely operate the airplane. Work duties or bad weather delay his arrival into his sheep camp and he isn't able to fly until opening day August 10. The pilot knows it is illegal to fly and look for sheep since the season is now open but he intends to not hunt or encroach on other hunters in this particular drainage so he flies at over 1000' above the ground to the head end of the drainage he plans to hunt to see if there are any other airplanes or bright colored tents before he decides this is where he wants to invest the only week he has off work for sheep hunting this year. This rationale only makes sense to any logical person. As I stated previously, the pilot wants to distance himself from other hunters. By doing this and looking for hunters where there may potentially be sheep after Aug 10 has this pilot violated this regulation?

Example 2-

A pilot does all of his pre-season scouting in July and finds a nice drainage with a big gravel bar he can land on safely. He camps here and is able to glass some rams and is excited for the opening day of sheep season to arrive. He can't get the opener of sheep season off from work so he comes in a week late. The area he intends to hunt has had heavy rains the last four days and when he flies over his 1000' gravel bar he sees that it is almost completely covered by swift moving water and is now an unsafe area to land. (I personally have had water rise and lost a runway in a matter of hours). He needs to now find a new location to sheep hunt. Since he is not flying to place or remove hunters from a camp, maintain an existing camp or salvage harvested sheep, will he be in violation of flying during sheep season as the rules state?

Example 3-

A pilot doesn't have the extra time or finances to scout prior to sheep season. He will take one week off for sheep hunting and that week will fall in late August. When pioneering a landing area that likely no other airplane has ever landed at there is a sequence of things that must be done. Extreme amounts of time and concentration are put into these efforts as it is a matter of life and death. When a pilot is landing in an area that he has never been able to walk on before is it very challenging. All of your knowledge and information of the landing site is received while you are in the cockpit flying the aircraft.

Sometimes a pilot will need to do 15 or more passes to see if a runway is suitable to land and to gain an increased level of confidence in their ability to safely land the airplane. These passes consist of high passes above 1000' to low passes at maybe 5' above the ground. The pilot may need to do a few circles at altitude and at a lower level to see what the wind direction/speed is especially in mountainous terrain. Also, a pilot will likely drag his tires a couple times along the strip to gauge how rough it is and visualize the exact touchdown spot for the airplane. This is a very timely process and it should not be rushed. When pilots rush things are usually when an accident will occur.

For the best possible outcome these passes should be very similar in speed and dimension that would simulate a traffic pattern. The more consistent they are the more variables that are managed the better the landing will turn out in most cases. These passes to the fellow sheep hunter on the hillside may look like the pilot could potentially be looking for sheep when they are only trying to safely land an airplane.

I have myself flown in these conditions and have wondered will this type of flying get me in trouble especially if there happen to be sheep nearby. I have also talked to fellow aviators who have rushed this off-airport evaluation process during sheep season for fear of prosecution. That is complete nonsense. A pilot should be able to fly an airplane and not have to wonder who will be turning him in.

Most recently in July of 2019 I did all my preseason scouting of sheep hunting locations. I found some good places to land and more importantly good places to tie up an airplane that was secure. With it being a very hot year the sheep I had found in July stayed very high and were inaccessible. My hunting partner and I decided we needed to go to a different area we had scouted pre-season. While flying over the first area we could see hunters in that drainage, so we decided to go to the next spot I had found.

While over flying this area looking at the strip we had cleared, it was impossible to not notice the white dots on the hillside that were in fact Dall sheep. So now what am I supposed to do? I've done preseason scouting, cleared a strip to use and located and glassed up sheep in this drainage. Now that I've moved into this drainage and looking over my strip, I see sheep on the hillside. Now I wonder while I do my passes to evaluate my landing zone if there is some hunter is on the hillside with a video camera taping all of this. Will I be getting a phone call from the troopers after sheep season is over? I reluctantly couldn't take that risk and we cut our sheep hunt short. I told my hunting partner "I love to fly and I love to hunt. Combining those things is my favorite thing do to in the entire world but right now I don't feel the same. I feel as I may be wrongfully accused for only trying to hunt sheep based on the patterns my plane is flying." This feeling made me sick and is not what hunting is about. A sheep hunter should be able to fly their airplane and not worry about wrongful accusations.

This law is also unenforceable and below are the comments from Board of Game proposals for 2019 about this regulation since it has passed from the Alaska Wildlife Troopers.

"The Alaska Wildlife Troopers are the primary enforcement agency for this regulation. Since this regulation was enacted, the Alaska Wildlife Troopers have received reports of aircraft and sheep hunters violating this regulation across the state. Investigation of this crime takes considerable time and effort for the Wildlife Troopers to look into these types of violations. **To date, there has been no successful prosecution of a hunter for a violation of this regulation.**"

The main enforcement agency in the state knows this law is ridiculous and unenforceable. The skills, resources and money used by our conservation officers should be used to find and prosecute real criminals not a resident pilot who wants to hunt sheep.

Proposal 207 has accomplished nothing. There are already wildlife harassment laws in place to keep pilots from buzzing or harassing sheep. There are also same day airborne regulations set in

place to manage that ethical dilemma. This regulation was set in place to target the **Alaskan Resident Sheep Hunters** and should be removed from the regulations.

PROPOSED BY: Adam Grenda (HQ-F20-028)

PROPOSAL 138

5 AAC 92.085. Unlawful methods of taking big game; exceptions.

Restrict aircraft use for locating Dall sheep for hunting, for all open seasons as follows:

Change the time that aircraft may not be used to locate Dall sheep in order to cover all open sheep seasons as follows:

(8) a person who has been airborne may not take or assist in taking a big game animal and a person may not be assisted in taking a big game animal by a person who has been airborne until after 3:00 a.m. following the day in which the flying occurred, and [FROM AUGUST 10 THROUGH SEPTEMBER 20] aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep **in any area where there is an open sheep hunting season** [DURING THE OPEN SHEEP HUNTING SEASON], however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep.

What is the issue you would like the board to address and why? The way this regulation is currently written, hunters may still use aircraft to locate Dall sheep during sheep hunting seasons that fall outside of the August 10 through September 20 time frame. This change would include every sheep season regardless of when it is held including any new sheep seasons that may be enacted in the future.

PROPOSED BY: Mike Harris (EG-F20-043)

PROPOSAL 139

5AAC 92.085 Unlawful methods of taking big game; exceptions.

Restrict the use of aircraft for making multiple, consecutive approaches near Dall sheep for hunting as follows:

Change 5 AAC 92.085(8) by repealing the language in brackets and replacing it with the underlined language.

5 AAC 92.085 Unlawful methods of taking big game: exceptions....

(8) a person who has been airborne may not take or assist in taking a big game animal until after 3:00 a.m. following the day in which the flying occurred, and from August 10 - September 20 aircraft may not be used **to make multiple, consecutive approaches near any sheep or group of sheep** [BE USED BY OR FOR ANY PERSON TO LOCATE DALL SHEEP FOR HUNTING OR DIRECT HUNTERS TO DALL SHEEP DURING THE OPEN SHEEP SEASON, HOWEVER, AIRCRAFT OTHER THAN HELICOPTERS MAY BE USED BY AND FOR

A reporting requirement for harvesting game animals is not without precedent. The state requires hunters to report kills on harvest tickets in accordance with 5 AAC 92.010. Similarly, a person who collides with a big game animal is required to notify the Alaska State Troopers as soon as possible, according to 5 AAC 92.220(b), and those figures are shared with the department.

Alaska is the only state with a legislative mandate to manage game animals intensively for human consumption. The Alaska Legislature and Board of Game have demonstrated a compelling interest in minimizing the wanton waste of game. The meat of most game animals killed by pets is wasted. It's a reasonable extension of the legislature's intensive management and wanton waste laws to better understand and minimize the wanton waste of game killed by pets.

PROPOSED BY: Rick Sinnott (EG-F20-035)

PROPOSAL 161

5 AAC 92.220. Salvage of game meat, furs, and hides.

Change the salvage requirement for sheep, goat and deer to all meat on the outside of the ribs as follows:

Change the salvage requirements of sheep, goat and deer from [ALL THE MEAT OF THE RIBS] to **all of the meat on the outside of the ribs.**

This would not include moose, caribou, elk, bison and muskox.

What is the issue you would like the board to address and why? We would like to see the salvage requirements of sheep, goat, and deer be changed to make it all of the meat on the outside of the rib rather than all the meat of the ribs. This would NOT include moose, caribou, elk, bison and muskox.

This would encourage hunters to still take as much good meat as logistically possible from the animal, but not enforce the taking of rib meat between the actual ribs. A hunter may remove the entire rib cage if they choose, or they may be selective when it comes to not taking bloodshot or tainted meat from any portion of the rib meat. Especially in mountain animals, poor shots or damage to the meat from a fall are much more common and often contaminates the inside of the rib meat. This would allow the hunter to salvage the usable meat and not worry if checked by a wildlife trooper. It would also apply to deer in southeast Alaska and on Kodiak, where large brown bears are present, and there may be a safety issue when butchering deer in the field. The process of removing the meat between the ribs adds precious time to a twilight hunting situation, where leaving the kill site in an appropriate amount of time is imperative. In most cases this would amount to less than a pound of meat. It is already not required to remove rib meat from black bear

PROPOSED BY: Matanuska Valley Fish and Game Advisory Committee (HQ-F20-008)

PROPOSAL 162

5 AAC 92.220. Salvage of game meat, furs, and hides.

Require the salvage of the meat or hide of snowshoe hare as follows:

5 AAC 92.220. Salvage of game meat, furs, and hides. (a) Subject to additional requirements in 5AAC 84 - 5 AAC 85, a person taking game shall salvage the following parts for human use:

- (1) the hide of a wolf, wolverine, coyote, fox, lynx, marten, mink, fisher, weasel, and land otter, and the hide or meat of a beaver, muskrat, pika, ground squirrel, **snowshoe hare**, or marmot;

What is the issue you would like the board to address and why? Currently there is no salvage requirement for snowshoe hare statewide. This proposal would create a statewide salvage requirement for human use. The human use requirement would be met as long as some portion of the carcass is used for human consumption, trapping, sewing, dog training, dog food, etc. This proposal would simply prohibit the take of a snowshoe hare with no attempt to recover, eat, or in any way make an attempt to use part or all of the carcass. Trappers would be allowed to use a whole or portion of a carcass for trapping bait.

PROPOSED BY: Alaska Department of Fish and Game

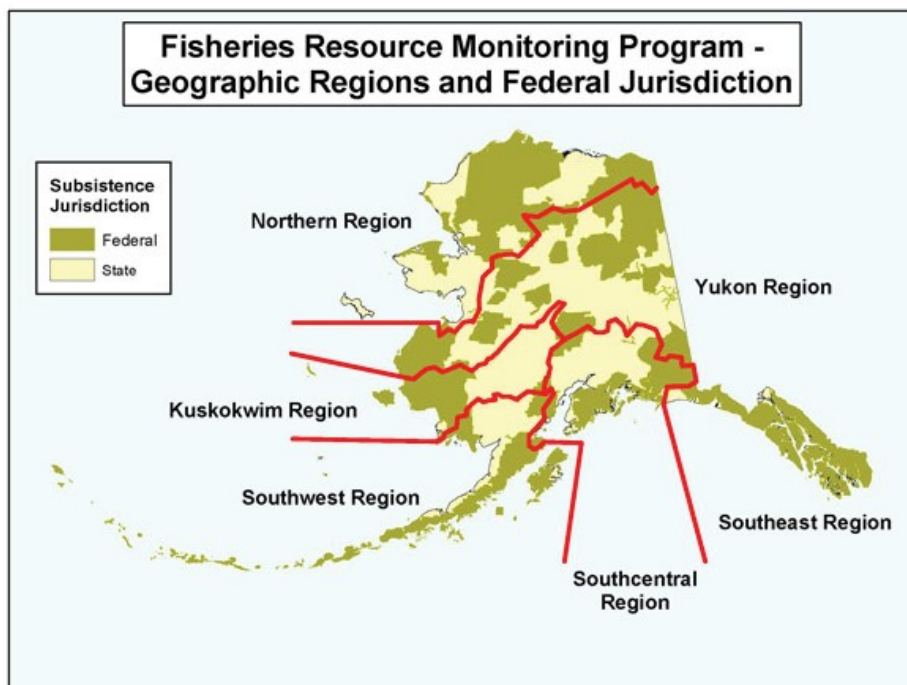
(HQ-F20-057)

FISHERIES RESOURCE MONITORING PROGRAM

BACKGROUND

Section 812 of the Alaska National Interest Lands Conservation Act (ANILCA) directs the Departments of the Interior and Agriculture, cooperating with other Federal agencies, the State of Alaska, and Alaska Native and other rural organizations, to research fish and wildlife subsistence uses on Federal public lands and to seek data from, consult with, and make use of the knowledge of local residents engaged in subsistence. When the Federal government assumed responsibility for management of subsistence fisheries on Federal public lands and waters in Alaska in 1999, the Secretaries of the Interior and Agriculture made a commitment to increase the quantity and quality of information available to manage subsistence fisheries, to increase quality and quantity of meaningful involvement by Alaska Native and other rural organizations, and to increase collaboration among Federal, State, Alaska Native, and rural organizations. The Fisheries Resource Monitoring Program (Monitoring Program) is a collaborative, interagency, interdisciplinary approach to enhance fisheries research and data in Alaska and effectively communicate information needed for subsistence fisheries management on Federal public lands and waters.

Every two years, the Office of Subsistence Management announces a funding opportunity for investigation plans addressing subsistence fisheries on Federal public lands. The 2022 Notice of Funding Opportunity focused on priority information needs developed by the Subsistence Regional Advisory Councils with input from strategic plans and subject matter specialists. The Monitoring Program is administered through regions to align with stock, harvest, and community issues common to a geographic area. The six Monitoring Program regions are shown below.



Strategic plans sponsored by the Monitoring Program have been developed by workgroups of fisheries managers, researchers, Subsistence Regional Advisory Councils, and by other stakeholders for three of the six regions: Southeast, Southcentral (excluding Cook Inlet Area), and Southwest Alaska, and for Yukon and Kuskokwim drainages whitefish (available for viewing at the Monitoring Program webpage at <https://www.doi.gov/subsistence/frmp/plans>). These plans identify prioritized information needs for each major subsistence fishery. Individual copies of plans are available from the Office of Subsistence Management by calling (907) 786-3888 or toll Free: (800) 478-1456 or by email subsistence@fws.gov. An independent strategic plan was completed for the Kuskokwim Region for salmon in 2006 and can be viewed at the Alaska-Yukon-Kuskokwim Sustainable Salmon Initiative website at <https://www.aykssi.org/salmon-research-plans/>.

Investigation plans are reviewed and evaluated by Office of Subsistence Management and U.S. Forest Service staff, and then scored by the Technical Review Committee. The Technical Review Committee's function is to provide evaluation, technical oversight, and strategic direction to the Monitoring Program. Each investigation plan is scored on the following five criteria: strategic priority, technical and scientific merit, investigator ability and resources, partnership and capacity building, and cost/benefit.

Project executive summaries are assembled into a draft 2022 Fisheries Resources Monitoring Plan. The draft plan is distributed for public review and comment through Subsistence Regional Advisory Council meetings, beginning in September 2021. The Federal Subsistence Board will review the draft plan and will accept written and oral comments at its January 2022 meeting. The Federal Subsistence Board forwards its comments to the Assistant Regional Director of the Office of Subsistence Management. Final funding approval lies with the Assistant Regional Director of the Office of Subsistence Management. Investigators are subsequently notified in writing of the status of their proposals.

HISTORICAL OVERVIEW

The Monitoring Program was first implemented in 2000 with an initial allocation of \$5 million. Since 2000, a total of \$127 million has been allocated for the Monitoring Program to fund a total of 494 projects (**Figure 1** and **Figure 2**).

During each two-year funding cycle, the Monitoring Program budget funds ongoing multi-year projects (2, 3, or 4 years) as well as new projects. Budget guidelines are established by geographic region (**Table 1**). The regional guidelines were developed using six criteria that included level of risk to species, level of threat to conservation units, amount of subsistence needs not being met, amount of information available to support subsistence management, importance of a species to subsistence harvest, and level of user concerns regarding subsistence harvest. Budget guidelines provide an initial target for planning; however, they are not final allocations and are adjusted annually as needed (**Figure 3**).

Figure 1. Monitoring Program Funds Distributed, by Organization Type, Since 2000

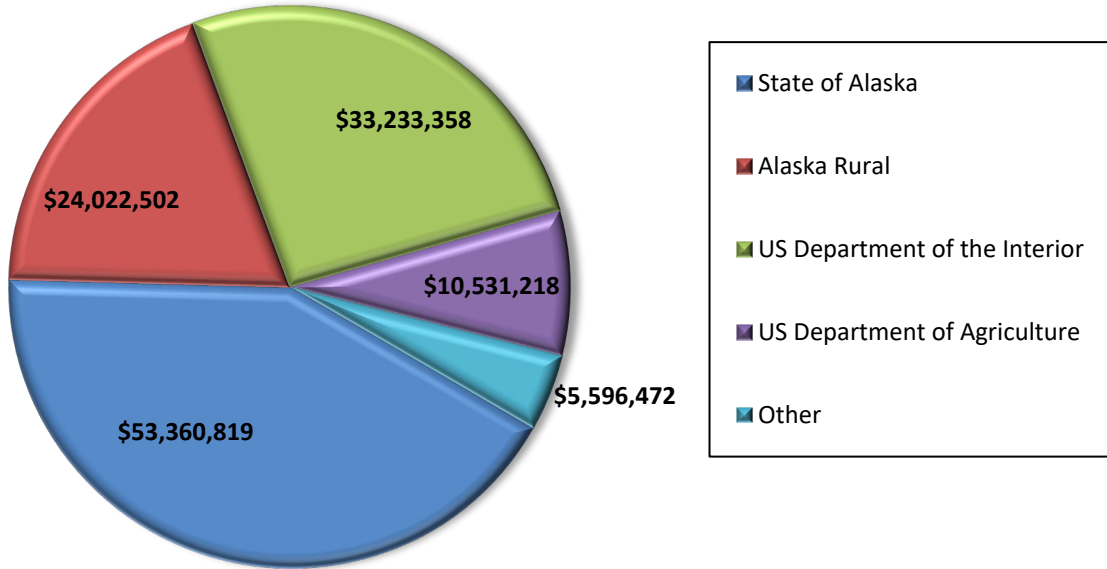


Figure 2. Number of Monitoring Program Projects Funded, by Organization Type, since 2000

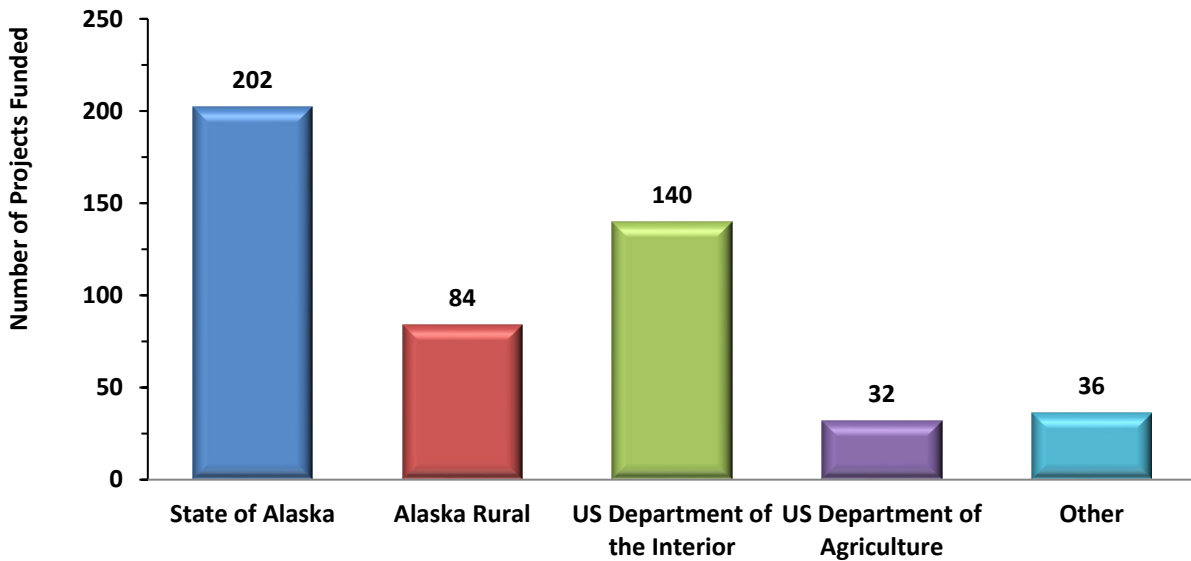
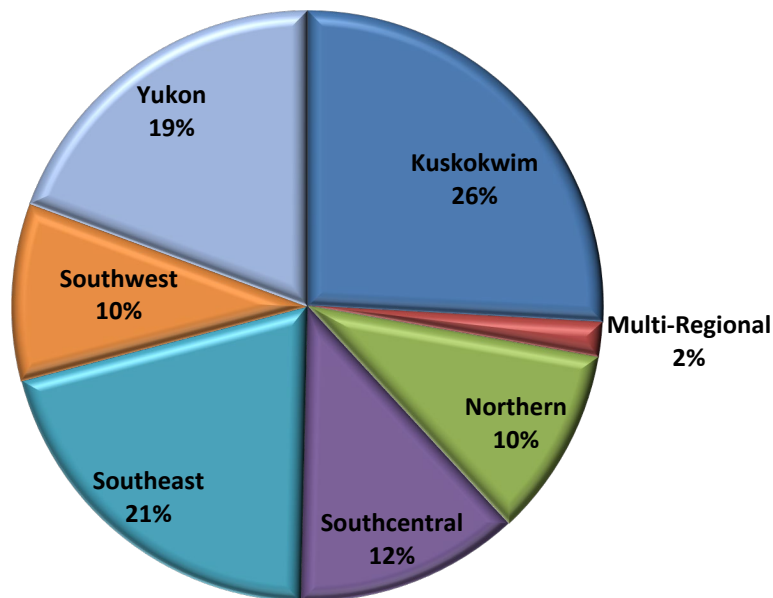


Table 1. Regional allocation guideline for Fisheries Resource Monitoring Program Funds.

| Region | U.S. Department of the Interior Funds | U.S. Department of Agriculture Funds |
|---------------------|---------------------------------------|--------------------------------------|
| Northern Alaska | 17% | 0% |
| Yukon Drainage | 29% | 0% |
| Kuskokwim Drainage | 29% | 0% |
| Southwest Alaska | 15% | 0% |
| Southcentral Alaska | 5% | 33% |
| Southeast Alaska | 0% | 67% |
| Multi-Regional | 5% | 0% |

Figure 3. Percentage of Monitoring Program Funding Distributed to Each Region since 2000



The following three broad categories of information that are solicited for the Monitoring Program: (1) harvest monitoring, (2) traditional ecological knowledge, and (3) stock status and trends. Projects that combine these approaches are encouraged. Definitions of these three categories of information are listed below.

Harvest monitoring studies provide information on numbers and species of fish harvested, locations of harvests, and gear types used. Methods used to gather information on subsistence harvest patterns may include harvest calendars, mail-in questionnaires, household interviews, subsistence permit reports, and telephone interviews.

Traditional ecological knowledge studies are investigations of local knowledge directed at collecting and analyzing information on a variety of topics such as the sociocultural aspects of subsistence, fish ecology, species identification, local names, life history, taxonomy, seasonal movements, harvests, spawning and rearing areas, population trends, environmental observations, and traditional management systems. Methods used to document traditional ecological knowledge include ethnographic fieldwork, key respondent interviews with local experts, place name mapping, and open-ended surveys.

Stock status and trends studies provide information on abundance and run timing; age, size, and sex composition; migration and geographic distribution; survival of juveniles or adults; stock production; genetic stock identification; and mixed stock analyses. Methods used to gather information on stock status and trends include aerial and ground surveys, test fishing, towers, weirs, sonar, video, genetics, mark-recapture, and telemetry.

PROJECT EVALUATION PROCESS

The Monitoring Program prioritizes high quality projects that address critical subsistence and conservation concerns. Projects are selected for funding through an evaluation and review process that is designed to advance projects that are strategically important for the Federal Subsistence Management Program, technically sound, administratively competent, promoting partnerships and capacity building, and are cost effective. Projects are first evaluated by a panel called the Technical Review Committee. This committee is a standing interagency committee of senior technical experts. The Technical Review Committee reviews, evaluates, and makes recommendations about proposed projects that are consistent with the mission of the Monitoring Program. Fisheries and Anthropology staff from the Office of Subsistence Management provide support for the Technical Review Committee. Recommendations from the Technical Review Committee provide the basis for further comments from Subsistence Regional Advisory Councils, the public, the Interagency Staff Committee, and the Federal Subsistence Board, with final approval of the Monitoring Plan by the Assistant Regional Director of the Office of Subsistence Management.

To be considered for funding under the Monitoring Program, a proposed project must have a nexus to Federal subsistence fishery management. Proposed projects must have a direct association to a Federal subsistence fishery, and the subsistence fishery or fish stocks in question must occur in or pass-through waters within or adjacent to Federal public lands in Alaska (National Wildlife Refuges, National Forests, National Parks and Preserves, National Conservation Areas, National Wild and Scenic River Systems, National Petroleum Reserves, and National Recreation Areas). A complete project package must be submitted on time and must address the following five specific criteria to be considered a high-quality project.

1. **Strategic Priorities**—Studies should be responsive to information needs identified in the 2022 Priority Information Needs available at the Monitoring Program webpage at <https://www.doi.gov/subsistence/frmp/funding>. All projects must have a direct linkage to Federal public lands and/or waters to be eligible for funding under the Monitoring Program. To assist in evaluation of submittals for projects previously funded under the Monitoring Program, investigators must summarize project findings in their investigation plans. This summary should clearly and concisely document project performance, key findings, and uses of collected information for Federal subsistence management. Projects should address the following topics to demonstrate links to strategic priorities:

- Federal jurisdiction—The extent of Federal public waters in or nearby the project area
- Direct subsistence fisheries management implications
- Conservation mandate—Threat or risk to conservation of species and populations that support subsistence fisheries
- Potential impacts on the subsistence priority—Risk that subsistence harvest users’ goals will not be met
- Data gaps—Amount of information available to support subsistence management and how a project answers specific questions related to these gaps
- Role of the resource—Contribution of a species to a subsistence harvest (number of villages affected, pounds of fish harvested, miles of river) and qualitative significance (cultural value, unique seasonal role)
- Local concern—Level of user concerns over subsistence harvests (upstream vs. downstream allocation, effects of recreational use, changes in fish abundance and population characteristics)

2. **Technical-Scientific Merit**—Technical quality of the study design must meet accepted standards for information collection, compilation, analysis, and reporting. To demonstrate technical and scientific merit, applicants should describe how projects will:

- Advance science
- Answer immediate subsistence management or conservation concerns
- Have rigorous sampling and/or research designs
- Have specific, measurable, realistic, clearly stated, and achievable (attainable within the proposed project period) objectives
- Incorporate traditional knowledge and methods

Data collection, compilation, analysis, and reporting procedures should be clearly stated. Analytical procedures should be understandable to the non-scientific community. To assist in evaluation of submittals for continuing projects previously funded under the Monitoring

Program, summarize project findings and justify continuation of the project, placing the proposed work in context with the ongoing work being accomplished.

3. ***Investigator Ability and Resources***—Investigators must show they are capable of successfully completing the proposed project by providing information on the ability (training, education, experience, and letters of support) and resources (technical and administrative) they possess to conduct the work. Investigators that have received funding in the past, via the Monitoring Program or other sources, are evaluated and scored on their past performance, including fulfillment of meeting deliverable and financial accountability deadlines. A record of failure to submit reports or delinquent submittal of reports will be taken into account when rating investigator ability and resources.
4. ***Partnership and Capacity Building***—Investigators must demonstrate that capacity building has already reached the communication or partnership development stage during proposal development and, ideally, include a strategy to develop capacity building to higher levels, recognizing, however, that in some situations higher level involvement may not be desired or feasible by local organizations.

Investigators are requested to include a strategy for integrating local capacity development in their study plans or research designs. Investigators should inform communities and regional organizations in the area where work is to be conducted about their project plans. They should also consult and communicate with local communities to ensure that local knowledge is utilized and concerns are addressed. Investigators and their organizations should demonstrate their ability to maintain effective local relationships and commitment to capacity building. This includes a plan to facilitate and develop partnerships so that investigators, communities, and regional organizations can pursue and achieve the most meaningful level of involvement. Proposals demonstrating multiple, highly collaborative efforts with rural community members or Alaska Native Organizations are encouraged.

Successful capacity building requires developing trust and dialogue among investigators, local communities, and regional organizations. Investigators need to be flexible in modifying their work plan in response to local knowledge, issues, and concerns, and must also understand that capacity building is a reciprocal process in which all participants share and gain valuable knowledge. The reciprocal nature of the capacity building component(s) should be clearly demonstrated in proposals. Investigators are encouraged to develop the highest level of community and regional collaboration that is practical including joining as co-investigators.

Capacity can be built by increasing the technical capabilities of rural communities and Alaska Native organizations. This can be accomplished via several methods, including increased technical experience for individuals and the acquisition of necessary gear and equipment. Increased technical experience would include all areas of project management including logistics, financial accountability, implementation, and administration. Other examples may include internships or providing opportunities within the project for outreach, modeling, sampling design,

or project specific training. Another would be the acquisition of equipment that could be transferred to rural communities and tribal organizations upon the conclusion of the project.

A “meaningful partner” is a partner that is actively engaged in one or more aspects of project design, logistics, implementation and reporting requirements. Someone who simply agrees with the concept or provides a cursory look at the proposal is not a meaningful partner.

5. **Cost/Benefit**—This criterion evaluates the reasonableness (what a prudent person would pay) of the funding requested to provide benefits to the Federal Subsistence Management Program. Benefits could be tangible or intangible. Examples of tangible outcomes include data sets that directly inform management decisions or fill knowledge gaps and opportunities for youth or local resident involvement in monitoring, research and/or resource management efforts. Examples of possible intangible goals and objectives include enhanced relationships and communications between managers and communities, partnerships and collaborations on critical resource issues, and potential for increased capacity within both communities and agencies.

Applicants should be aware that the Government shall perform a “best value analysis” and the selection for award shall be made to the applicant whose proposal is most advantageous to the Government. The Office of Subsistence Management strives to maximize program efficiency by encouraging cost sharing, partnerships, and collaboration.

POLICY AND FUNDING GUIDELINES

Several policies have been developed to aid in implementing funding. These policies include:

- Projects of up to four years in duration may be considered
- Proposals requesting Monitoring Program funding that exceeds \$215,000 in any one year are not eligible for funding
- Studies must not duplicate existing projects
- Long term projects will be considered on a case-by-case basis

Activities that are not eligible for funding include:

- Habitat protection, mitigation, restoration, and enhancement
- Hatchery propagation, restoration, enhancement, and supplementation
- Contaminant assessment, evaluation, and monitoring
- Projects where the primary or only objective is outreach and education (for example, science camps, technician training, and intern programs), rather than information collection

The rationale behind these policy and funding guidelines is to ensure that existing responsibilities and efforts by government agencies are not duplicated under the Monitoring Program. Land management or regulatory agencies already have direct responsibility, as well as specific programs, to address these activities. However, the Monitoring Program may fund research to determine how these activities affect Federal subsistence fisheries or fishery resources.

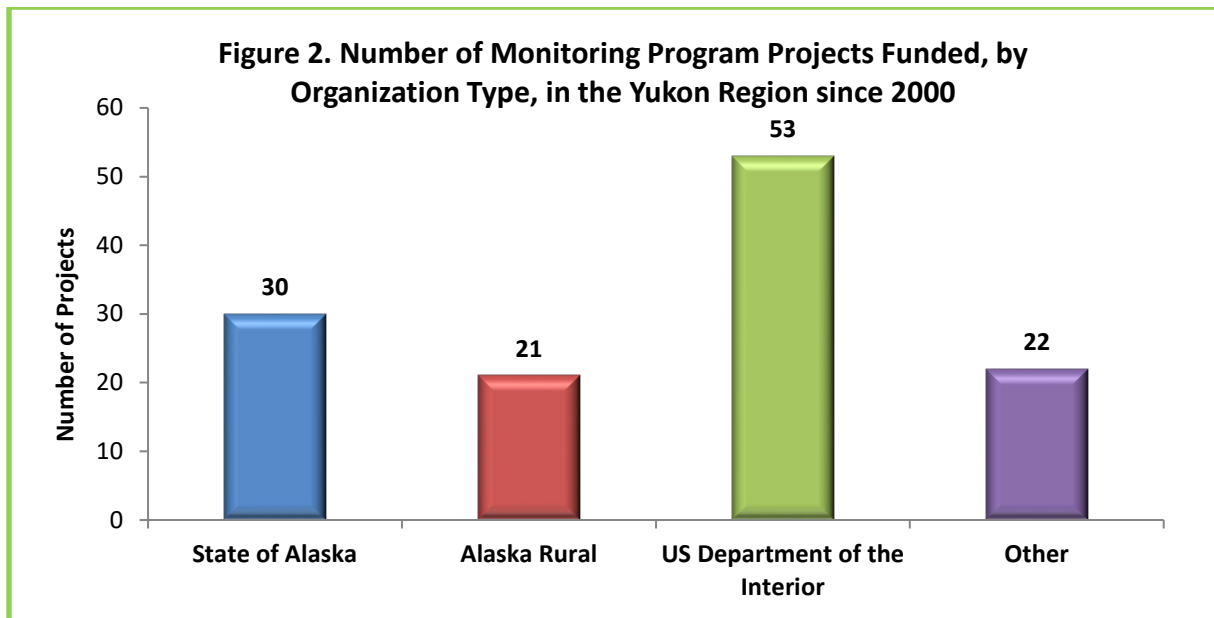
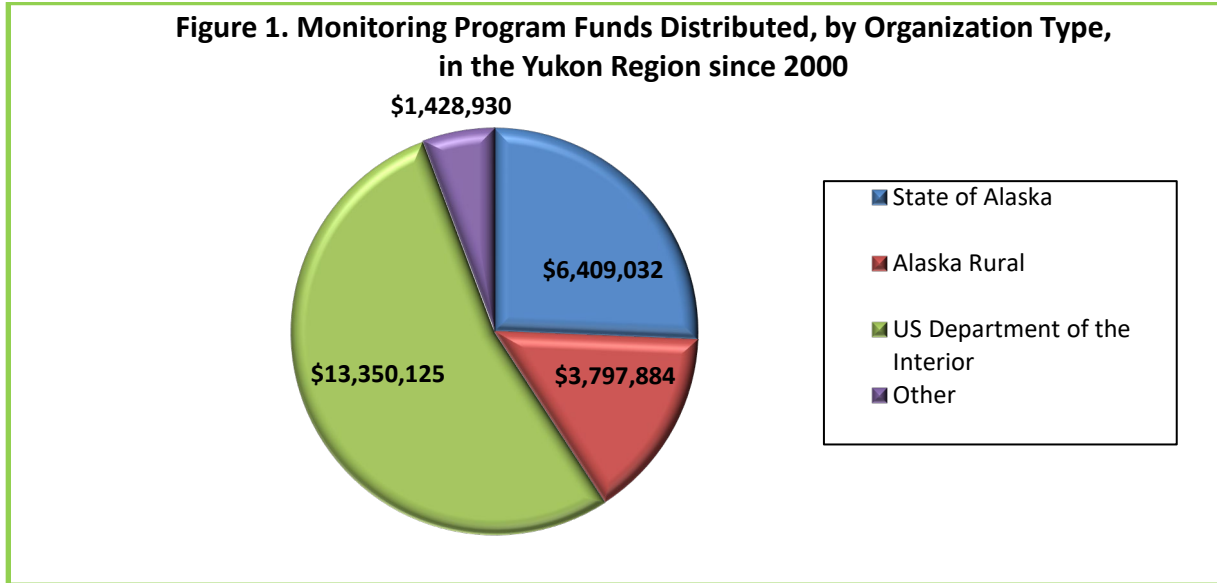
The Monitoring Program may fund assessments of key Federal subsistence fishery stocks in decline or that may decline due to climatological, environmental, habitat displacement, or other drivers; however, applicants must show how this knowledge would contribute to Federal subsistence fisheries management. Similarly, the Monitoring Program may legitimately fund projects that assess whether migratory barriers (e.g., falls, beaver dams) significantly affect spawning success or distribution; however, it would be inappropriate to fund projects to build fish passes, remove beaver dams, or otherwise alter or enhance habitat.

2022 FISHERIES RESOURCE MONITORING PLAN

For 2022, a total of 42 investigation plans were received and all are considered eligible for funding. For 2022, the Department of the Interior, through the U.S. Fish and Wildlife Service, will provide an anticipated \$1.5 million in funding for new projects. The U.S. Department of Agriculture, through the U.S. Forest Service, will provide an anticipated \$750,000 in funding.

FISHERIES RESOURCE MONITORING PROGRAM YUKON REGION OVERVIEW

Since the inception of the Monitoring Program in 2000, a total of 126 projects have been undertaken in the Yukon Region costing \$25 million (**Figure 1**). Of these, the State of Alaska received funds to conduct 30 projects, Alaska rural organizations conducted 21 projects, the Department of the Interior conducted 53 projects, and other organizations conducted 22 projects (**Figure 2**). See **Appendix 1** for more information on Yukon Region projects completed since 2000.



PRIORITY INFORMATION NEEDS

The 2022 Notice of Funding Opportunity for the Yukon Region identified the following 13 priority information needs:

- Impacts of climate change in continued harvest and use of fish; and impacts of climate change on fish, for example, impacts to fish migration, spawning, and life cycle.
- Effects of environmental stressors, such as heat stress, on salmon mortality during adult upriver migration and/or pre-spawn mortality within spawning tributaries.
- Effects of Ichthyophonus infection on Chinook Salmon mortality and spawning success.
- Knowledge of population, reproduction, and health of spawning habitat for Bering Cisco and Humpback Whitefish.
- Reliable estimates of Chinook, Summer Chum, Fall Chum, and Coho Salmon escapements and/or harvests, particularly sub-stocks in District 5 that are large contributors to the total run, for example in the Chandalar and Sheenjek Rivers.
- Distribution, abundance, condition, and survival of juvenile and out-migrating salmon in the Yukon River drainage.
- Estimates of “quality of escapement” measures for Chinook Salmon, for example, potential egg deposition, age, sex, and size composition of spawners, percentage of females, percentage of jacks, and spawning habitat utilization, with an emphasis on Canadian-origin stocks.
- Reliable in-season estimates of salmon harvests in the lower, middle, and upper Yukon River subsistence fisheries.
- Reliable estimates of age-sex-length and genetic composition of salmon harvested in the subsistence fishery, with emphasis on Chinook and Fall Chum Salmon.
- In-season estimates of genetic stock composition of Chinook, Summer Chum, and Fall Chum Salmon runs and harvests.
- Reliable methods of forecasting Chinook, Summer Chum, Fall Chum, and Coho Salmon run abundance.
- Assessment of incidental mortality with gillnets, dip nets, and seines, with particular consideration for delayed mortality from entanglement from drop-outs and live release of Chinook Salmon (for example, loss of Chinook Salmon from 6-inch mesh nets during Chum Salmon fisheries and the live release of Chinook Salmon from dip nets and seines).
- Traditional ecological knowledge of fishes.

AVAILABLE FUNDS

Federal Subsistence Board guidelines direct initial distribution of funds among regions. Regional budget guidelines provide an initial target for planning. For 2022, the U.S. Department of the Interior and U.S. Department of Agriculture, through the U.S. Fish and Wildlife Service and the U.S. Forest Service, will provide an anticipated \$2.25 million in funding statewide for new projects.

ROLE OF THE TECHNICAL REVIEW COMMITTEE

The mission of the Monitoring Program is to identify and provide information needed to sustain subsistence fisheries on Federal public lands for rural Alaskans through a multidisciplinary and collaborative program. It is the responsibility of the Technical Review Committee to develop the strongest possible Monitoring Plan for each region and across the entire state.

For the 2022 Monitoring Program, seven proposals were submitted for the Yukon Region. The Technical Review Committee evaluated and scored each proposal on Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit (**Table 1**). These scores remain confidential. An executive summary for each proposal submitted to the 2022 Monitoring Program for the Yukon Region is in **Appendix 2**.

Table 1. Projects submitted for the Yukon Region, 2022 Monitoring Program, including total funds requested and average annual funding requests.

| Project Number | Title | Total Project Request | Average Annual Request |
|-----------------------|--|------------------------------|-------------------------------|
| 22-201 | East Fork Andreafsky River Weir Chinook and Summer Chum Salmon Abundance and Run Timing Assessment | \$701,347 | \$175,336 |
| 22-202 | Gisasa River Weir Chinook and Summer Chum Salmon Abundance and Run Timing Assessment | \$342,652 | \$171,826 |
| 22-203 | Outmigrating Chinook Salmon and Prey Species Assessment in the Lower Yukon River | \$304,642 | \$152,321 |
| 22-204 | Western Alaska Coho Salmon Genetic Baseline Development | \$116,782 | \$58,491 |
| 22-251 | Presence and Use of Salmon in the Pastolik and Pastoliak Rivers | \$204,603 | \$102,301 |
| 22-252 | Humpback Whitefish and other Nonsalmon Fishes Traditional Ecological Knowledge and Biological Sampling in the Upper Koyukuk Region | \$231,952 | \$115,976 |
| 22-253 | Yukon River Nonsalmon Subsistence Survey | \$219,342 | \$54,835 |
| Total | | \$2,121,320 | \$796,986 |

TECHNICAL REVIEW COMMITTEE JUSTIFICATION FOR PROPOSAL SCORES

Project Number: 22-201

Project Title: East Fork Andreafsky River Weir Chinook and Summer Chum Salmon Abundance and Run Timing

Technical Review Committee Justification: The investigation plan outlines the continuation of a successfully implemented project that uses weir and video technology to collect fish passage counts and estimate annual escapement for Chinook and summer Chum salmon in the East Fork Andreafsky River. The Federal nexus is clear and this project addresses a 2022 Priority Information Need for the Yukon Region. Escapement estimates from this project are used in run reconstructions and forecasts, and to inform in-season management decisions and post-season evaluations. While this project provides important data and is technically sound, the investigation plan did not outline any meaningful consultations with local communities or provide examples of long-term capacity building. However, a letter of support was received from St. Mary's Native Corporation. Letters of support were also received from the Alaska Department of Fish and Game (Division of Commercial Fisheries), University of Alaska Fairbanks (Institute of Arctic Biology), and Yukon Delta National Wildlife Refuge. Four years of funding are requested to complete the proposed work and matching funds will be provided to offset project costs. Project costs are comparable to other weirs in the region and are reasonable for the proposed work.

Project Number: 22-202

Project Title: Gisasa River Weir Chinook and Summer Chum Salmon Abundance and Run Timing Assessment

Technical Review Committee Justification: The Gisasa River weir is an established monitoring project that has operated since 1994 and has been funded by the Monitoring Program since 2003. The Federal nexus is clear and this project addresses multiple 2022 Priority Information Needs for the Yukon Region. The methods used in this project have consistently achieved results and the investigators have the experience needed to conduct this research. Data collected by this project are used to inform in-season management decisions and produce annual escapement estimates, assess in-season management actions, and develop run reconstructions for the Yukon River basin. The previous relationship between the Fairbanks Fish and Wildlife Conservation Office and the Tanana Chiefs Conference will be expanded in order for the Tanana Chiefs Conference to build the capacity needed to serve as the principal investigator after the 2023 season. Matching funds will be provided to offset project costs and the funds requested to complete this project are comparable to other weirs in the region and are reasonable for the proposed work. This project received letters of support from the Koyukuk/Nowitna/Innoko National Wildlife Refuges, Tanana Chiefs Conference, and University of Alaska Fairbanks.

Project Number: 22-203

Project Title: Outmigrating Chinook Salmon and Prey Species Assessment in the Lower Yukon River

Technical Review Committee Justification: The investigation plan requests two years of funding to evaluate the composition, spatial variation, and temporal variation in fish and invertebrate prey for juvenile Chinook Salmon, and assess the quality of prey resources in relation to juvenile Chinook Salmon condition in the Yukon Delta. The investigation plan does not clearly articulate its relevance to Federal subsistence management but this project does address a 2022 Priority Information Need for the Yukon

Region. This study may shed light on juvenile Chinook Salmon survival by identifying factors contributing to variation in individual size and energetic status just prior to transitioning to the marine phase of their life history. Study objectives are clear and measurable but it is difficult to determine if they are achievable due to methods and procedures that are not described in sufficient detail. This project would continue a multi-year history of research and engagement with the residents of the lower Yukon River. Local capacity will be built by presenting information about juvenile fish to science classes in Emmonak and Alakanuk. The investigation plan mentions that the Yukon Delta Fisheries Development Association intends on hosting an Alaska Native Science and Engineering Program intern. However, a letter of recommendation was not received from the Alaska Native Science and Engineering Program and salary/scholarship information was not included in the Budget Table. While this project leverages substantial contributions from the Yukon Delta Fisheries Development Association for field sample collections, more detail is needed for DNA analyses that make up a large proportion of the requested funds. No letters of support were received for this project.

Project Number: 22-204

Project Title: Western Alaska Coho Salmon Genetic Baseline Development

Technical Review Committee Justification: The primary goal of this proposal is to develop a high-resolution genetic baseline for Yukon River and Coastal Western Alaska Coho Salmon populations. Currently, during years where Chinook and Chum salmon abundance are low, subsistence harvests are beginning to increase on other species such as Coho Salmon. This proposed work is timely to help inform in-season managers to give them an additional information to assess forecasted run strength. This proposed work, would provide the needed genetic baseline to someday begin the development of a juvenile-based run assessment to forecast adult returns of Coho Salmon in the Yukon River. Alaska Department of Fish and Game have already collected the necessary tissue samples needed across 18 Federal public lands and waters, which includes 43 spawning sites. Once completed, this newly developed genetic baseline will enhance mixed-stock assessments across Western Alaska for various fisheries stakeholders.

Project Number: 22-251

Project Title: Presence and Use of Salmon in the Pastolik and Pastoliak Rivers

Technical Review Committee Justification: Investigators responded to two Priority Information Needs identified in the 2022 Notice of Funding Opportunity. The project is within the Yukon Delta National Wildlife Refuge. The Federal nexus is clear. Objectives are clearly stated and the investigation plan is well-written. Investigators appear qualified to do the work, and the budget is reasonable for the work being proposed. Results from this research will contribute to two long-term data sets. Investigators say they will work with three local Tribal governments in Kotlik through a cooperative agreement to provide logistical help; however, funding was not provided in the budget for these tasks. Local hires to assist with field work are planned. Four letters supporting this project were provided.

Project Number: 22-252

Project Title: Humpback Whitefish and Other Nonsalmon Fishes Traditional Ecological Knowledge and Biological Sampling in the Upper Koyukuk Region

Technical Review Committee Justification: Investigators responded to three Priority Information Needs identified in the 2022 Notice of Funding Opportunity and in other ways make a good case for the need for this research. The project area is most closely associated with the Kanuti National Wildlife Refuge. The Federal nexus is clear. Investigators intend a strong partnership with Tanana Chiefs Conference. The investigation plan is well-written including extensive background information and inventory of previous research conducted on this topic in this area. Investigators describe a well thought out, collaborative and interdisciplinary study plan. Two letters of support were provided.

Project Number: 22-253

Project Title: Yukon River Nonsalmon Fish Harvest Survey

Technical Review Committee Justification: This project is attempting to address two priority information needs identified in the 2022 Notice of Funding Opportunity. Research funded by the Monitoring Program to identify information needed for whitefish includes collection of high-quality annual harvest estimates as well as traditional ecology knowledge. In contrast, the focus of this project is harvest monitoring, which is not an identified priority information need in either document. Project objectives and plans to achieve those objectives need more work. Study communities have not been chosen. Some budgeted costs appear to duplicate those in another Monitoring Program project implemented by this organization. Five letters of support were provided.

**APPENDIX 1
PROJECTS FUNDED IN THE YUKON REGION SINCE 2000**

| Project Number | Project Title | Investigators |
|------------------------|---|---------------|
| Salmon Projects | | |
| 00-003 | Effects of <i>Ichthyophonus</i> on Chinook Salmon | UW |
| 00-005 | Tanana Upper Kantishna River Fish Wheel | NPS |
| 00-018 | Pilot Station Sonar Upgrade | ADF&G |
| 00-022 | Hooper Bay Test Fishing | ADF&G, NVHB |
| 00-024 | Pilot Station Sonar Technician Support | AVCP |
| 00-025 | Henshaw Creek Salmon Weir | USFWS |
| 00-026 | Circle and Eagle Salmon and Other Fish TEK | NVE |
| 01-014 | Yukon River Salmon Management Teleconferences | YRDFA |
| 01-015 | Yukon River Salmon TEK | YRDFA |
| 01-018 | Pilot Station Sonar Technician Support | AVCP |
| 01-026 | East Fork Andreafski River Salmon Weir | BSFA |
| 01-029 | Nulato River Salmon Weir | BSFA |
| 01-032 | Rampart Rapids Tagging Study | USFWS |
| 01-038 | Kateel River Salmon Weir | USFWS |
| 01-048 | Innoko River Drainage Weir Survey | USFWS |
| 01-050 | Kaltag Chinook Salmon Age-Sex-Length Sampling | COK |

| Project Number | Project Title | Investigators |
|-----------------------|--|----------------------|
| 01-058 | East Fork Andreafsky Weir Panel Replacement | USFWS |
| 01-122 | Lower Yukon River Salmon Drift Test Fishing | ADF&G, EMV |
| 01-141 | Holitna River Chinook, Chum and Coho Telemetry | ADF&G |
| 01-177 | Rampart Rapids Extension | USFWS |
| 01-197 | Rampart Rapids Summer CPUE Video | SZ |
| 01-199 | Tanana Fisheries Conservation Outreach | TTC |
| 01-200 | Effects of Ichthyophonous on Chinook Salmon | USGS |
| 01-211 | Upper Yukon, Porcupine, & Black River Salmon TEK | CATG |
| 02-009 | Pilot Station Sonar Technician Support | AVCP |
| 02-011 | Rampart Rapids Fall Chum Handling/mortality | USFWS |
| 02-097 | Kuskokwim & Yukon Rivers Sex-ratios of Juvenile & Adult Chinook | USFWS |
| 02-121 | Yukon River Chinook Salmon Genetics | USFWS, ADF&G, DFO |
| 02-122 | Yukon River Chinook & Chum Salmon In-season Subsistence | USFWS |
| 03-009 | Tozitna River Salmon Weir | BLM |
| 03-013 | Gisasa River Salmon Weir | USFWS |
| 03-015 | Phenotypic Characterization of Chinook Salmon Subsistence Harvests | YRDFA, USFWS |
| 03-034 | East Fork Andreafsky River Salmon Weir | USFWS |
| 03-038 | Yukon River Sub-district 5-A Test Fishwheel | BF |
| 04-206 | Tozitna River Salmon Weir | BLM |
| 04-208 | East Fork Andreafsky River Salmon Weir | USFWS |
| 04-209 | Gisasa River Salmon Weir | USFWS |
| 04-211 | Henshaw Creek Salmon Weir | USFWS |
| 04-217 | Rampart Rapids Fall Chum Salmon Abundance | USFWS |
| 04-228 | Yukon River Chum Salmon Genetic Stock Identification | USFWS |
| 04-229 | Lower Yukon River Salmon Drift Test Fishing | ADF&G |
| 04-231 | Yukon River Chinook Salmon Telemetry | ADF&G |
| 04-234 | Kaltag Chinook Salmon Age-Sex-Length Sampling | COK |
| 04-251 | Fort Yukon Traditional Ecological Knowledge Camp | TCC,CATG, ADF&G |
| 04-255 | Yukon River Salmon Fishery Traditional Ecological Knowledge | NPS |
| 04-256 | Tanana Conservation Outreach | TTC, USFWS |
| 04-263 | Yukon River Salmon Management Teleconferences | YRDFA |
| 04-265 | Yukon River TEK of Customary Trade of Subsistence Fish | YRDFA |
| 04-268 | Hooper Bay Subsistence Monitoring | ADF&G, HBTC |
| 05-203 | Yukon River Coho Salmon Genetics | USFWS |
| 05-208 | Anvik River Salmon Sonar Enumeration | ADF&G |
| 05-210 | Tanana River Fall Chum Salmon Abundance | ADF&G |
| 05-211 | Henshaw Creek Salmon Weir | TCC, USFWS |
| 05-254 | Yukon River Salmon Inseason Subsistence Harvest Monitoring | USFWS |
| 06-205 | Yukon River Chum Salmon Mixed Stock Analysis | USFWS |
| 07-202 | East Fork Andreafsky River Salmon Weir | USFWS |

| Project Number | Project Title | Investigators |
|-----------------------|---|----------------------|
| 07-204 | Lower Yukon River Salmon Drift Test Fishing | ADF&G |
| 07-207 | Gisasa River Salmon Weir | USFWS |
| 07-208 | Tozitna River Salmon Weir | BLM |
| 07-209 | Yukon River Salmon Management Teleconferences | YRDFA |
| 07-210 | Validation of DNA Gender Test Chinook Salmon | USFWS |
| 07-211 | Kaltag Chinook Salmon Age-Sex-Length Sampling | COK |
| 07-253 | Yukon River Salmon Harvest Patterns | RWA, AC |
| 08-200 | Kaltag Chinook Salmon Age-Sex-Length Sampling | COK |
| 08-201 | Henshaw Creek Salmon Weir | TCC |
| 08-202 | Anvik River Chum Salmon Sonar Enumeration | ADF&G |
| 08-253 | Yukon River Teleconferences and Inseason Management | YRDFA |
| 10-200 | Yukon River Chinook Salmon Run Reconstruction | BUE |
| 10-205 | Yukon River Chum Salmon Mixed-stock Analysis | USFWS |
| 10-206 | Nulato River Salmon Assessment | TCC |
| 10-207 | Gisasa River Chinook and Summer Chum Salmon Assessment | USFWS |
| 12-202 | Henshaw Creek Abundance and run timing of adult salmon | TCC |
| 12-204 | Anvik River Sonar Project | ADF&G |
| 12-205 | Kaltag Chinook Salmon Sampling Project | KAL |
| 12-251 | In-season Salmon Teleconferences and Interviews | YRDFA |
| 14-201 | Gisasa R Salmon Video | USFWS |
| 14-202 | E Fork Andreafsky Salmon | USFWS |
| 14-203 | Gisasa R Salmon | USFWS |
| 14-206 | Yukon R Coho Salmon | USFWS |
| 14-207 | Yukon R Chum Salmon | USFWS |
| 14-208 | Koyukuk R Chum Salmon | USFWS |
| 14-209 | Henshaw Crk Salmon | TCC |
| 16-204 | Henshaw Creek Abundance and run timing of adult salmon. | TCC |
| 16-251 | Seasonal habitats, migratory timing and spawning populations of mainstem Yukon River Burbot | ADF&G |
| 16-255 | Yukon River In-Season Community Surveyor Program | YRDFA, USFWS |
| 16-256 | In Season Salmon Management Teleconferences | YRDFA |
| 18-201 | East Fork Andreafsky River Chinook and summer Chum Salmon abundance and run timing, Yukon Deltan National Wildlife Refuge | USFWS |
| 18-202 | Gisasa River Chinook and summer Chum Salmon abundance and run timing assessment, Koyukuk National Wildlife Refuge, Alaska | USFWS |
| 18-250 | Documentation of salmon spawning and rearing in the Upper Tanana River Drainage | ADF&G |
| 18-251 | Traditional knowledge of anadromous fish in the Yukon Flats with a focus on the Draanjik Basin | TCC |
| 18-252 | Subsistence salmon networks in Yukon River communities | ADF&G |
| 20-200 | Yukon River Coho Salmon Radio Telemetry | ADF&G, USFWS |
| 20-201 | Application of mixed-stock analysis for Yukon River chum salmon | USFWS |

| Project Number | Project Title | Investigators |
|--------------------------------|--|-------------------------|
| 20-204 | Abundance and Run Timing of Adult Salmon in Henshaw Creek, Kanuti National Wildlife Refuge, Alaska | TCC |
| 20-251 | In-season Yukon River Subsistence Salmon Survey Program | YRDFA, USFWS |
| 20-252 | Customary Trade in the Lower and Middle Yukon River | ADF&G |
| 20-256 | Yukon River In-Season Salmon Management Teleconferences | YRDFA |
| Nonsalmon Fish Projects | | |
| 00-004 | Humpback Whitefish/Beaver Interactions | USFWS, CATG |
| 00-006 | Traditional Ecological Knowledge Beaver/Whitefish Interactions | ADF&G, CATG |
| 00-021 | Dall River Northern Pike | ADF&G, SV |
| 00-023 | Upper Tanana River Humpback Whitefish | USFWS |
| 01-003 | Old John Lake TEK of Subsistence Harvests and Fish | ADF&G, AV, USFWS |
| 01-011 | Arctic Village Freshwater Fish Subsistence Survey | ADF&G, AV, USFWS |
| 01-100 | Koyukuk Non-salmon Fish TEK and Subsistence Uses | ADF&G, TCC |
| 01-140 | Yukon Flats Northern Pike | ADF&G, SV |
| 01-238 | GASH Working Group | USFWS |
| 02-006 | Arctic Village Freshwater Fish Subsistence | ADF&G, NVV |
| 02-037 | Lower Yukon River Non-salmon Harvest Monitoring | ADF&G, TCC |
| 02-084 | Old John Lake Oral History and TEK of Subsistence | USFWS, AV, ADF&G |
| 04-253 | Upper Tanana Subsistence Fisheries Traditional Ecological Knowledge | USFWS,UAF, ADF&G |
| 04-269 | Kanuti NWR Whitefish TEK and Radio Telemetry | USFWS, RN |
| 06-252 | Yukon Flats Non-salmon Traditional Ecological Knowledge | ADF&G, BLM, USFWS, CATG |
| 06-253 | Middle Yukon River Non-salmon TEK and Harvest | ADF&G, LTC |
| 07-206 | Innoko River Inconnu Radio Telemetry | USFWS, ADF&G |
| 08-206 | Yukon and Kuskokwim Coregonid Strategic Plan | USFWS, ADF&G |
| 08-250 | Use of Subsistence Fish to Feed Sled Dogs | RN, AC |
| 10-209 | Yukon Delta Bering Cisco Mixed-stock Analysis | USFWS |
| 10-250 | Yukon Climate Change Impacts on Subsistence Fisheries | RN |
| 12-200 | Alatna River Inconnu Population Structure | USFWS |
| 12-207 | Yukon Bering Cisco Spawning Origins Telemetry | USFWS |
| 14-252 | Lower Yukon Whitefish | ADF&G |
| 14-253 | Upper Yukon Customary Trade | YRDFA |
| 16-203 | Bering Cisco Spawning Abundance in the Upper Yukon Flats, 2016-2017 | ADF&G, USFWS |
| 16-205 | Burbot Population Assessments in lakes of the Upper Tanana and Upper Yukon River Drainages | NPS |
| 20-202 | Evaluating dart and telemetry tags in an effort to track run timing and migration patterns of Yukon River Arctic lamprey | USFWS, UAF, ADF&G |

Abbreviations: AC = Alaskan Connections, ADF&G = Alaska Department of Fish and Game, AVCP = Association of Village Council Presidents, AV = Arctic Village, BF = Bill Fliris, BUE = Bue Consulting, BLM = Bureau of Land Management, BSFA = Bering Sea Fisherman's Association, CATG = Council of Athabaskan Tribal Governments, COK = City of Kaltag, DFO = Department of Fisheries and Oceans, EMV = Emmonak Village Council, KAL = City of Kaltag, NPS = National Park Service, LTC = Loudon Tribal Council, NVE = Native Village of Eagle, NVHB = Native Village of Hooper Bay, NVV = Native Village of Venetie, RN = Research North, RW = Robert Wolfe and Associations, SVNRC = Stevens Village, SZ=Stan Zuray, TCC = Tanana Chiefs Conference, TTC = Tanana Tribal Council,

UAF = University of Alaska Fairbanks, USFWS = U.S. Fish and Wildlife Service, USGS = U.S. Geological Survey, UW = University of Washington, and YRDFA = Yukon River Drainage Fisheries Association.

APPENDIX 2 EXECUTIVE SUMMARIES

The following executive summaries were written by principal investigators and were submitted to the Office of Subsistence Management as part of proposal packages. They may not reflect the opinions of the Office of Subsistence Management or the Technical Review Committee. Executive summaries may have been altered for length.

| | | | | |
|--------------------------------|--|------------------------|------------------------|------------------------|
| Project Number: | 22-201 | | | |
| Title: | East Fork Andreafsky River Chinook and summer Chum Salmon abundance and run timing, Yukon Delta National Wildlife Refuge, Alaska | | | |
| Geographic Region: | Yukon | | | |
| Data Types: | Stock Status and Trends | | | |
| Principal Investigator: | Jeff Melegari, U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Conservation Office | | | |
| Co-investigator: | None | | | |
| Project Cost: | 2022: \$162,978 | 2023: \$182,274 | 2024: \$174,915 | 2025: \$181,180 |
| Total Cost: | \$701,347 | | | |

Issue: The Alaska National Interest Lands Conservation Act (ANILCA) specifies that salmon populations in federal conservation units are to be managed to conserve natural diversity, fulfill international treaty obligations, and maintain a priority for subsistence harvest opportunities. Run sizes and production rates in Yukon Chinook and Chum salmon populations have been lower than expected in a number of years over the recent two decades.

The primary function of the East Fork Andreafsky River weir project is to collect fish passage counts and estimate annual escapement for Chinook and summer Chum salmon in this tributary. Estimates of age, sex, size composition of these escapements are also provided by the project. The Andreafsky River is the lowest major salmon producing tributary in the Yukon river drainage and contributes a major proportion of lower Yukon River Chinook and summer Chum salmon stocks. Salmon escapement data from East Fork Andreafsky River provide a valuable early indicator of run strength and timing to fishery managers. In addition, these escapement estimates are the only measure of salmon abundance below the Pilot Station sonar and fill a critical gap in data needed for estimating total Chinook and summer Chum salmon run sizes for the Yukon River. The estimates are necessary to evaluate Chinook and summer Chum salmon escapement goals established by the Alaska Department of Fish and Game (ADF&G) and are an essential component of drainagewide run reconstructions and forecasts.

The Andreafsky River is the first major tributary encountered by salmon migrating up the Yukon River. Salmon fisheries below that point encounter essentially all the Yukon River salmon stocks as they migrate through the area. All communities in the lower Yukon area depend on reliable, large salmon harvests for

sustenance in this remote area, where the costs of imported fuel and groceries are exorbitant and supplies of fresh, healthful foods are limited. Recent Chinook and summer Chum salmon harvests in this area have been lower than historic averages; Chinook Salmon subsistence harvests have been among the lowest on record. The Pilot Station sonar project, situated about 30 rkm upriver from the Andreafsky River confluence, and which provides estimates of total salmon run sizes of all species at that point in the river, does not include the Andreafsky River salmon stocks. Andreafsky River Chinook and summer Chum salmon stocks are not represented in mixed-stock samples collected at the sonar project site for genetic analysis of the Chinook and Chum salmon runs. This underscores the importance of the East Fork Andreafsky weir project in assessing the status of salmon runs which are not represented in other run size and stock group estimates.

A recent review of long-term project data indicated that East Fork Andreafsky Chinook and summer Chum salmon escapements have remained stable over the lifetime of the project, as has run timing for both species. This stability indicates resilience in the East Fork Andreafsky River salmon populations to both environmental change and fishing. The long-term data record will be valuable for future assessments in the face of more severe climate change effects, major ocean ecosystem shifts, and freshwater warming. Recent heat stress studies show that East Fork Andreafsky River weir project is taking on a new dimension of importance in conservation in the era of accelerating anthropogenic climate change.

Objectives

1. Estimate daily and seasonal escapement and run timing of adult Chinook and summer Chum salmon (target species) between the third week of June and the end of July.
2. Estimate the age, sex, and length (ASL) composition of the adult Chinook and summer Chum salmon escapements, for which the 95% confidence intervals of age-sex proportions are no larger than ± 0.1 .
3. Identify and count other fish species passing through the weir daily (recognizing that for most species, these will be partial counts).
4. Record species, ASL information, and spawning condition for all Chinook and summer Chum salmon carcasses, and species, sex, and spawning condition for Sockeye and Coho salmon carcasses, found during daily checks on the upstream side of the weir and along both banks.
5. Measure and record water level and temperature at the fish passage chute every 4 hours, and record air temperature and other weather data at least twice daily.

Methods: The project will use same weir design and structure used in previous years. New floating weir panels were constructed and installed in 2019. The main fish passage chute is located at the deepest part of the channel and leads into a sampling trap and then a video chute, which is fitted with a glass view window and underwater video camera. The weir and video system will be operated 24 hours a day starting June 16 and continuing until the end of July. Statistical methods will be used to estimate probable passage of Chinook and summer Chum salmon after the last day of weir operation. Data and scale samples will be collected from Chinook and summer Chum salmon escapements to characterize their age, sex, and length (ASL) composition. The sample size goal for each species (Chinook and summer Chum salmon) is 220–240 fish for the season. Sampling will be suspended if water temperatures exceed specific thresholds for physiological stress in salmon. The crew will collect ASL samples and check carcasses of heat-stressed salmon near the weir for spawning condition, and log water depth and

temperature and air temperature using automated data loggers and backup manual measurements. Daily fish counts and other data will be reported to the FFWCO for distribution to managers, biologists, and stakeholders in the morning following each 24-hour day. ADF&G will analyze scales for age determination. Annual performance reports will be submitted, and project results will be published each year in the USFWS Alaska Fishery Data Series.

Partnerships/Capacity Building

Yupiiit of Andreafskii (a Tribal organization in St. Mary’s), Nerklikmute Corporation (a local Alaska Native organization in St. Mary’s), and the City of St. Mary’s have an ongoing association with the project, through hiring local crew members, leasing land for the project camp site to the USFWS, and providing services in St. Mary’s. FFWCO will also continue as in recent years to contract with St. Mary’s Native Corporation/SMNC Properties LLC for logistical support and services using local crews. These Tribal and local organizations have built working relationships with FFWCO staff over many years. Furthermore, residents of St. Mary’s devote substantial time, expertise, and traditional knowledge, to federal, state, and international fish and wildlife regulatory processes. They hold seats on state and federal Advisory Councils, the Yukon River Panel, and the board of directors of the Yukon River Drainage Fisheries Association. In these capacities they discuss and make decisions about various research and stock assessment projects, including the East Fork Andreafsky River weir, and engage in ongoing conversations about their observations and traditional knowledge of salmon runs with agency staff.

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|--------------------------------|--|------------------------|------------------|------------------|
| Project Number: | 22-202 | | | |
| Title: | Gisasa River Chinook and summer Chum Salmon abundance and run timing assessment, Koyukuk National Wildlife Refuge, Alaska | | | |
| Geographic Region: | Yukon | | | |
| Data Types: | Stock Status and Trends | | | |
| Principal Investigator: | Jeremy Carlson, U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office | | | |
| Co-investigator: | Jeff Melegari, U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office; Robert Eric Rowe, Tanana Chiefs Conference | | | |
| Project Cost: | 2022: \$168,695 | 2023: \$174,957 | 2024: \$0 | 2025: \$0 |
| Total Cost: | \$343,652 | | | |

Issue: Through Section 302 of the Alaska National Interest Lands Conservation Act, the USFWS has a responsibility to ensure that salmon populations within federal conservation units are conserved in their natural diversity, that international treaty agreements are met, and subsistence opportunities are maintained. The Gisasa River provides important spawning and rearing habitat for Chinook and summer Chum salmon that contribute to complex Yukon River mixed stock subsistence and commercial fisheries. The Gisasa River weir is currently one of only two projects within the Koyukuk River drainage that provide in-season run information. The data is utilized postseason to produce an annual estimate of escapement and assess the success of management actions in-season. These data will also help evaluate long-term trends in species abundance and age, sex, and length composition.

Objectives:

1. Use video weir technology to enumerate daily passage of all fish species and forward this data on to managers and users daily.
2. Estimate seasonal escapement of adult Chinook Salmon and summer Chum Salmon using Sethi and Bradley (2016) model, as needed, and characterize their run timing.
3. Estimate the age, sex, and length (ASL) composition of the adult Chinook and summer Chum salmon escapements, for which the 95% confidence intervals of age-sex proportions are no larger than ± 0.1 .
4. Work with Tanana Chiefs Conference (TCC), as the Tribal Organization for the region, to transition operation of the project from USFWS staff to TCC.

Methods: A resistance board weir will be installed and operated on the Gisasa River from mid-June through early to mid-August during each year. A trap equipped with a video counting chute will allow all fish passing through the weir to be identified to species and counted. Count data will be provided to managers and other interested parties daily. Age (scales), sex, and length data will be collected from Chinook, and Chum salmon. Scales will be sent to Alaska Department of Fish and Game for aging. Personnel from TCC will participate in all aspects of the project to build the capacity to assume the role of principle investigator

Partnerships/Capacity Building: Project staff have worked with staff from Tanana Chiefs Conference’s (TCC) Henshaw River Weir, the other Koyukuk River monitoring project, to share knowledge, methods, and labor for weir setup. This cooperation with TCC will be expanded upon by working closely with TCC during both years of this project to familiarize them with all aspects of the project and help them build the capacity to take over as the principle investigator after the 2023 season. The FFWCO has strived for local involvement and capacity building with the project and is committed to continually promoting capacity building by describing project opportunities at RAC, YRDFA, and Refuge coordination meetings. The FFWCO has also worked with Koyukuk National Wildlife Refuge to provide field work experience for Alaska Native Science & Engineering Program students and local hires from the Refuge.

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|--------------------------------|--|------------------------|------------------|------------------|
| Project Number: | 22-203 | | | |
| Title: | Combining molecular and traditional methods to assess prey availability, prey quality, and diets in relation to size and condition of outmigrating Chinook smolts in the lower Yukon River | | | |
| Geographic Region: | Yukon | | | |
| Data Types: | Stock Status and Trends | | | |
| Principal Investigator: | Courtney Weiss, Yukon Delta Fisheries Development Association | | | |
| Co-investigator: | Daniel Bogan, Alaska Center for Conservation Science, University of Alaska Anchorage; Rebecca Shaftel, Alaska Center for Conservation Science, University of Alaska Anchorage; Katharine Miller, National Marine Fisheries Service; Ragnar Alstrom, Yukon Delta Fisheries Development Association | | | |
| Project Cost: | 2022: \$165,838 | 2023: \$138,804 | 2024: \$0 | 2025: \$0 |
| Total Cost: | \$304,642 | | | |

Issue: The proposed research addresses *Yukon Region 2022 Priority Information Need: Distribution, abundance, condition, and survival of juvenile and out-migrating salmon in the Yukon River drainage.*

This research will evaluate the composition, spatial variation, and temporal variation in fish and invertebrate prey for juvenile Chinook salmon in distributary habitats, and assess the quality of prey resources in relation to juvenile Chinook salmon growth and condition. Juvenile salmon migration timing has evolved in response to seasonal patterns in prey availability. To optimize growth, juvenile salmon must be capable of rapidly capitalizing on short-lived episodes ('resource pulses') of high prey availability in order to amass energy stores prior to the stressful parr-smolt transformation. Several studies indicate that juvenile growth in freshwater may influence survival during marine entry and early marine life stages, and that the quality and quantity of prey resources available during outmigration and early marine residence are crucial factors for juvenile salmon growth and survival.

The Yukon River is experiencing rapid climatic changes that are evidenced in warmer water temperatures, decreased ice periods, and reduced ice thickness. Since 2015, water temperatures in the lower Yukon River have consistently exceeded the long-term average. Less predictable inter-annual variability in environmental conditions can lead to temporal mismatches between juvenile salmon and pulsed prey resources in certain years. Such mismatches could lead to high mortality if pulses are missed during critical times for feeding.

Recent advances in the use of DNA-based diet determination provide an additional tool for accurate diet analysis. DNA-based methods can identify prey regardless of the degree of digestion. When standard morphological content analysis and DNA-based methods are combined, they can provide greater resolution of diet and trophic interactions than when either method is used in isolation. This research proposes to evaluate how seasonal patterns in resource availability interact with inter-annual environmental variation to influence the growth and energetic status of outmigrating Chinook salmon. We propose to conduct two years of prey field sampling and DNA-analysis of stomach samples. Prey field data will be compared with existing data from a pilot study of prey dynamics in 2016. Combining all three years of data will increase our understanding of mechanisms by which seasonal patterns in prey availability affect Chinook salmon growth and by extension survival rates.

Objectives:

- 1) Characterize changes in diet composition of juvenile Chinook salmon in the Yukon Delta over the duration of the outmigration season using an integrative approach.
- 2) Characterize changes in the composition and quality (lipid content) of prey available to, and changes in prey selection by, juvenile Chinook salmon across the outmigration season and across years
- 3) Relate inter-annual environmental variation to among-year differences in lipid availability (prey) and among-year differences in size and condition of juvenile Chinook salmon

Methods: Chinook salmon and weekly prey field samples will be collected using other funding. Diet analysis of individual Chinook will be assessed by excising the stomachs from frozen samples and weighing and identifying stomach contents under a microscope to the lowest taxonomic level feasible. Each taxa or prey group will be measured and enumerated, and the percent prey weight composition will be summarized. DNA samples will be extracted from the stomach contents and processed in a commercial laboratory. Drift samples will be processed by trained taxonomists at UAA's Alaska Center for Conservation Science aquatic ecology lab. Published length-weight regressions will be used to estimate biomass for all major prey taxa. Flow volume (measured during field sampling; described previously) will be multiplied by surface area to estimate water volume sampled; this estimate will be combined with biomass estimates to produce estimates of drift prey densities by taxa. Non-parametric analysis (i.e.,

PERMANOVA, MDS) will be used to investigate the relationship between biotic (e.g., Chinook body size) and abiotic (i.e., water temperature, season, year) factors and community composition of the diets. Seasonal variations in diet quality in relation to juvenile Chinook condition will be assessed by evaluating consumed energy in relation to required maintenance metabolism given Chinook size and water temperature. The result will provide information on how well diets are fulfilling Chinook energetic needs for varying sizes of salmon, and throughout the migration period.

Partnerships/Capacity Building: Project management is done by the in-region CDQ group YDFDA. This proposal continues to build on a multi-year history of research and engagement with the residents of the Lower Yukon, specifically in the communities of Emmonak, Alakanuk, and Kotlik. YDFDA has been an important lead in this research, enabling local fishermen and technicians (mostly high school students) throughout the Yukon Delta to have an active role in juvenile Chinook salmon research. Local knowledge and expertise have been invaluable in helping identify appropriate sampling locations, navigating complex waterways, and developing sampling protocols for the Yukon River environment. In exchange, local fishermen and technicians have gained first-hand knowledge of scientific research principals and processes. The project PI lives in the community during the summer and is often approached by community members to talk about the research and its importance to salmon ecology. The unique relationship between scientists and fishermen has made this research successful and is providing a valuable multi-year dataset on understudied aspects of juvenile salmon ecology in the Yukon River.

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|--------------------------------|--|-----------------------|-----------------------|------------------|
| Project Number: | 22-204 | | | |
| Title: | Western Alaska Coho Salmon Genetic Baseline Development | | | |
| Geographic Region: | Yukon | | | |
| Data Types: | Stock Status and Trends | | | |
| Principal Investigator: | Elizabeth Lee, Alaska Department of Fish and Game, Commercial Fisheries Division, Gene Conservation Laboratory | | | |
| Co-investigator: | Tyler Dann, Alaska Department of Fish & Game, Commercial Fisheries Division, Gene Conservation Laboratory | | | |
| Project Cost: | 2022: \$0 | 2023: \$52,348 | 2024: \$64,434 | 2025: \$0 |
| Total Cost: | \$116,782 | | | |

Issue Addressed: Chinook salmon (*Oncorhynchus tshawytscha*) and chum salmon (*O. keta*) runs are major subsistence fishery resources for Yukon River communities (ADF&G 2013; JTC 2020). However, low productivity and poor return years have been observed for both species in recent years, resulting in economic hardships and food security issues for fishing communities throughout the region. With variable Chinook and chum salmon returns, the importance of other fishery resources is growing on the Yukon River, including coho salmon (*O. kisutch*). Coho salmon have been relatively understudied on the Yukon River compared to Chinook and chum salmon, and limited information exists on the distribution and abundance of coho salmon throughout the drainage. Nevertheless, fisheries biologists and managers are required to use the best available information to assess coho salmon abundance when managing the subsistence coho salmon fisheries on the Yukon River.

Currently, ADF&G and NOAA collaborate to conduct annual offshore trawl surveys in the Bering Sea to assess abundances of juvenile salmon species. Prior studies have demonstrated a clear relationship between juvenile abundance and future adult returns of Yukon River Chinook salmon, enabling juvenile-based forecasts of adult run sizes (Howard et al. 2020). Furthermore, an in-progress study is developing a similar forecast tool for Yukon River chum salmon. Due to a mixture of salmon stocks in the Bering Sea, genetic mixed-stock analysis (MSA) is a central component of these models and facilitates apportionment of Yukon River salmon from other Alaskan salmon stocks. These forecasts are the best available and

directly inform conservation and management of major fishery resources in the Yukon River. Coho salmon conservation and management could similarly benefit from juvenile-based forecasts of adult run sizes, since coho salmon samples and abundance data is collected during the annual Bering Sea trawl surveys. However, a genetic baseline for coho salmon that can be used for Bering Sea MSA is necessary before developing a juvenile-based forecast model for coho salmon in the Yukon River.

The proposed project addresses the following Office of Subsistence Management Priority Information Need for Federal Subsistence Fisheries in the Yukon Region: ***Baseline information about geographic distribution, migration patterns, run timing, genetic structure, and tributary escapements of Yukon River coho Salmon.*** Ultimately, the product of the proposed project will eventually contribute to a second Priority Information Need for Federal Subsistence Fisheries in the Yukon Region: ***Reliable methods of forecasting Coho salmon run abundance.***

The primary goal of this proposed project is to develop a high-resolution genetic baseline for Yukon River and Coastal Western Alaska coho salmon populations. The genetic baseline can be used to describe the genetic structure of coho salmon 1) within the Yukon River and 2) between the Yukon River and other Coastal Western Alaska populations (i.e., Norton Sound, Kuskokwim River, and Bristol Bay). Moreover, the baseline can then be used for MSA in subsistence fisheries management applications. MSA can provide federal, state, and local subsistence fisheries managers and biologists with stock composition estimates of mixed-stock catch or harvest samples, which can be utilized in interdisciplinary efforts to 1) understand population dynamics and run structures, 2) estimate escapement, harvest, and stock-specific abundances, and 3) forecast future runs of coho salmon. Project objectives include:

Objective 1: Genotype 43 Western Alaska coho salmon collections for 372 genetic markers using amplicon sequencing and a bioinformatic pipeline.

Objective 2: Construct a genetic baseline and analyze the baseline for population structure.

Objective 3: Evaluate the MSA potential of the baseline for management applications and identify missing baseline populations through engagement with subsistence fisheries stakeholders.

Methods: DNA from 3,990 coho salmon tissue samples collected from 43 spawning locations across Western Alaska (Yukon River, Norton Sound, Kuskokwim River, and Bristol Bay) will be genotyped at 372 genetic markers using novel, yet well-vetted, Genotyping-in-Thousands by Sequencing methods (GT-seq; Campbell et al. 2015), a cost-effective method for screening hundreds of genetic markers for baseline development. The GT-seq marker panel of 372 loci was developed for coastwide coho salmon collaboration by WDFW and designed to include the genetic markers used by DFO. Libraries of pooled samples will be prepared and sequenced following the GT-seq methods described in Campbell et al. (2015) with modifications as described in Barclay et al. (2019). We will examine population genetic structure among populations. We will test reporting groups by sampling individuals from the baseline without replacement to generate test mixtures and use the R package *rubias* to estimate the stock composition of test mixtures. With these methods, we will evaluate the capability of the baseline to accurately and precisely estimate Yukon River stock compositions within mixture samples. The results of these baseline tests will be shared with Yukon River Western Alaska fisheries managers and scientists and local community organizations. Discussions with these groups will us help identify missing baseline populations and recommend future avenues of improvement for a more comprehensive Western Alaska coho salmon baseline needed for Yukon River subsistence fisheries management applications.

Partnerships/Capacity Building: Our long-term vision is that the initial genetic baseline developed through our proposed project will be expanded into a more comprehensive Western Alaska baseline through partnerships and collaboration with local communities. This initial project represents the first step towards building a valuable partnership with Yukon River and Western Alaska rural communities and Alaska Native organizations to more meaningfully participate in management of subsistence fisheries.

The baseline proposed here would be a product of previous opportunistic sampling in Western Alaska. Therefore, it is an initial Western Alaska coho salmon baseline that will benefit from additional, targeted baseline sample collecting. The quantitative measures obtained through genetic structure analysis will allow us to form hypotheses about missing populations within the baseline. However, ground-truthing with local knowledge will be essential for identifying additional baseline collection sites across the vast and remote Western Alaska landscape. Partnership building with Yukon River and Western Alaska community organizations will be facilitated by ADF&G local area staff, Research Coordinators, Fisheries Managers, and Fisheries Scientists throughout the project. Formal meetings will be planned with these groups each Spring of the project duration to disseminate baseline progress, gather feedback from local community organizations, and discuss baseline improvement options with these stakeholders. Ultimately, development of a comprehensive Western Alaska coho salmon baseline will provide the foundation for more sustainable harvesting of an increasingly important fishery resource on the Yukon River.

References:

ADF&G. 2013. Chinook salmon stock assessment and research plan, 2013. Alaska Department of Fish and Game, Special Publication No. 13-01
Barclay et al. 2019. New genetic baseline for Upper Cook Inlet Chinook salmon allows for the identification of more stocks in mixed stock fisheries: 413 loci and 67 populations. Alaska Department of Fish and Game, Fishery Manuscript Series No. 19-06.
Campbell et al. 2015. Genotyping-in-Thousands by sequencing (GT-seq): A cost effective SNP genotyping method based on custom amplicon sequencing. Molecular Ecology Resources.
Howard et al. 2020. Northeastern Bering Sea juvenile Chinook salmon survey, 2017 and Yukon River adult run forecasts, 2018–2020. Alaska Department of Fish and Game, Fishery Data Series No. 19-04.
JTC. 2020. Yukon River salmon 2019 season summary and 2020 season outlook. Alaska Department of Fish and Game, RIR 3A20-01.

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|--------------------------------|--|------------------------|------------------|------------------|
| Project Number: | 22-251 | | | |
| Title: | The Presence and Use of Salmon in the Pastolik and Pastoliak Rivers | | | |
| Geographic Region: | Yukon | | | |
| Data Types: | Stock Status and Trends, Harvest Monitoring, and Traditional Ecological Knowledge | | | |
| Principal Investigator: | Alida Trainor, Division of Subsistence, Alaska Department of Fish and Game | | | |
| Co-investigator: | Nate Cathcart, Division of Sport Fish, Alaska Department of Fish and Game | | | |
| Project Cost: | 2022: \$272,804 | 2023: \$102,301 | 2024: \$0 | 2025: \$0 |
| Total Cost: | \$375,105 | | | |

Issue: Sustainable management of salmon fisheries requires accurate data about stock status and harvest. For two coastal rivers located in the Yukon Delta National Wildlife Refuge, this information does not exist or is very limited, outdated, or unsubstantiated. The Pastolik and Pastoliak rivers, near the north mouth of the Yukon River, have been traditionally used by residents of Kotlik and the surrounding area for subsistence salmon and nonsalmon fishing long before Alaska became a state (Wolfe 1981; Yukon Delta National Wildlife Refuge 1988; Runfola et al. 2018). Despite long-term use of these rivers, fisheries managers have no data on subsistence salmon harvests for them and maintain unresolved questions about presence or absence, abundance, and health of the salmon species in these rivers. This study seeks to address the data gaps that exist about the presence and use of salmon in the Pastolik and Pastoliak rivers.

Objectives:

- 1) Document local and traditional knowledge held by Kotlik residents about:
 - a. the presence and ecology of salmon in the Pastolik and Pastoliak rivers;
 - b. the historical and contemporary uses of these river systems for subsistence salmon fishing.
- 2) Document subsistence salmon harvests and the locations of harvest in the Pastolik and Pastoliak rivers during the 2022 fishing season to understand patterns of harvest specific to these rivers and distinct from the total harvest within the Y1 District of the Yukon River.

- 3) Substantiate presence and enhance knowledge of salmon stocks in the Pastolik and Pastoliak rivers through biological sampling methods. Specifically,
 - a. identify what species of salmon are present in what life stages, with a focus on identifying adult spawning salmon and distributions throughout both rivers of adult spawning and juvenile rearing.
 - b. document run timing.
 - c. determine if stocks identify genetically with Yukon River or other major stocks through genetic sampling.
 - d. submit detailed nominations to the AWC for waterbodies supporting anadromous species, including seasonal efforts that document the fish assemblages present, including life stages of certain species. Share results publicly through the ADF&G AFFI online mapper.

Methods: ADF&G researchers will work with the Kotlik Traditional Council to identify two local research assistants (LRAs) to help with ethnographic interviews and household surveys. Semi-structured interviews will be conducted with long-time residents who have a history of fishing on the Pastolik and Pastoliak rivers. Researchers will administer a short salmon harvest survey to households who fished for subsistence salmon in the Pastolik and Pastoliak rivers in 2021. The survey will document what species were harvested, the amounts, timing of harvest, gear types used, and location of harvest. These data will be the first attempt to quantify subsistence salmon harvest information specific to these rivers. During interviews and surveys, a map of the Pastolik and Pastoliak rivers and nearby surrounding areas will be used as a visual reference. Fishing sites, observations of salmon and salmon habitat, and other relevant information related to the topics of interest will be noted on the maps. Map data will later be digitized and formatted using ESRI ArcMap GIS software.

For biological data collection, ADF&G staff will also utilize the expertise of a LRA and local boat driver. Staff and LRAs will travel the Pastolik and Pastoliak rivers by boat and helicopter, conducting biological sampling throughout each drainage. Primary fish capture methods proposed to be used throughout the duration of field work include actively sampling with electrofishing in upper segments of the rivers and more passive sampling using gillnets in downstream reaches of each river. In each river, two 100' gillnets with 5.5" (for chum and pink salmon) and 7" (Chinook and chum) stretched mesh will be fished perpendicular to streambanks and set overnight and checked each day throughout the duration of the project. Researchers will also seek to rent fishing nets from local fishers to increase the mesh selectivity. Fishers in this area tend to use 6" or 7.5" stretched mesh to catch salmon. Opportunistic sampling methods include minnow trapping, aerial observations, and angling. Minnow traps will be set opportunistically by boat or raft-electrofishing crews in habitats able to support juvenile salmon. Trapped juveniles will be visually identified, measured to fork length (mm), and will provide verification of rearing habitat. Aerial surveys will be performed opportunistically during helicopter travel to, from, and at raft-electrofishing sites with any observations georeferenced on a handheld GPS. If salmon are observed to be abundant, angling will be used as an alternative method of capture to reduce salmon mortality during sampling. Direct and indirect genetic sampling will be performed and then analyzed by the ADF&G genetics laboratory and Jonah Ventures Lab in Boulder, CO. Captured fishes from any method will be identified, measured to fork length, photographed when necessary (such as to document identity for verification of species), and recorded. Sex will be recorded for adult salmon. Any remarkable or informative notes (e.g., sex, spawning condition, disease) for other species will be noted. In addition, in each river, researchers will collect three water samples from six locations in each river (N=36) for environmental DNA (eDNA) analysis, which will provide evidence of potential presence or absence of various salmon species to be detected. All captured adult salmon will be tissue sampled via clipping the axillary process and saved for genetic analysis, which will help determine if they are a unique stock from

other Yukon River salmon. For observations of anadromous fishes, staff will generate nominations to the AWC.

Partnerships/Capacity Building: Throughout the development of this proposal, the lead investigator was in communication with local residents of Kotlik who have expressed interest for more informed and comprehensive salmon management of the Pastolik and Pastoliak rivers. This communication helped shape project design and decide the sampling methods for household harvest surveys and traditional knowledge interviews. Through consultation with the Kotlik Traditional Council, investigators and community leaders have agreed to include local research assistants (LRAs) in all aspects of data collection. One of the main goals of this project is to facilitate information sharing between local residents and fisheries management agencies. Local residents will have the opportunity to share their knowledge of salmon in the Pastolik and Pastoliak rivers with researchers, and in return project staff will share what they learn through biological sampling with the community. This two-way information exchange will help build a relationship between the community and managers to strengthen additional partnerships in the future.

Additionally, project staff will work with the tribal council in Kotlik to hire LRAs, to select key respondents, and facilitate community meetings. The LRAs will be trained in anthropological and biological sampling methods. This training will increase the capacity for local involvement in future research opportunities. This increases coordination between agencies, tribal entities, and community members; working together in data collection increases communication and leads to better understanding of local issues and local understanding of science and management issues.

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|--------------------------------|---|------------------------|------------------|------------------|
| Project Number: | 22-252 | | | |
| Title: | Combining Traditional Ecological Knowledge & Biological Sampling to Enhance Understanding of Humpback Whitefish and other Non-salmon Fishes in the Upper Koyukuk Region | | | |
| Geographic Region: | Yukon | | | |
| Data Types: | Harvest Monitoring, Traditional Ecological Knowledge, and Stock Status and Trends | | | |
| Principal Investigator: | Brooke McDavid, Division of Subsistence, Alaska Department of Fish and Game | | | |
| Co-investigator: | Brian McKenna, Tanana Chiefs Conference; Randy J. Brown, U.S. Fish and Wildlife Service, Fairbanks Fish & Wildlife Conservation Office | | | |
| Project Cost: | 2022: \$126,629 | 2023: \$105,323 | 2024: \$0 | 2025: \$0 |
| Total Cost: | \$231,952 | | | |

Issue: Whitefishes and other nonsalmon fishes are an integral component of the overall subsistence harvest profile in Yukon River communities, including Allakaket and Alatna. However, despite their prolific subsistence use and commercial exploitation, there is limited information about their stock statuses, life histories, and annual subsistence harvests (Brown et al 2012). This lack of information makes managing nonsalmon fisheries extremely difficult for both federal and state managers. Using mixed qualitative and quantitative methods, the proposed research will update the documentation of TEK of nonsalmon fishes in the upper Koyukuk River area with a focus on local fishers’ observations of landscape and waterway change linked to climate effects. It will also update harvest estimates of nonsalmon species for the communities of Allakaket and Alatna in order to allow the investigation of shifting harvest patterns. The biological component of this study will address existing data gaps in humpback whitefish populations in the upper Koyukuk River drainage. Specifically, the demographic composition of humpback whitefish will be

described for spawning populations in the Alatna and South Fork Koyukuk rivers. This study will describe age, sex, and length structures, assess fish condition through weight at length relationships, and assess the reproductive health of spawning populations by analyzing the gonadosomatic index, or the relationship of ovary weight to total weight. This work will have multiple applications. Updated harvest data will assess changes in the harvest, provide managers information about important nonsalmon fish habitats (mapped data), and develop their understanding of role of nonsalmon fishes within a total context of subsistence, especially in light of declining salmon runs. Critical assessments of local experiences of and adaptations to climate, landscape-based, and economic change in the fisheries are critical inputs to management and policy.

Objectives:

1. Update documented TEK of critical nonsalmon fish populations held by Alatna and Allakaket residents with particular attention to humpback whitefish, including:
 - a. Observational knowledge about landscape and waterway change linked to climate change effects in the upper Koyukuk River region;
 - b. Observed changes to nonsalmon fish populations, their habitats, or both over time;
 - c. Adaptations in subsistence harvest practices over time due to environmental or resource change and associated regulatory, economic, or social change.
2. Estimate nonsalmon fish harvests, timing, and locations and compare with results from previous studies.
3. Describe the demographic composition (age, sex, length, weight, and gonadosomatic index) of humpback whitefish spawning populations in the Alatna and South Fork Koyukuk rivers.

Methods: This research will utilize an interdisciplinary approach to study humpback whitefish and other nonsalmon fishes in the upper Koyukuk River drainage. ADF&G staff from the Division of Subsistence will lead the ethnographic and harvest research components of this project and staff from Tanana Chiefs Conference will lead the biological components of the project. Local research assistants (LRAs) will be hired to aid both aspects of the data collection.

Division of Subsistence staff will administer a short household harvest survey to better understand harvest levels, the timing of harvest, the gear types used, and locations of harvest. A census of all households in both communities will be attempted. Ethnographic research will consist of semi-structured interviews and mapping of nonsalmon habitats. Researchers will develop an interview protocol prior to fieldwork in consultation with tribal councils and fisheries managers. Topics are expected to include traditional harvest practices; nonsalmon fish life histories and habitat; effects of climate change on nonsalmon fish, especially humpback whitefish, and their habitats; and any concerns related to fisheries management and the proposed Ambler Road development. The semi-structured protocol will help guide conversations, but it is expected that respondents will discuss additional topics related to subsistence fishing and resource management. Maps will be also be used during interviews to record information about current and historical fishing sites, nonsalmon fish habitat, and observations of environmental change.

For the biological component of the project, project investigators (PIs) will sample humpback whitefish in two locations either through acquired samples from subsistence caught fish or through direct sampling. In the Alatna River, PIs will sample whitefish harvested by subsistence fishers. In the South Fork Koyukuk River, PIs will apply for an aquatic resource permit through ADF&G to allow for the lawful collection of fish and will utilize a small mesh beach seine. All identified humpback whitefish will be measured for length, weighed, and sexed. Additionally, ovaries will be weighed, and otoliths will be collected. Fork length (FL) will be measured to the nearest 1 mm using a 100 cm soft tape measuring ruler. Wet weight will be measured to nearest 1 g using a digital hanging scale with a capacity of 50 g to 50 kg. After recording length and weight measurements, all fish will be cut open so the reproductive organs can be visually

assessed for sex identification. Otoliths (2) from each fish will be removed, stored individually, and systematically tied to the recorded data for each individual fish so that ages can be associated with fork length, wet weight, ovary weights, and sex identification records. All sampled fish will be donated to the communities of Allakaket and Alatna.

Partnerships/Capacity Building: This interdisciplinary project relies heavily on the partnership with the tribal councils, communities, and residents of Allakaket and Alatna. Through the development of this proposal, representatives from both the Allakaket and Alatna tribal councils have contributed to the development of the research design. If this project is funded, project staff will work with the councils to identify and hire LRAs to assist with data collection. These LRAs will be trained in anthropological and biological sampling methods. This training will increase the capacity for local involvement in future research opportunities. Additionally, this project brings together researchers from the State of Alaska, USFWS, and the Tanana Chiefs Conference. This partnership and collaboration will inevitably draw on diverse perspectives and experience that will allow researchers to analyze results critically and develop strong recommendations for future research and improved management of whitefish species.

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|--------------------------------|---|-----------------------|-----------------------|-----------------------|
| Project Number: | 22-253 | | | |
| Title: | Yukon River Nonsalmon Subsistence Survey | | | |
| Geographic Region: | Yukon | | | |
| Data Types: | Harvest Monitoring and Traditional Ecological Knowledge | | | |
| Principal Investigator: | Catherine Moncrieff, Yukon River Drainage Fisheries Association | | | |
| Co-investigator: | None | | | |
| Project Cost: | 2022: \$46,230 | 2023: \$57,704 | 2024: \$57,704 | 2025: \$57,704 |
| Total Cost: | \$219,343 | | | |

Issue Addressed: The Yukon River Drainage Fisheries Association (YRDFA) is proposing to address two of the 2022 Priority Information Needs identified by the Yukon Region Federal Subsistence Regional Advisory Councils. The first issue addressed is to gather Traditional Ecological Knowledge (TEK) of freshwater species in the Yukon River, and the second issue is to gather knowledge on the population, reproduction, and health of spawning habitat for Bering Cisco and Humpback Whitefish. This project is significant because there has been an increase of expressed concern from residents of the Yukon River at 2020 Federal Subsistence Regional Advisory Council (RAC) meetings about the population and health of nonsalmon species.

Gathering knowledge about the population and health of freshwater species, also referred to as nonsalmon species of fish in the Yukon River through TEK methodology has direct association to the federal subsistence freshwater species fisheries that take place along the Yukon River. Nonsalmon species of fish are prioritized in 2022 by the Yukon River RACs, with a specific focus on Humpback Whitefish (*Coregoninae clupeaformis*) and Bering Cisco (*C. laurettae*). This project is relevant to the Federal Subsistence Management and Section 812 of the Alaska National Interest Lands Claims Act (ANILCA) which directs the Department of the Interior (DOI) to cooperate with other federal agencies, the State of Alaska, and Alaska Native and rural organizations to research and monitor subsistence uses of fish and wildlife on federal public lands and to seek data from, consult with, and make use of the knowledge of local residents engaged in subsistence activities. The creation of a nonsalmon subsistence survey that will work specifically with the federal fisheries management team will add another tool in the federal fishery manager’s toolbox.

This project will address harvest pressure on nonsalmon species through the collection of information about local fisher observations, traditional harvest practices and timing of nonsalmon species.

This program will be an adaptive communication program which maximizes fishers' voices in subsistence fisheries and enables the federal manager to send important conservation messages directly into the fishers' households in five key villages. With this proposal, the surveyor program is responding to the most recent feedback from the fishers, and expanding to hire more surveyors, survey new fishers and include new information to pre-season, in-season, and post-season meetings to strengthen both the capacity building and communication aspects of the program.

The extent and depth of subsistence use of nonsalmon species in the Yukon River can be seen in the most recent Annual Management Report from 2017 showing the harvest of 67,464 whitefish (*Coregonus spp. and Prosopium cylindraceum*), 22,877 northern pike (*Esox lucius*), and 13,038 sheefish (*Stenodus leucichthys*) (Estensen et al. 2018). Other species are also harvested but are only reported by total because of small amounts of harvest or because they occur outside of the salmon season. The following were their totals for 2017: 2,843 burbot (*Lota lota*), 6,661 tomcod (*Eleginus gracilis*), 1,501 Arctic grayling (*Thymallus arcticus*), 179 longnose suckers (*Catostomus catostomus*), 109,888 Alaska blackfish (*Dallia pectoralis*), 19,357 Arctic lamprey (*Lethenteron camtschaticum*), and 16,492 Pacific herring (*Clupea pallasii*). ADF&G reports that estimates of nonsalmon harvest in Yukon River drainage is poorly understood at a species level and a comprehensive assessment of nonsalmon harvest and use, by species, has been identified as a research priority (Estensen 2018:37-38; Brown RJ et al. 2012). They note that information about nonsalmon harvests are collected through the ADF&G annual postseason subsistence survey but does not include species distinctions.

Objectives:

1. Develop a protocol for nonsalmon subsistence survey program that will collect fisher information about Yukon River nonsalmon harvests and observations.
 - a. Review protocol with Yukon River fishery managers and researchers to include methods for community selection, time in the field, data collection, approvals and informed consent.
2. Implement nonsalmon subsistence survey program
 - a. Conduct community outreach, travel to communities, hold meetings, hire and train surveyors, collect nonsalmon fisher harvest data and observations from five Yukon River communities in the spring and late summer/ fall nonsalmon fishing periods, and evaluate annually.
3. Build capacity of YRDFA, local surveyors, fishers and Yukon River Federal Subsistence Regional Advisory Councils to participate in nonsalmon subsistence fisheries management and regulatory decision-making.

Methods: Methods for this project include communication, outreach, survey instrument, data analysis, and annual evaluations. YRDFA will develop a Traditional Ecological Knowledge (TEK) survey protocol for community surveyors to conduct weekly interviews with active fishers about their nonsalmon harvests in five Yukon River communities and will focus on identification and differentiation of Bering Cisco and Humpback Whitefish. Additionally, the survey will gather information about whether fishing was for daily use or for preservation for later use. This knowledge will be utilized to build on existing knowledge and provide contemporary updates that are shared with federal fisheries managers for the Yukon River for their use in subsistence fisheries decision-making.

YRDFA will hire local surveyors from five of the 10 salmon surveyed villages who will interview known nonsalmon fishers in their communities about qualitative harvest data and observations. This protocol will be adapted from and modeled after the successful In-season Subsistence Salmon Survey Program. The

interview methodology will follow the National Academy of Science's *Principles for Conduct of Research in the Arctic* and will include informed consent for participants, to be conducted prior to the first interview. Privacy and confidentiality will be protected in the reporting. In addition to collecting information from fishers, surveyors will disseminate relevant information to fishers. For the data analysis, at the end of the season the PI will review all the survey forms and the compiled MS Excel spreadsheet and produce summary narrative reports.

Partnerships/Capacity Building: This project will build the capability and expertise of the locally hired surveyors to enhance their communication and reporting skills. Partnerships will be maintained with the federal fishery managers and also with the village Tribal Councils and individuals working as a part of the project. YRDFA will be working in partnership with all these entities but no formal partnership agreements are made as a result of this. Contracts with the Tribal Councils and/or the individuals hired will be working agreements that guide the quality of the program to ensure we meet our goals and objectives of the program.

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.



United States Department of the Interior
NATIONAL PARK SERVICE
 Wrangell-St. Elias National Park & Preserve
 Mile 106.8 Richardson Hwy. P.O. Box 439
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<http://www.nps.gov/wrst>



WRANGELL-ST. ELIAS NATIONAL PARK SUBSISTENCE RESOURCE COMMISSION

The Wrangell-St. Elias National Park Subsistence Resource Commission (WRST SRC) provides a venue for local subsistence users to have input into the management of subsistence resources in Wrangell-St. Elias National Park. Since the establishment of the Federal Subsistence Program in 1990, the nine-member commission has also been making recommendations on proposals affecting the park directly to Regional Advisory Councils and the Federal Subsistence Board.

Federal Subsistence Regional Advisory Councils (RACs) appoint three members to the SRC. These members provide an important link between the SRC and the Federal Subsistence Program. The Regional Advisory Councils that address issues in Wrangell-St. Elias National Park and Preserve include the Southcentral RAC, the Eastern Interior RAC, and the Southeast RAC. Sue Entsminger of Mentasta Pass is the Eastern Interior RAC appointee to the WRST SRC. Her term expires in November 2021. In addition to the RAC appointments, three members of the SRC are appointed by the Governor of Alaska and three members are appointed by the Secretary of the Interior.

At its October 2021 meeting, the Eastern Interior RAC has the opportunity to take action on its appointment to the WRST SRC. According to ANILCA Section 808(a), RAC appointees to the SRC must be a member of either the RAC or a local advisory committee (AC) within the region and also engage in subsistence uses within the park. Members of local Fish and Game ACs in the region, such as the Upper Tanana-Forty Mile AC, who also engage in subsistence in the park, are also eligible for this appointment. In order to be eligible to engage in subsistence uses within the park, rural residents must make their primary permanent home in one of the park’s resident zone communities, live within the park, or hold a subsistence permit issued pursuant to 36 Code of Federal Regulations (CFR) 13.440.

Subsistence users who have questions about or are interested in applying for a seat on the WRST SRC should contact Barbara Cellarius at 822-7236 or barbara_cellarius@nps.gov.

Wrangell-St. Elias SRC Roster August 2021

| Name | Community | Appointing Source | Expires* |
|-------------------------------|------------------|--------------------------|-----------------|
| Michael L. Cronk | Tok | Secretary of Interior | 1/15/2024 |
| Michael Christenson | Silver Lake | Secretary of Interior | 2/26/2022 |
| Daniel E. Stevens | Chitina | Secretary of Interior | 2/26/2022 |
| Kaleb Rowland | McCarthy | Governor | 11/04/2023 |
| Suzanne McCarthy | Gakona | Governor | 11/04/2021 |
| Donald R. Horrell | Tazlina | Governor | 11/04/2021 |
| Gloria Stickwan | Tazlina | Southcentral RAC | 11/04/2023 |
| Sam Demmert | Yakutat | Southeast RAC | 3/21/2022 |
| Alternate Larry R. Bemis, Jr. | | Yakutat | |
| Sue Entsminger | Mentasta Pass | Eastern Interior RAC | 11/04/2021 |

* All members serve for three-year terms. According to 54 U.S. Code § 100906(c), members continue to serve until re-appointed or replaced. However, RAC appointees must be current members of a RAC or AC for their appointments to be valid.



Tanana Chiefs Conference

TCC Fisheries Program Report of Activities



Burbot, *Lota lota*



Chinook Salmon, *Oncorhynchus tshawytscha*



Arctic Lamprey, *Lampetra camtschatica*

Prepared for the Regional Advisory Councils, October 2021

Traditional Knowledge of Anadromous Fishes in the Yukon Flats:

TCC and the Yukon River Drainage Fisheries Association (YRDLFA) have been working together to update the Catalog of Waters Important for the Spawning, Rearing, and Migration of Anadromous Fishes and its associated atlas of critical waters. Through this project, we are focusing on salmon species that spawn and rear within the Draanjik drainage (Chinook, Chum, & Coho). We are utilizing a combination of traditional knowledge, eDNA, minnow trapping, and on-the-ground observations to collect the required information for submitting nominations to update the Anadromous Waters Catalog to protect critical habitat for these salmon species.

TCC and ADF&G staff (Brian McKenna, Nate Cathcart) conducted fishery surveys for spawning adults and rearing juvenile Chinook and Coho salmon in the Draanjik basin in August 2021. A combination of traditional knowledge and prior eDNA sampling were used as a guide to determine which tributary streams to survey. Four tributaries to the Draanjik were surveyed; Drifting Snow Creek, Tetthajik Creek, Kevinjik Creek, and Grayling Fork Black River. Habitat characteristics in



Drifting Snow Creek and upper Grayling Fork Black River looked like potential habitat for spawning Chinook salmon. However, no adult spawners were observed during the aerial surveys. One adult Chinook salmon was observed in the upper Tetthajik Creek, and, based on previous observations in 2015 – 2017 it is suspected that there is a small spawning population that utilizes this creek annually. Juvenile Chinook salmon were observed utilizing rearing habitats in Drifting Snow Creek and Tetthajik Creek, while juvenile Coho salmon were found only in one specific, unique location, *Nee'inlii*, located in the Kevinjik Creek drainage. These observations will result in nominations to the Anadromous Waters Catalog to help protect these important locations.



Picture on left: *Nee'inlii*; traditional place name for a unique spawning and rearing location for fall chum and Coho salmon in the Kevinjik Creek drainage. Picture on right: juvenile Coho salmon sampled at *Nee'inlii*, August 2021.

Several other resident and anadromous fishes were also observed during the juvenile fish surveys. Arctic grayling were very abundant in all locations, as were sculpin. A small number of Burbot were also observed in all four tributaries. One adult round whitefish was observed in Drifting Snow Creek, and several juvenile round whitefish were observed in Kevinjik Creek and Grayling Fork Black River. Northern Pike were also observed in Kevinjik Creek and Grayling Fork Black River. Arctic lamprey ammocoetes and juveniles were observed in Tetthajik and Kevinjik Creeks and in Grayling Fork Black River.



Clockwise from top left: round whitefish on top of arctic grayling, burbot, northern pike, juvenile fish habitat (beaver dam), slimy sculpin, and arctic lamprey.

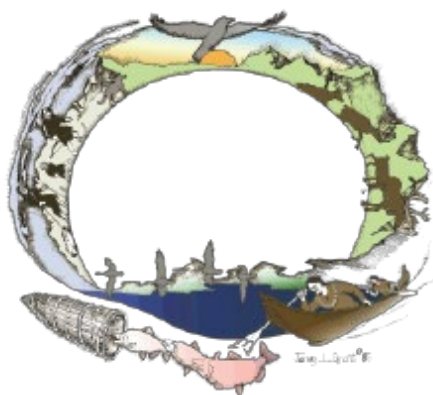
Fieldwork for this project is nearly complete. TCC staff will be conducting one additional survey in the Kevinjik Creek drainage in mid-October 2021 to identify and locate adult spawning Coho salmon. Traditional knowledge, eDNA results, and juvenile fish surveys all support the claim that Coho salmon are spawning in the Kevinjik Creek system. The Coho salmon spawning area (Nèhdlij Ní'inlii) has not yet been added to the Anadromous Waters Catalog. If successful in October, a nomination will be submitted to add this location to the catalog to protect this important habitat.

Henshaw Creek Weir:

The Henshaw Creek Weir project was operational between June 28 and July 29, 2021. Counting was scheduled to continue through early August. However, a flash flood forced the crew to evacuate the site on July 29, and the weir has been under water since then. TCC staff are monitoring the water level in the creek, and will return to the site to remove the weir before freeze up. Salmon escapement numbers at the weir were as dismal as those reported throughout the Yukon drainage. Chinook salmon escapement was 130, and was the lowest recorded escapement in the history of the project. Chum salmon escapement was a miniscule 3,729, which is also the lowest escapement on record, and a mere 2.6% of the historical average ($n = 145,595$).



Clockwise from top left: TCC fisheries technicians Spencer Jacobs, Nick Jacuk, and Robert Rowe and ANSEP student intern Archer Bowles, Henshaw crew building weir, flash flood submerged weir and debris destroyed sampling cage, completed weir build June 2021.



Tanana Chiefs Conference

The Tanana Chiefs Conference's Fisheries Program strives to continually build educational capacity and expertise in fisheries science and management throughout the TCC region, including the Yukon and Kuskokwim River drainages. Our goals are to utilize western science and traditional knowledge to enable sustainable fisheries, and to advocate for more comprehensive and inclusive resource management. We endeavor to accomplish these goals by collaborating with other Tribal organizations, NGO's, Academia, and State and Federal agencies to better manage, protect, and preserve our fisheries resources.

For more information, please visit our website, <https://www.tananachiefs.org/services/fish-wildlife/>. We can also be reached via telephone at 907-452-8251.

Brian McKenna – Fisheries Biologist, Partners for Fisheries Monitoring Program



Arctic National Wildlife Refuge U.S. Fish and Wildlife Service Summary of Activities



**Prepared for Eastern Interior and North Slope
Regional Advisory Councils - October 2021**

**Arctic National
Wildlife Refuge
907-456-0250,
800-362-4546**

arctic_refuges@fws.gov, <http://arctic.fws.gov>

Refuge Staffing Changes:

- In January, 2021, Refuge Ranger Will Wiese accepted an opportunity to move west to serve the residents and habitats of the Selawik River area by taking on the role as Assistant Manager at Selawik National Wildlife Refuge. The sole staffer who was stationed on Barter Island, Will departed Kaktovik in February, 2021. The efforts and approaches he pursued while at Arctic remain valued, and in his absence, managers look forward to exploring ways resident perspectives can remain central to management efforts.

Oil and Gas Leasing Programs:

- The new administration issued an Executive Order that put a pause on any further work on the Arctic Coastal Plain Oil and Gas program.
- Under direction of the administration and the Department of Interior, the BLM has initiated a Supplemental EIS for the Coastal Plain. Public Scoping is underway with an end date of October 4, 2021.

Biological Monitoring and Research

- Tundra Nesting Birds at the Canning River Delta
The Canning River Delta study site in Arctic Refuge was established in the late 1970s and has since become the primary tundra nesting bird research station for the refuge. Work at this location is a collaboration between numerous partners, including Arctic National Wildlife Refuge, FWS External Affairs, FWS Migratory Birds, Manomet, Inc., the Wildlife Conservation Society, University of Alaska Fairbanks, the U.S. Geological Survey, Alaska Department of Fish and Game, Washington Department of Fish and Wildlife, and Oregon Department of Fish and Wildlife. Crews flew into the camp on June 6 and the camp was demobilized on July 25. In general, there appeared to be fewer birds nesting at the Canning River Delta this summer compared to prior years.



Figure 1. 2021 Canning River Delta field camp.



Figure 2. Researcher aging and measuring eggs at a cackling goose nest at the Canning River Delta study site.

This year marked yet another step forward in our effort to implement a more multidisciplinary approach to research projects at the site which includes collection of data on wildlife and their habitats (for example see our recent collaborative publication on standardizing herbivory monitoring <https://cdnsiencepub.com/doi/10.1139>). This work is important to scientifically inform management decisions for the Refuge and to better understand how climate change is impacting the species and habitats that occur there.

In addition to the core bird monitoring work we have conducted in the past, this year we continued efforts on a variety of collaborative avian projects. We are tracking the movements of American golden plovers and pectoral sandpipers as they migrate across the Americas. The transmitters we use are tiny, weighing < 4 g (for reference a penny weighs 2.5 g). These devices collect location data every day and then send it to orbiting satellites. An interesting note from this summers results is that 2 of the pectoral sandpipers whose nests were depredated at the Canning Delta, appear to have left the Canning a few days after their nests failed and fly up to 1400 km east into Canada and renest in the Canadian Arctic.



Figure 3. Researchers attaching a transmitter to pectoral sandpiper at the Canning River Delta study site.



Figure 4. 2021 migration routes of pectoral sandpipers captured on nests at the Canning Delta camp and tagged with 4 g GPS transmitters.

This summer we expanded our collaborative work tracking the behavior and migration of cackling geese by tagging birds at both the Canning and near Prudhoe Bay. Cackling geese have increased 10 fold at our study site over the last several decades and are now the most common waterbird we encounter. Our work seeks to track the post-breeding and wintering movements of cackling geese by attaching 25 g neck collars (about the weight of a single aa battery) that collect a GPS location every 15 minutes then transmits the data via cell towers when the birds enter areas of cell coverage in Canada and the lower 48. In prior years, all the birds that have reported data spent at least some of the winter in Albuquerque, NM.



Figure 5. Researcher holding female Cackling goose captured from nest at the Canning River Delta study site and fitted with a solar-powered GPS transmitter neck collar.

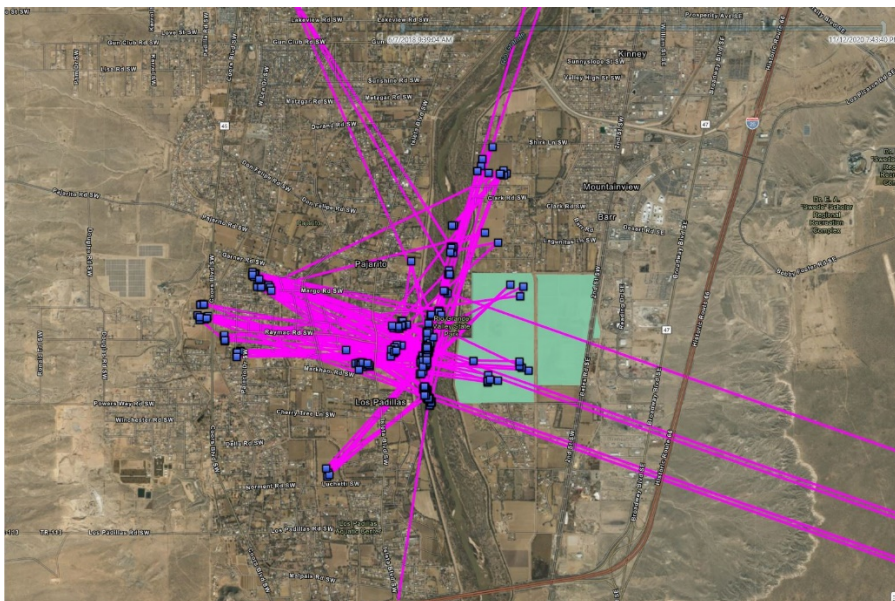


Figure 6. Locations in December-February in Albuquerque, NM of cackling geese fitted with gps transmitters the previous summer at the Canning River Delta in Arctic NWR. The top figure shows birds use of Vale de Oro NWR (green fill).

We also continued work on a project to track the movements of red-throated loons that breed on the Refuge to determine how they use the coastal lagoons (see prior years report: <https://pubs.er.usgs.gov/publication/ofr20211029>). We also conducted scoping efforts to help finalize protocols for a collaborative aerial loon survey that will begin in 2022. We are also continued efforts to use novel ways to reduce costs and minimize our disturbance to the tundra environment, including the use of small cameras and temperature logger at nests to monitor behavior and predation.



Figure 7. Red phalarope chicks in nest bowl with temperature logger sensor that measures incubation behavior and provides cues we use to determine nest success or failure.

- Small mammals at the Canning River Delta

Small mammal species such as lemmings and voles, typically undergo dramatic multi-year population cycles, with some years of high population peaks, followed by years of severe population crashes. These extreme fluctuations can cause cascading effects in other wildlife species in arctic food webs. For example, peak lemming population years have been linked to increased breeding success of tundra nesting birds. In these years, the huge abundance of lemmings on the tundra causes predators of birds and their nests, such as arctic fox, to preferentially consume lemmings, thereby shielding tundra nesting birds from predation pressure. However, this relationship is unconfirmed for most of the Alaskan North Slope. To address this, this summer we initiated pilot research to investigate the relationship between tundra nesting bird nest success and small mammal populations, and document annual small mammal population dynamics on the coastal plain of Arctic Refuge.

In June and July 2021, at the Canning River Delta, we used grids of live-traps to capture small mammals for sampling and tagging. While small mammal abundance is typically determined by mark-recapture methods, where marked animals are repeatedly recaptured over a set period of time, we instead tested novel recapture methods including the use of game cameras and RFID (radio frequency identification) readers to observe small mammals marked with an RFID tag under the skin. Research accomplishments of the 2021 field season included the first successful small mammal captures at the Canning River Delta since the early 2000's and demonstrating the effective use of our novel remote monitoring equipment in the harsh weather conditions of the North Slope. The small mammal work will continue in 2022 at the Canning River Delta and possibly other regions of the coastal plain of Arctic Refuge.



Figure 8. Researchers at the Canning River Delta processing a live-captured small mammal.



Figure 9. A collared lemming captured at the Canning River Delta for sampling and tagging.

- Foxes at the Canning River Delta

Due to the effectiveness of foxes as predators, a large driver of bird productivity on the Arctic Coastal Plain is fox abundance. In addition, arctic foxes are likely to be negatively impacted by climate change with increased threats from habitat loss, competition with red foxes, and changing prey abundance. In 2021, arctic and red fox research at the CRD involved collecting scat, saliva, and hair samples at known den sites and depredated nests, with a focus on collecting samples most likely to contain viable DNA for determining individuals and genetic relatedness. We collected more than 50 samples this summer. In cooperation with the U.S. Geological Survey, we have developed genetic analysis methods to help investigate fox predation on ground-nesting birds on the Arctic Coastal Plain. Samples collected at the Canning River Delta in 2017-2019 were recently analyzed by colleagues at the U.S. Geological Survey Molecular Genetics Laboratory, who are currently finalizing the report for this work.



Figure 10. Adult arctic fox with a greater white-fronted goose.



Figure 11. Arctic fox kits at the Canning River Delta.

- Whimbrel monitoring at the Katakturuk River

The Katakturuk River study site in Arctic Refuge was used in 2019 as a base for shorebird density surveys. During that work we located several whimbrel nests and returned this summer to monitor the survival and ecology of the birds and to place tracking devices on some of the birds. Work at this location is a collaboration between Arctic National Wildlife Refuge, FWS Migratory Birds, and Manomet, Inc. Because these shorebirds are bigger than those we have tagged in the past at the Canning Delta, we are able to use larger transmitters that weigh about 5-10 g. Our partner put together a great synopsis of the work (<https://www.manomet.org/publication/whimbrels-in-the-arctic/>).



Figure 12. Migration routes of whimbrel captured on nests at the Katakturuk River study site in 2021 and tagged with solar-powered transmitters.

- Gray-headed Chickadee study

Gray-headed chickadee may be one of the most imperiled birds that breed in northern Alaska, and Arctic Refuge appears to be one of the only areas in North America the species has regularly been spotted in the last decade (see the recent publication by our partners: <https://meridian.allenpress.com/jfwm/article/11/2/654/436145>). This summer we collected samples for a collaborative study with FWS Migratory Birds, the U.S. Geological Survey, and the Alaska Department of Fish and Game to determine if hybridization between the gray-headed chickadee and a recent colonizer, the boreal chickadee, may help explain the decline. Staff conducted two surveys for boreal chickadee along the Coleen and Sheenjek Rivers. The first survey took place the first week of August, when biologists used mist-nets to capture and obtain DNA samples from boreal chickadee. In early September, two staff floated the Sheenjek River to conduct a second part of this research.



Figure 13. Boreal chickadee captured using a mist-net in Arctic NWR in August 2021.

- Ongoing monitoring of Porcupine Caribou Herd

Partners (ADFG, Yukon Government, USFWS, and USGS) have continued monitoring the Porcupine Caribou Herd movement, habitat use, and population trends through radio-telemetry and aerial surveys.

- Research Publication – Porcupine Caribou Herd

Biologists at USGS, USFWS, and the Department of Environment (Yukon Government) carried out an analysis of how spring vegetation phenology affects the spatial ecology of the Porcupine Caribou Herd (PCH). In years with early spring green-up, the herd primarily used habitat in Alaska. In years with late green-up, they spent more time in the Yukon. Future climate conditions and green-up patterns indicate a shift in PCH calving and post-calving distributions further west into Alaska. (Severson et al. 2021. *Spring phenology drives range shifts in a migratory Arctic ungulate with key implications for the future*. Global Change Biology. DOI: 10.1111/gcb.15682).

- Diet Research Porcupine Caribou Herd

Biologists at Arctic Refuge carried out field activities on the North Slope and Coastal Plain of the Arctic Refuge to support a collaborative research effort by USGS, FWS, and the Yukon investigating the diet of the Porcupine Caribou Herd (PCH) during the calving, post-calving, and insect-relief periods. We collected over 475 fecal samples from over 90 locations across the PCH's seasonal range. These samples were sent to a lab for DNA meta-barcoding to decipher diet attributes.



Figure 14. Porcupine Caribou on the Arctic Coastal Plain

- Sheep Surveys

No Dall sheep surveys were conducted within the Refuge in 2021.

- Moose Research Project

Arctic Refuge has initiated a moose research project in cooperation with the National Park Service, the Bureau of Land Management, and the University of Alaska to gain a better understanding of migratory patterns, seasonal distribution, spatial ecology, and population of moose inhabiting the Brooks Range and Coastal Plain of the Refuge and adjacent National Park Service (NPS) and Bureau of Land Management (BLM) areas and to investigate the environmental factors driving these patterns so we can design viable management and conservation strategies at a landscape scale. Laboratory analyses of diet have already begun. Capture and collaring of Refuge moose will commence in April 2021.

Public Use Management

- Polar Bear viewing – For a second year, Special Use Permits for Polar Bear Viewing were not issued and no commercial guiding was conducted in 2021. The efforts by Refuge staff and Qaaktuġvigmiut (the people of Kaktovik) to address the complex issues surrounding public demand for tourism to Kaktovik is an example of the Refuge’s good faith effort to meaningfully participate in shared decisions about any activity that may impact residents. The Refuge staff are hopeful that, with intentional effort and close collaboration, we will mutually develop a path and process to best meet these responsibilities. Staff also continue to coordinate with the Marine Mammals Management Office of the USFWS to help support the community in addressing human-bear issues that occur when bears return to the region each fall.
- Hunt Guide Use Area Offerings – In August of 2021, eight of the Arctic National Wildlife Refuge Guide Use Areas (GUA) were opened for guiding proposals from all State of Alaska registered guides. All of the GUA offered are currently filled through 2023. The application period for these areas ends on April 11, 2022.
- Historic Access Study - Arctic Refuge contracted with a 3rd Party vendor to conduct a Historic Access Study to determine historic access methods and means for subsistence purposes, with a focus on off-road vehicles (ORVs) for the villages of Kaktovik, Arctic Village, Venetie, Ft. Yukon, Chalkyitsik, and Coldfoot. A final report will be completed by a December 23rd deadline.
- Arctic Village Sheep Management Area (AVSMA) – Arctic Refuge clarified new regulations for the new state hunt opportunity recently passed by the State Board of Game that would occur within the boundary of the federally designated AVSMA. The area was labeled as “Eastern Brooks Range Management Area” and it directly overlays the Federal AVSMA. There was some early confusion as to whether the AVSMA area was open to non-qualified users during both the Youth Hunt in early August and during the winter hunt beginning in October. The area is *not open to either hunt* on Federal lands within the special management area (over 99% of the area). Refuge staff developed a communication poster (Figure 3) and posted it in Arctic Village, Coldfoot, and Happy Valley as well as online to better inform the public.



U.S. Fish & Wildlife Service

Attention Sheep Hunters in Game Management Unit 25A

Arctic National Wildlife Refuge

If you are planning to hunt sheep in Game Management Unit 25A, be advised that the area defined as the Eastern Brooks Range Management Area (EBRMA) in the Alaska State regulations is closed to all non-federally-qualified users, including closed for the youth hunt and the winter hunt (RS595).

The entire Arctic Village Sheep Management Area (AVSMA) (known as the EBRMA in State regulations) is closed to sheep hunting except by federally qualified residents of Arctic Village, Venetie, Fort Yukon, Kaktovik and Chalkyitsik. Qualified hunters must have Federal registration permit FS2502 to hunt sheep in the AVSMA.

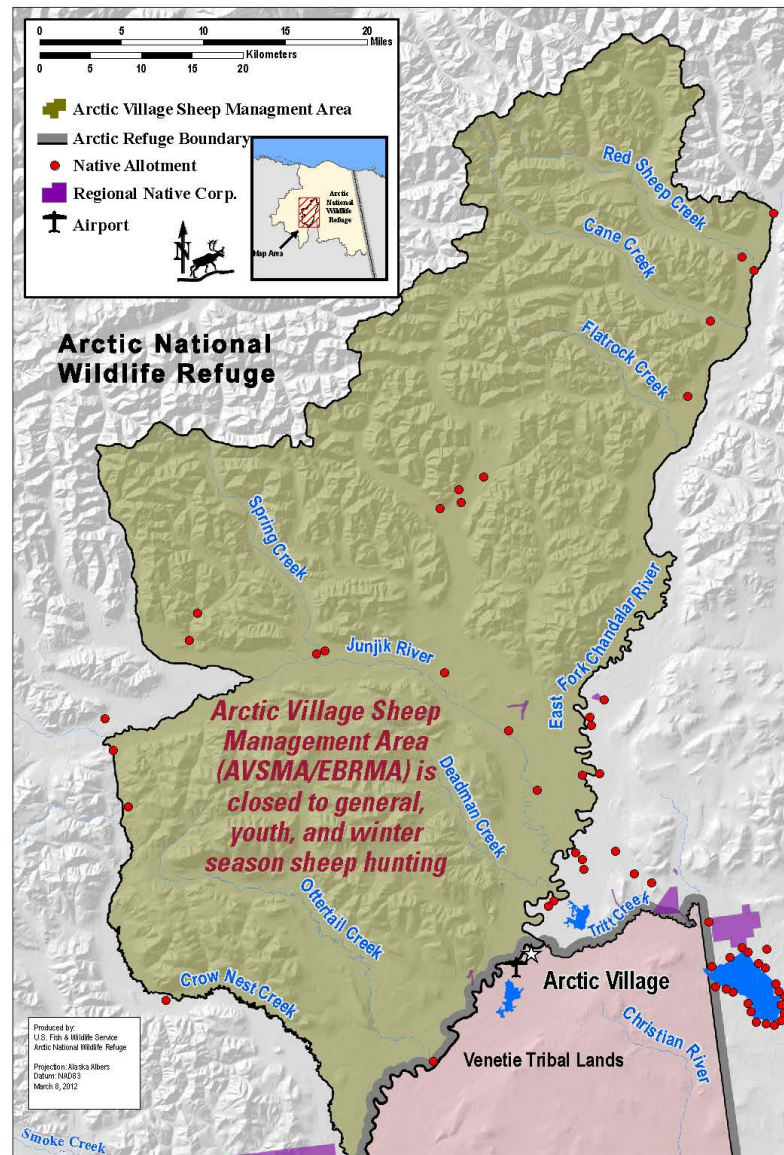
Regulation for Unit 25A – Arctic Village Sheep Management Area: 2 rams by Federal registration permit only, August 10 to April 30. Federal public lands within the AVSMA are closed to the taking of sheep except by rural Alaska residents of Arctic Village, Venetie, Fort Yukon, Kaktovik, and Chalkyitsik hunting under Federal harvest of wildlife regulations.

General hunting of any game species other than sheep is allowed in the AVSMA during hunting season.

The AVSMA was established in 1995 in response to concerns from local rural residents about conflicts with general hunters. The Alaska National Interest Lands Conservation Act (ANILCA) provides authority to protect subsistence uses in particular areas. The AVSMA protects subsistence sheep hunting opportunities and provides a mechanism for reporting harvests.

Boundary description – You can find the legal boundary description for the AVSMA/EBRMA in both the State and Federal regulations handbooks.

Please be respectful and do not enter private lands. The red dots on this map show their general locations.



Arctic National Wildlife Refuge
 907/456 0250 800/362 4546
 arctic_refuge@fws.gov http://arctic.fws.gov/
 facebook.com/arcticnationalwildliferefuge

Figure 15. Outreach poster for the Arctic Village Sheep Management Area

Public Outreach and Environmental Education

- Information about Wild and Scenic Rivers – In 2021, staff were invited to raise awareness about the seven Wild and Scenic Rivers managed by the USFWS in Alaska, and how they insure subsistence, cultural, fish, geology/hydrology, scenery, and other river values are preserved and enhanced to benefit people, as intended by Congress and the Wild and Scenic Rivers Act of 1968. ANILCA designated three wild and scenic rivers within Arctic Refuge: the Ivishak, Wind, and Sheenjek Wild and Scenic Rivers. Learn more at rivers.gov.
- Numerous environmental education outreach classes and activities were provided throughout the year using online communications with schools and various groups. The COVID-19 restrictions have changed the methods used for communications of this type, but there is still an interest and desire for the programs and presentations that staff are able to provide.

Resource Management

- Barrel Extraction – As part of a long-term and on-going effort by the Refuge, staff removed spent oil barrels from two sites on the coastal plain of Arctic Refuge in early September. Old barrels are a potential source of contamination and decrease wilderness character and visitor experience. Barrels were transported to Kavik via sling loads using a R44 helicopter. In the Camden Bay area, 21 barrels were extracted and 8 barrels were removed from the Canning River Delta.



Figure 16. Oil barrels that were removed in early September 2021 from the coastal plain of Arctic National Wildlife Refuge.

- Fuel Tank Removal – Refuge staff worked to remove two 4,000 gal fuel tanks from Barter Island that were no longer in use by the refuge. Staff worked with GSA to excess the property. With no official bids received, the tanks were released to proceed with disposition by sale or other disposal action. With no local interest in the tanks, their removal from the island became a priority. In early August, the tanks were barged to Prudhoe Bay where they were purchased by a local business owner.



Figure 17. One of two large fuel tanks removed from Barter Island in 2021

Yukon Flats National Wildlife Refuge – Annual Report (2021)

The Yukon Flats Basin is a world-renowned breeding ground for waterfowl. It also provides resources to over 1,200 people who live here. Yukon Flats National Wildlife Refuge (Refuge) was created under Alaska Native Interest Lands Conservation Act *aka* ANILCA of 1980 and established the following purposes:

- to conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to, canvasbacks and other migratory birds, Dall sheep, bears, moose, wolves, wolverines and other furbearers, caribou (including participation in coordinated ecological studies and management of the Porcupine and Fortymile caribou herds) and salmon;
- to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats;
- to provide, in a manner consistent with the purposes set forth in (1) and (2), the opportunity for continued subsistence uses by local residents; and
- to ensure, to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph (i), water quality and necessary water quantity within the refuge.



Figure 1 Aerial Picture of Yukon Flats area

The Refuge is the nation's third-largest national wildlife refuge, encompassing approximately 11.1 million-acres of land (8.63-million acres in federal ownership) in eastern, central Alaska. Extending 220 miles east-west along the Arctic Circle, the Refuge lies between the Brooks Range to the north and the limestone peaks of the White Mountains to the south. The Trans-Alaska Pipeline corridor runs along the western boundary while the eastern boundary extends to within 30-miles of the Canada border. The Yukon River bisects the refuge and contributes to the vast floodplain of lakes, ponds, and streams that dominate the landscape. The staff focus much of their efforts on monitoring the status of animals and habitat that are important from both a local and national perspective. Through a diverse program of biology, education, outreach, and enforcement, Refuge staff work with partners to conserve these important resources.

Below is a brief summary of staff activities and items of interest between October 2020 and September 2021:

- We provided extensive comments to the Bureau of Land Management regarding their update of the Central Yukon resource management plan, and to Alaska Department of Natural Resources regarding extraction of water by Hilcorp in support of stratigraphic well drilling on private lands near the refuge.
- By following strict protocol to avoid spread of COVID-19, we completed a hare pellet survey, sticknest survey, lesser scaup and scoter aerial survey, waterfowl brood survey, mallard banding

project, loon survey, lynx monitoring and a trail camera project. The snow, swan and Dall's sheep surveys were not completed.

- For the first time since 1959, biologists banded a young-of-the-year Blue-winged Teal.
- Limited water sampling was conducted at four remote lakes across the Yukon Flats Basin to obtain background information on algal toxins that might be present. No algal toxins were detected.
- Our partner Fairbanks Soil and Water Conservation District completed invasive plant surveys in several communities, and we searched sandbars from Fort Yukon to Circle.
- We continued our support of permafrost temperature monitoring and research.
- COVID-19 limited engagement with local residents. We didn't host an open house or science camp, but there were a few boat trips on the Yukon River, radio announcements on KZPA, and an outreach bulletin was mailed to Yukon Flats box holders along with multiple partners. The bulletin can be found at <https://uaf-iarc.org/yukon-flats-changes/>.
- We provided aviation fuel in Fort Yukon to support two search and rescue efforts in July.
- There were two incidents in Fort Yukon of theft and vandalism at our facilities, and the new bunkhouse in Fort Yukon should be finished this fall.
- Work continued with CATG:
 - Fence is being installed by CATG around the old BIA school building site in preparation for removal of ground contamination and any asbestos that may be in the old BIA buildings
 - CATG also brushed around the shed in Beaver and constructed a new outhouse and repaired the fence
 - CATG began the Eyes in the Bush project by documenting ice out of the Yukon River, migratory bird arrivals and green up and permafrost thaw monitoring. Planned for Fall 2021 is collection of soil microbes and tick samples with snow measurements planned for the winter.
 - CATG was unable to conduct the summer youth culture and science camp.
 - The hunter liaison effort was completed in Circle.
- We negotiated a new Annual Funding Agreement with CATG. One new project will be to assist Beaver, Birch Creek and Stevens Village with their efforts to issue federal subsistence hunt permits and assist hunters with reporting.
- Two old snowmachines, a old ATV and old pickup truck were donated to CATG.
- We're initiating a mandatory review of uses to determine compatibility with purposes of the refuge and the mission of the National Wildlife Refuge System and Section 810 of ANILCA. This effort will include opportunities for government-to-government consultations and public comment.
- A new project has begun with the Geographic Information Network of Alaska at UAF to collect various online maps into one Web site that will enable anyone to view landscape changes (wetlands, fire, water extent, etc).
- In partnership with others, we completed a workshop to explore fire management in a changing environment. (A report is forthcoming.)
- Despite extremely dry conditions in early and mid summer only five fires burned approximately 1,916 acres this year.
- Randy Mayo was selected by the USFWS-Alaska Regional Director as the 2021 Alaska Native Leader/Elder Conservation Hero for his efforts over the years.

For more information on the Yukon Flats National Wildlife Refuge go to [Home - Yukon Flats - U.S. Fish and Wildlife Service \(fws.gov\)\(www.fws.gov/refuge/yukon_flats/\)](https://www.fws.gov/refuge/yukon_flats/) or call 1-800-531-0676

Fall 2021 Update for Tetlin National Wildlife Refuge

August 2021



Photo credit:USFWS

Tetlin National Wildlife Refuge
PO Box 779, Tok, AK 99780



STAFF UPDATE

Tetlin NWR hired Travis David in May 2021 to be the environmental educator. Travis grew up in the Upper Tanana and this is his first job with USFWS. Travis is working with local communities to provide programs.

BIOLOGY PROJECTS

Moose Twinning Survey

For the first time since 2007, a twinning survey was conducted to identify the nutritional status of the cow moose on Tetlin National Wildlife Refuge. This information is important because it allows refuge biologists to monitor the moose population's proximity to the carrying capacity of the landscape, and therefore the health of the individual moose. Biologists flew for four days this spring and observed 31 cow moose with one or more calf. Of these cows, 6 had twins, resulting in a twinning rate of 19.4%.

Duck Banding

Efforts continue on Tetlin NWR to monitor the migration and harvest of waterfowl. Refuge staff are currently operating banding stations on multiple lakes, and are nearing 500 bands for the season.

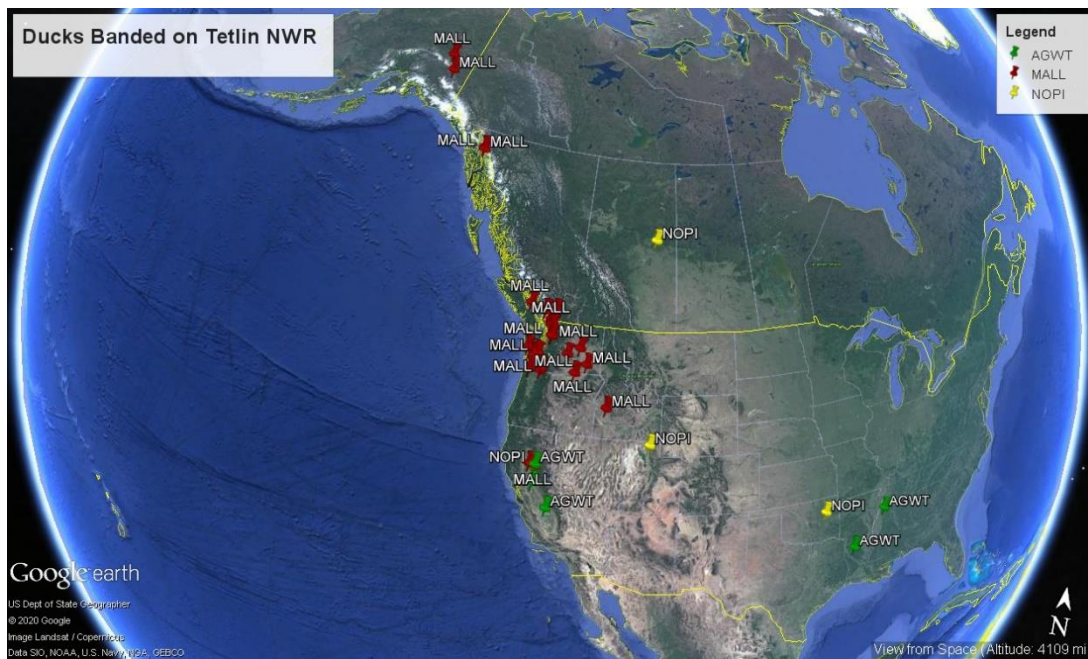


Figure 1. Harvest locations of ducks banded on Tetlin NWR. Red pins represent mallards, yellow pins represent northern pintails, and green pins represent American green-winged teal.

Northwest Boreal Lynx Project

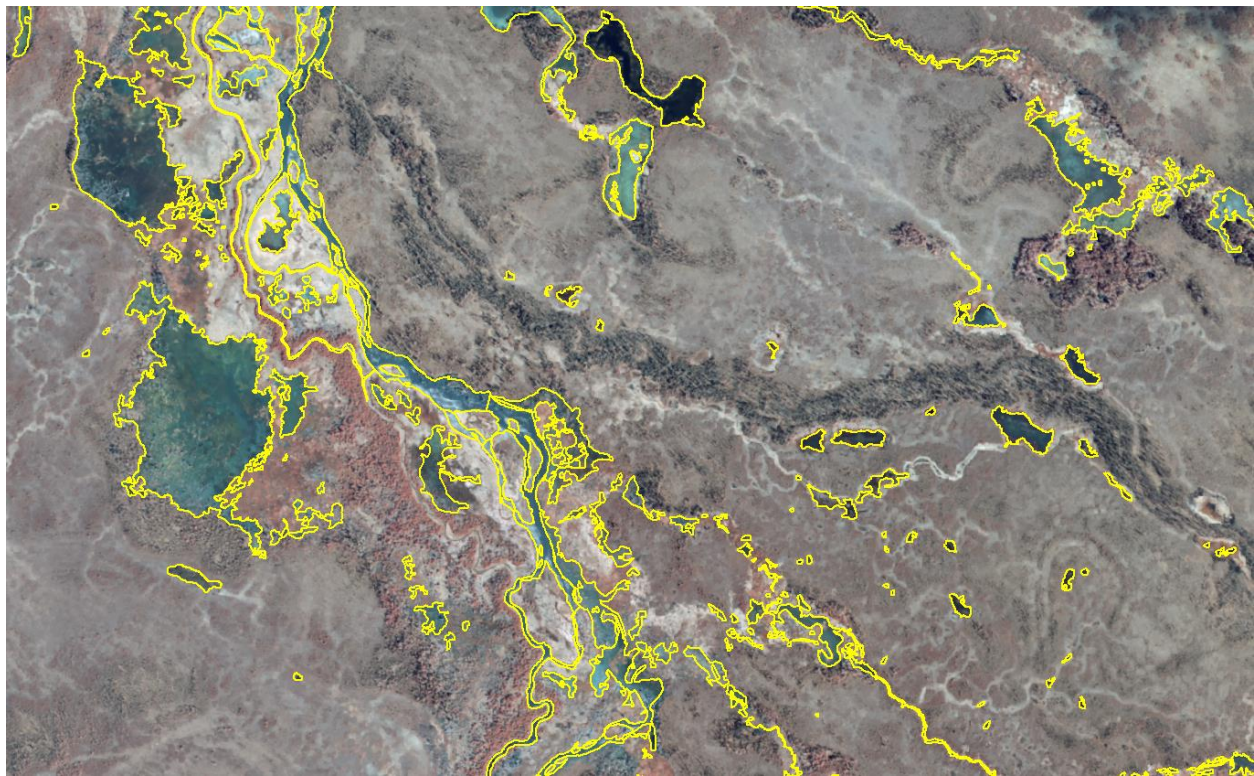
It was a slow year for the lynx project at Tetlin NWR and across the state. As we continue to move into a trough in the lynx population cycle, trapping efforts yield fewer and fewer lynx. This year, only one female lynx was captured and recollared at our study sight on Tetlin NWR. Other refuges caught between 0 and 5 lynx.

Table 1. A synopsis of collars deployed on Canada lynx (*Lynx canadensis*) captured on the Tetlin National Wildlife Refuge.

| Year | Collars Deployed | Alive | | Mortalities | Collars Replaced | Collars Offline |
|--------|------------------|-----------|------------|-------------|------------------|-----------------|
| | | On Refuge | Off Refuge | | | |
| 2015 | 6 | 0 | 0 | 4 | 0 | 2 |
| 2016 | 18 | 0 | 0 | 9 | 2 | 7 |
| 2017 | 20 | 1 | 0 | 9 | 3 | 7 |
| 2018 | 20 | 2 | 0 | 6 | 8 | 4 |
| 2019 | 26 | 3 | 3 | 14 | 5 | 1 |
| 2020 | 9 | 1 | 0 | 6 | 2 | 0 |
| 2021 | 1 | 0 | 0 | 0 | 1 | 0 |
| Totals | 100 | 7 | 3 | 48 | 21 | 21 |

Wetland Digitizing

Biology staff has also been helping with a project at the regional office to delineate surface water on satellite imagery. The goal is to validate a model that will then be able to identify surface water by itself. The yellow outlines have been drawn by hand to ensure an accurate model.



FEDERAL SUBSISTENCE

Tetlin NWR intends to propose a limit of one caribou for the winter federal caribou season (FC1202). The moose hunt will reopen to a limit of one antlered bull from November 1-February 28 (FM1203) to qualified users. The Refuge office remains open to those seeking a permit.

VISITOR SERVICES

Visitation numbers remained low for the 2021 summer season due to the closed border with Canada. During this season, multiple maintenance projects improved visitor facilities along the Alaska Highway.

TNWR opened the doors to the visitor center near the Alaska border after being closed for the entire 2020 season. Staff greeted limited numbers of travelers. Park Ranger Marilynn Paul and Environmental



Educator Travis David held multiple birch basket making classes. Leslie Brown, from the Student Conservation Association, spent 12 weeks helping with every program at Tetlin NWR.

TNWR also helped operate a visitor center in Tok during the summer of 2021 in coordination with the Tok Chamber of Commerce and the Bureau of Land Management. Three seasonal park rangers greeted the public and helped provide information about public lands in the Eastern Interior. TNWR submitted a planning contract that will begin in October 2021 to update displays and improve the visitor experience. NPS, BLM, USFWS, and the Tok Chamber of Commerce hope to continue to work together to provide these services to the public.



Denali National Park and Preserve Wildlife Updates August 2021

Bear Monitoring – Two radio collars released in June and will be retrieved during field work schedule for September. Four radio collars remain. No field work is occurring except occasional radio tracking as part of other projects. Data analysis continues. Remaining collars are due to release later this year and in 2022. A poster describing the project has been accepted and will be presented at the virtual International Bear Association conference in September 2021.

Bear DNA Citizen Science Study – No field worked done in 2021 due to lack of funding. Previously collected data continue to be analyzed.

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).

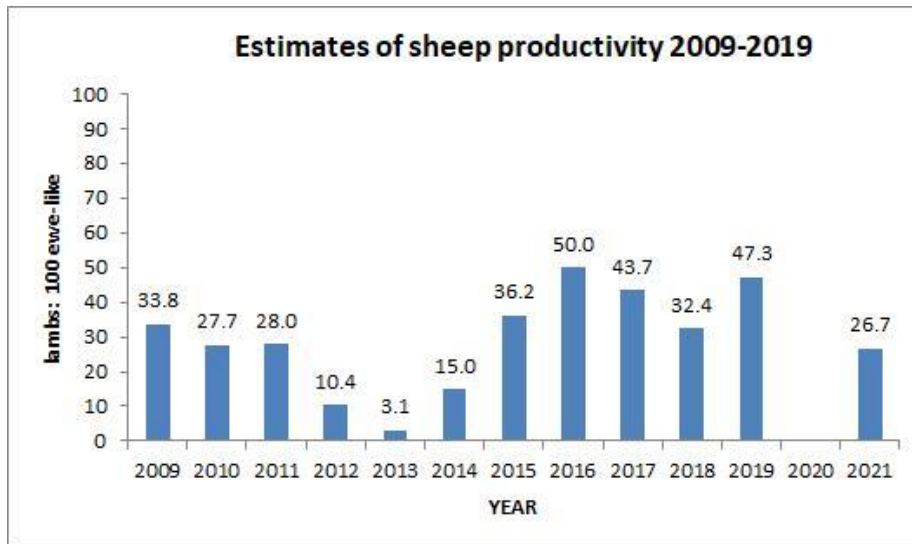
The Wildlife Management team has been busy with bear activity in the usual places in the Park – Savage river, Teklanika river, Sable, Highway, and Thorofare Passes and Eielson Visitors Center. These are areas of good bear habitat and many are places where concentrations of people also occur.

Private vehicle traffic on the Park road daily to Teklanika rest stop, increased bicycle traffic on the Park road, and abundant bear activity on the Park road have resulted in a high number of human-bear interactions, fortunately no serious incidents have occurred.

Moose Monitoring - Moose monitoring surveys are on hold indefinitely. Evaluation of protocol is ongoing. Moose rut will begin later this month. The annual closure from approximately mile 6.5 to 11.5 on the Park road will be implemented restricting visitors to hiking and photography on the road only.

Caribou Monitoring - Caribou monitoring field work (March capture and year-round radio tracking) was conducted in 2021. Annual reports of caribou monitoring are completed in March of each year for the previous year. The Fall 2020 Denali caribou numbers showed a decrease from 2019 of 3050 to 2460 in 2020 following a relatively low snow winter and low calf recruitment. Post calving surveys in 2021 showed locally variable calf ratios with an average of 22 calves per 100 cows. Fall composition surveys will occur in September and provide the basis for an updated population estimate this Fall.

Sheep Surveys - Ground based surveys were conducted in July. Assessing 4 sites (instead of the more typical 6) on Margaret Ridge, Mt. Wright, Cathedral, and Igloo, 87 sheep in 13 bands (groups of sheep) were observed. Estimated productivity, as measured as the ratio of lambs per 100 ewe-like sheep, is about 27. Heavy late season snowfalls have anecdotally impacted observations in the past (see 2013); a decrease is not surprising this year.



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 are beginning to become more active and move away from den sites, pup numbers will be determined.

Summary from the 2020 Wolf Project report:

In 2020, 14 wolf packs were monitored in the Denali study area and 37 aerial tracking flights were conducted to observe wolf pack locations, obtain pack counts, locate den sites and provide estimates of pups produced. Information from these flights also documented wolves feeding at kills 50 times, comprised of 12 caribou, 36 moose, 2 sheep and 1 unknown kill species. Reduced project funding (due to COVID-19 decreasing park revenue) meant fewer monitoring flights than usual in 2020.

In 2020, staff captured and collared 16 wolves during two capture efforts, including 2 recaptures of wolves collared in previous years to replace aging or failed collars. Wolves were monitored to estimate survival, pack size, den locations, and denning success. In November, 2 new packs were located and collared in the eastern area of the park (Cantwell Creek and Erratics). The number of wolves counted in the study area in spring 2020 was 68 wolves in 12 packs. There was evidence that 11 packs denned in the park in 2020, and 8 packs recruited an estimated total 34 pups to the population. 10 collared resident wolves died in 2020: 3 were legally harvested, 1 was illegally harvested, 3 were killed by wolves, 3 died of other natural causes. The fall 2020 population estimate was 95 wolves in 12 packs. See territory map for Spring 2021 estimates.

Due to Covid-19 changing the nature of park visitation, bus traffic, and wildlife sighting data collection protocols, an index of wolf viewing was not calculated in 2020.

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

<https://www.nps.gov/dena/learn/nature/wolves.htm>

Alpine Wildlife Project - No field work was conducted in 2020. Field work resumed in 2021 with a graduate student and 2 interns. The Denali Alpine Wildlife Crew conducted field research between May 31st and August 11th. Researchers hiked a total of 433 km in the backcountry, visited 109 sites, conducted 74 field surveys, and recorded 332 additional visual and acoustic

observations of key alpine wildlife- Arctic ground squirrels, collared pika, and hoary marmots- throughout Denali National Park and Preserve. Signs of alpine wildlife were present at 85% of surveyed sites, with Arctic ground squirrel signs at 49%, collared pika signs at 26%, and hoary marmot signs at 11% of surveyed sites.

Researchers also launched the Denali Alpine Wildlife citizen science project this year, creating the Denali Alpine Wildlife Instagram account (@denalialpinewildlife, 41 posts, 136 followers) in November 2020 and posting about 35 posters throughout Denali National Park and Preserve and Kantishna (i.e. Denali Visitor Center, Backcountry Information Desk, Eielson Visitor Center, Toklat rest stop, Denali Bus Depot, Camp Denali, Kantishna Roadhouse, and Denali Backcountry lodge, among others). To date, about 64 people have submitted observations in 2021, including a total of 74 submissions through iNaturalist (53 Arctic ground squirrel, 7 collared pika, 8 hoary marmots, and 6 Dall sheep) and 11 submissions through email (denalialpinewildlife@gmail.com).

With approximately 2 weeks remaining in the field season, reported numbers are expected to change.

Avian Projects - Some avian projects resumed or started in 2021.

- 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.
- 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 indicate an influx of woodpecker species, nuthatches, and brown creepers. This is very likely due to the spread of spruce bark beetles.
- A nest predation study was conducted by a crew from USGS. Camera traps and site visits were utilized to detect nest predation rates and document nest predation events in a wide variety of avian species. Preliminary results are expected to be presented in September.

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

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



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WRANGELL-ST. ELIAS NATIONAL PARK AND PRESERVE SUBSISTENCE AND ANTHROPOLOGY REPORT

Fall 2021

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Federal Subsistence Hunting Permits

Federal subsistence permits for hunts within Wrangell-St. Elias are issued by park staff in Chitina, Copper Center, McCarthy/Kennecott, and Slana along with staff from Tetlin National Wildlife Refuge in Tok. As of August 15, 2022, 91 federal registration permits had been issued for goat, moose, and sheep hunts in Unit 11 and for sheep and caribou hunts taking place primarily in Wrangell-St. Elias portion of Unit 12. See Table 1 for a summary of the permits issued for these hunts. Note that it is early in the year, and that additional permits will be issued before the close of the hunting seasons. Updated permit numbers for Units 11 and 12 will be provided verbally during the Regional Advisory Council and Subsistence Resource Commission meetings, and harvest information will be available during the spring 2021 meetings. The table does not include Unit 13 moose and caribou permits issued at the Slana Ranger Station, and joint state/federal permits (RM291) issued by Wrangell-St. Elias staff for the moose hunt for portions of Units 11 and 12 in the northern part of the park. Permit and harvest numbers for the RM291 hunt area through 2020 are shown in Table 2. Numbers for the 2021 hunt will be available at the spring meetings.

Chisana caribou herd hunt: The Chisana caribou herd hunt takes place in Unit 12 east of the Nabesna River and Glacier and south of the Winter Trail. Consistent with the management plan for the herd, the 2021 harvest quota was set at 7 bull caribou. As of August 15, a total of 4 permits had been issued.

South Unit 11 winter moose hunt: A winter moose hunt in the southern portion of Unit 11 was established in 2014. The season is November 20 to January 20. The quota for the 2021-22 season will be announced in early November.

Table 1. Federal Subsistence Registration Permits in Wrangell-St. Elias NPP, 2011-2021

Unit 11 Goat (FG1101)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 53 | 42 | 30 | 31 | 29 | 22 | 26 | 30 | 27 | 27 | 9 |
| Individuals Hunting | 14 | 6 | 7 | 10 | 6 | 4 | 3 | 8 | 8 | 7 | |
| Animals Harvested | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| Success Rate (%) | 7.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 0.0 | |

Unit 11 Moose -- Fall Hunt, since 2012 remainder only (FM1106)**

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 217 | 189 | 146 | 123 | 128 | 138 | 132 | 144 | 107 | 156 | 48 |
| Individuals Hunting | 131 | 75 | 78 | 70 | 70 | 75 | 72 | 85 | 45 | 70 | |
| Animals Harvested | 27 | 9 | 12 | 10 | 13 | 16 | 13 | 12 | 10 | 15 | |
| Success Rate (%) | 20.6 | 12.0 | 15.4 | 14.3 | 18.6 | 21.3 | 18.1 | 14.1 | 22.2 | 21.4 | |

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

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | - | - | - | 32 | 17 | 20 | 14 | 11 | 8 | 8 | 1 |
| Individuals Hunting | - | - | - | 3 | 3 | 4 | 4 | 2 | 2 | 3 | - |
| Animals Harvested | - | - | - | 0 | 0 | 1 | 0 | 0 | 0 | 1 | - |
| Success Rate (%) | - | - | - | 0.0 | 0.0 | 25.0 | 0.0 | 0.0 | 0.0 | 33.3 | - |

Unit 11 Elder Sheep (FS1104)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 23 | 32 | 20 | 25 | 25 | 32 | 34 | 38 | 34 | 38 | 19 |
| Individuals Hunting | 10 | 11 | 5 | 10 | 8 | 12 | 13 | 18 | 14 | 14 | |
| Animals Harvested | 0 | 1 | 0 | 1 | 3 | 3 | 4 | 1 | 1 | 1 | |
| Success Rate (%) | 0.0 | 9.1 | 0.0 | 10.0 | 37.5 | 25.0 | 30.8 | 5.6 | 7.1 | 7.1 | |

Unit 11 Elder/Junior Sheep (FS1103)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 2 | 1 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 0 |
| Individuals Hunting | 1 | 0 | | | | 1 | 2 | 0 | | 0 | |
| Animals Harvested | 0 | 0 | | | | 0 | 0 | 0 | | | |
| Success Rate (%) | 0.0 | - | | | | 0.0 | 0.0 | - | | | |

Unit 12 Caribou -- Chisana (FC1205)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | - | 9 | 9 | 11 | 11 | 8 | 8 | 6 | 4 | 7 | 4 |
| Individuals Hunting | - | 8 | 7 | 8 | 7 | 8 | 3 | 3 | 3 | 4 | - |
| Animals Harvested | - | 2 | 3 | 2 | 0 | 1 | 0 | 2 | 1 | 3 | - |
| Success Rate (%) | - | 25.0 | 42.9 | 25.0 | -- | 12.5 | 0.0 | 66.7 | 33.3 | 75.0 | - |

Table 1. Federal Subsistence Registration Permits in Wrangell-St. Elias NPP, 2011-2021 (cont.)

Unit 12 Elder Sheep (FS1201)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|----------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 9 | 13 | 9 | 9 | 7 | 11 | 12 | 14 | 14 | 12 | 10 |
| Individuals Hunting | 3 | 3 | 3 | 5 | 3 | 6 | 4 | 8 | 6 | 4 | |
| Animals Harvested | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | |
| Success Rate (%) | 0.0 | 0.0 | 0.0 | 20.0 | 0.0 | 16.7 | 25.0 | 0.0 | 0.0 | 25.0 | |

Unit 12 Elder/Junior Sheep (FS1204)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|----------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Individuals Hunting | 1 | 0 | | | | | | | | | |
| Animals Harvested | 0 | 0 | | | | | | | | | |
| Success Rate (%) | - | - | | | | | | | | | |

Source: Federal Subsistence Permit Database.

* 2021 data as of 8/15/2021.

** From 2012 forward, the federal Unit 11 moose permit is for Unit 11 remainder only.

Notes: 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), 2012-2020

All Hunters

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------------------|------|------|------|------|------|------|------|------|------|
| Permits Issued | 253 | 246 | 296 | 250 | 277 | 244 | 250 | 277 | 316 |
| Individuals Hunting | 164 | 151 | 191 | 142 | 179 | 145 | 155 | 159 | 180 |
| Total Animals Harvested | 23 | 19 | 20 | 20 | 23 | 19 | 23 | 21 | 26 |
| <i>Unit 11 Harvest</i> | 16 | 10 | 11 | 9 | 17 | 15 | 17 | 14 | 10 |
| <i>Unit 12 Harvest</i> | 7 | 9 | 9 | 11 | 6 | 4 | 6 | 7 | 14 |
| Success Rate (%) | 14.0 | 12.6 | 10.5 | 14.1 | 12.8 | 13.1 | 14.8 | 13.2 | 14.4 |

Federally Qualified Subsistence Users

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|----------------------------|------|------|------|------|------|------|------|------|------|
| Permits Issued | 158 | 135 | 154 | 168 | 176 | 155 | 171 | 172 | 173 |
| Individuals Hunting | 94 | 74 | 92 | 89 | 106 | 88 | 108 | 103 | 106 |
| Animals Harvested | 19 | 15 | 15 | 14 | 18 | 15 | 19 | 21 | 15 |
| Success Rate (%) | 20.2 | 20.3 | 16.3 | 15.7 | 17.0 | 17.0 | 17.6 | 20.4 | 14.2 |

Source: Emails from ADF&G Tok and RC012 from 2018 Alaska Board of Game Central/Southwest Region Meeting.

Notes: (1) 2021 figures will be provided at the spring 2022 meeting.

(2) 2020 figures are as of 1/13/2021. Some hunters have not yet submitted harvest reports.

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

(4) 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 Access Projects:

Work is underway on several ethnographic and subsistence projects. All projects are being supervised by the Wrangell-St. Elias cultural anthropologist, with much of the work being carried out either by other park staff or by various project partners through cooperative agreements.

An Ethnohistory of the Chisana River Basin: A manuscript on the ethnohistory of the Chisana River Basin was drafted a decade ago, but never finalized for publication. In this project, park staff revised the manuscript for publication, with the assistance of the original author from Yukon College (now Yukon University) in Whitehorse, Yukon Territory. In addition to providing a view of the Chisana gold rush from the lens of Alaska Native involvement, the report is important for documenting traditional uses of an area that is the borderland between the Upper Tanana and Upper Ahtna Athabascans. This project is now complete. An electronic version can be downloaded from the park website at the following address: <https://www.nps.gov/wrst/learn/historyculture/an-ethnohistory-of-the-chisana-river-basin.htm>.

Ahtna Ethnographic Overview and Assessment (EOA): This project will produce a report documenting Ahtna Athabaskan connections to Wrangell-St. Elias. An EOA is a baseline cultural anthropological study that aims to document traditional associations between distinct cultural communities and landscapes, places or resources. This EOA will consist of 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. This project is being carried out through a cooperative agreement with the Ahtna Intertribal Resource Commission. It is scheduled to be completed in mid-2022.

Documenting Traditional Ecological Knowledge about Historic Dynamics of Caribou Herds Associated with Wrangell-St. Elias: The goals of this project are to conduct 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 as to conduct new traditional knowledge interviews about caribou with knowledgeable long-term residents. Topics to be covered in the traditional knowledge interviews may 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 completed through a cooperative agreement with the Ahtna Intertribal Resource Commission.

Local Knowledge of Winter Environmental Conditions and Their Impacts on Subsistence Access: The goals of this project are to document local knowledge of changing environmental conditions, and to evaluate implications for winter subsistence access. This will be accomplished by interviewing trappers and possibly other Copper Basin residents who are out on the landscape during the winter about ambient 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 will be summarized in a report. This project is being completed through a cooperative agreement with the Ahtna Intertribal Resource Commission.

Quantify Changing Environmental Conditions to Inform Decisions about Allowed Means of Winter Access to Subsistence Resources: This project will quantify temporal and spatial patterns of river freeze-up, winter ice conditions, and break-up using remote sensing data and evaluate the implications of changing environmental conditions for temporal and spatial patterns of winter subsistence access in the park. The analysis will focus on the Copper and Chitina Rivers. In addition to peer-reviewed journal publications, 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). Work has begun on preparing the remote sensing data for analysis. In addition, four time-lapse cameras were installed in September 2020 to collect daily images of the Copper River during winter 2020-2021 that will help with the interpretation and validation of the satellite imagery. Three of the cameras are game cameras where images are stored locally, and one is a satellite-linked camera that uploads real-time images online through a partnership with the Fresh Eyes on Ice project at UAF. The satellite-linked camera will be in place for two more winters. The Copper River images from that project can be viewed at <http://fresheyesonice.org/realtime-data/river-ice-camera/#a1506>. A time-lapse video produced using images from the camera for the winter of 2020-21 can be viewed on the Fresh Eyes on Ice YouTube channel: <https://youtu.be/z71axPj0I-c>.

Prepared 8/16/2021

NATIONAL PARK SERVICE
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Fall 2021 Fisheries Report
Dave Sarafin, Fisheries Biologist

FISHERIES RESEARCH AND MONITORING PROJECTS

Tanada Creek Salmon Weir and Upper Yukon Burbot Assessments

The Wrangell-St. Elias National Park and Preserve (WRST) Fisheries Program planned on performing work on two projects funded through the Fisheries Resource Monitoring Program (FRMP); the Tanada Creek salmon weir and a Burbot population assessment in Ptarmigan Lake of the Upper Yukon River Drainage. However, neither project operated this year, in part, due to the limitations of risk mitigation guidelines associated with the Covid-19 pandemic. For the 2022 season, we again hope to operate both of these projects.

One particular challenge we had during both 2020 and 2021 was recruiting a full crew of local residents to work on the Tanada Creek weir project. This project is based out of Slana, which has typically provided a very limited pool of applicants interested in these seasonal positions. For the 2022 season we will again attempt to recruit locally, however may need to consider applicants from outside of the local community. Please help inform any potential applicants of these upcoming employment opportunities; local hire announcements should be posted on the park website this winter.



Photo of Tanada Creek weir site.

Tracing Mercury in Lake Trout Food Webs

As part of a collaborative project between NPS and the U.S. Geological Survey (USGS), the WRST Fisheries Program was planning to assist with field activities to support a study tracing Mercury (Hg) in Lake Trout food webs. However, this project was postponed due to Covid-19 safety guidelines. This study was prompted by findings of elevated Hg levels in muscle tissue of Lake Trout residing in certain lakes of Alaska parks. Three lakes in the park are intended to be studied, including Copper Lake, Tanada Lake, and one other lake (yet to be determined).

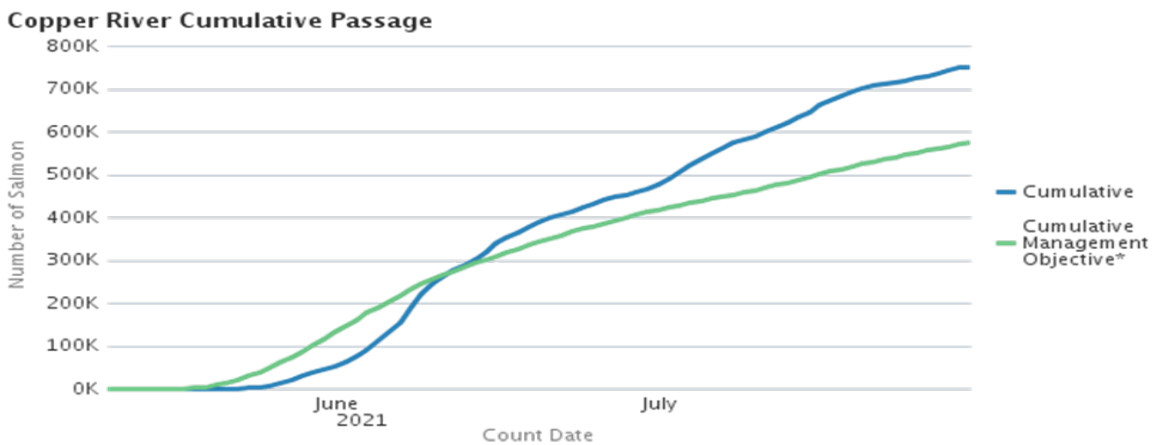
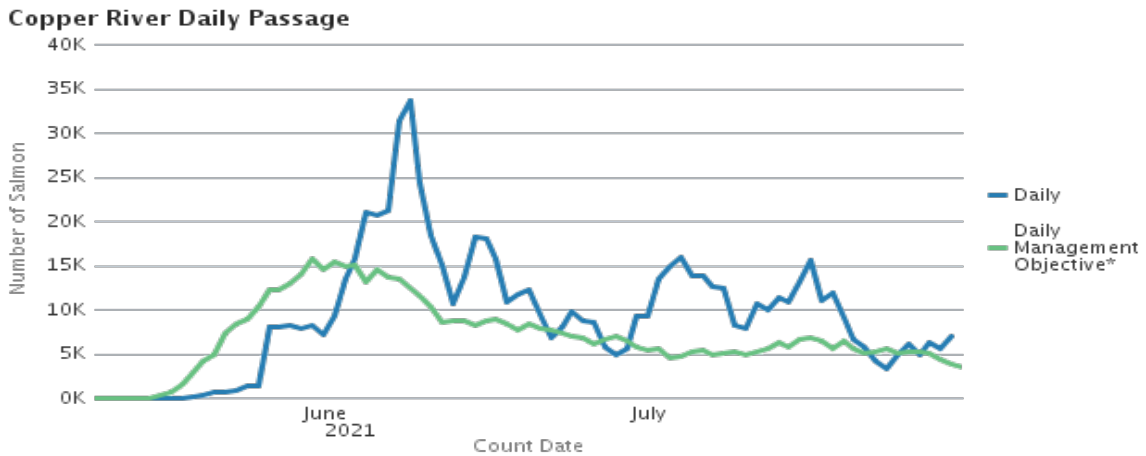
UPPER COPPER RIVER FISHERIES

2021 Copper River Salmon Run Strength and Management Actions

Management actions of the Alaska Department of Fish and Game (ADFG) limited early season commercial fishing opportunities in the Copper River District in response to low numbers of returning salmon at the start of the season. The season total commercial harvest for the Copper River District through August 24 is reported to include 400,121 Sockeye Salmon and 6,950 Chinook Salmon.

The ADFG sonar at Miles Lake (located just downstream of the Million Dollar Bridge in the Copper River) recorded salmon passage from May 12 through July 28; providing a season total estimate of 751,262 salmon migrating upstream. This estimate is 31% above the cumulative management objective of 575,297 salmon passing the sonar and exceeds the 2021 season total inriver goal of 605,057 by 146,205 salmon.

2021 Copper River Salmon Passage at Miles Lake Sonar.



*Management objectives are based on historical run-timing to achieve the in-river goal.

Source: http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareacopperriver.salmon_escapement

Inriver sonar salmon passage estimates provide the primary assessment of the Sockeye Salmon return to the Copper River. After a relatively slow start, sonar passage improved substantially by early June and the overall assessment of inriver Sockeye Salmon run strength exceeded ADFG management objectives for the season. These objectives are designed to provide harvest opportunities to both Federal subsistence and other State upriver users, as well as to achieve the sustainable escapement goal (SEG) for Sockeye Salmon.

As with Sockeye Salmon, fisheries managers also monitor assessments of the Chinook Salmon run strength; the primary inseason indicator are data from the Chinook Salmon inriver abundance project operated by the Native Village of Eyak. Additional insight is gained from the recent application of updated technology at the Miles Lake sonar site to provide species apportionment data. Assessments indicate a weak return, and both State and Federal managers believe that the Chinook Salmon SEG of 24,000 fish was likely not met. This will be the 4th season in the past 10 years that the goal was not met.

In response to the 2021 assessment of the weak Chinook Salmon return, the ADFG closed all State fisheries of the Upper Copper River drainage to the retention of Chinook Salmon by late-June; including the personal use fishery of the Chitina Subdistrict, the sport fisheries, and the subsistence fishery of the Glennallen Subdistrict. Concurrent with these closures, including that of the upper river subsistence fishery, the ADFG continued to authorize routine openings of the commercial and subsistence fisheries of the Copper River District since the Chinook Salmon entry to the Copper River is historically nearly complete by early July.

The Chinook Salmon closures did not affect those fishing under Federal subsistence regulations. Once enough information was available to indicate the likelihood of not meeting the SEG, harvest by Federal users through the remainder of the season was not expected to be high enough to have a significant impact on the sustainability of the stocks. No Federal Special Action was issued by the inseason manager to restrict the harvest of Chinook Salmon, or for any other purpose, in the fisheries of the Upper Copper River. Federal managers monitored run strength indices throughout the season to evaluate the need for appropriate fisheries management actions in the Federal waters of the Copper River Drainage.

Although Federal actions were not taken, WRST prepared and distributed an advisory announcement intended to inform subsistence users of the present concerns for Copper River Chinook Salmon. This announcement was sent to all Upper Copper River District Federal subsistence fishing permit holders with email addresses on record. In the announcement, WRST requested that users consider voluntarily releasing healthy Chinook Salmon that may be beyond their subsistence needs.

2021 Federal Subsistence Fishing Permits and Historical Harvests

The Federal subsistence salmon fisheries of the upper Copper River were open from May 15 through September 30. Through the Office of Subsistence Management (OSM) Federal subsistence permit website 191 Chitina Subdistrict permits, 355 Glennallen Subdistrict permits, and 1 Batzulnetas area permits were issued. Tables 1 through 4 (pages 4 to 7) show historical reported and expanded harvests for the Federal subsistence fisheries in each subdistrict through the 2020 season.

2021 Alaska Board of Fisheries Agenda Change Request: Copper River Salmon Management Plans

The ADFG follows two management plans for Copper River salmon fisheries; the Copper River District Salmon Management Plan (CR District Plan, 5 AAC 24.360) and the Copper River King Salmon Management Plan (CR King Plan, 5 AAC 24.361). Although the CR King Plan directs the ADFG to manage for an SEG of 24,000 Chinook Salmon, the CR District Plan directs to manage for an inriver goal that includes a different escapement goal of only 17,500 other (non-Sockeye) salmon. This apparent inconsistency suggests that the inriver goal of salmon, announced annually, is at least 6,500 fish too low.

In light of weak salmon returns observed in recent years, and to resolve the apparent inconsistency related to the Chinook Salmon escapement goals specified in each plan, the WRST Superintendent, as delegated Federal inseason manager, submitted an Agenda Change Request to address this issue at the upcoming Alaska Board of Fisheries Meeting to be held in Cordova in early December. Included in this request is a recommendation to revise the inriver goal of the CR District Plan to specify spawning escapements of 24,000 Chinook Salmon, as well as 500 other salmon.

Table 1. Federal Subsistence Expanded Fish Harvests¹ in the Upper Copper River District, including Harvests by Gear Type.

| Year | Expanded Harvest Estimates ² | | | | | | | | | | All Species, Approximate Harvest by Gear Type | | | |
|-----------------------|---|---------|------|-------|---------------|---------------|--------------|------------------|-----------|---------------|---|--------------------|--------------|--|
| | Steelhead | | | | | Fish | | | | | Dip Net | | Rod and Reel | |
| | Sockeye | Chinook | Coho | Trout | Other Species | Total Harvest | Fish Wheel % | Fish Wheel Total | Dip Net % | Dip Net Total | Rod and Reel % | Rod and Reel Total | | |
| 2002 | 10,644 | 745 | 100 | 77 | N.A. | 11,567 | | | | | | | | |
| 2003 | 17,220 | 687 | 268 | 16 | N.A. | 18,191 | | | | | | | | |
| 2004 | 24,035 | 815 | 216 | 15 | N.A. | 25,082 | | | | | | | | |
| 2005 | 24,781 | 412 | 55 | 7 | 37 | 25,292 | | | | | | | | |
| 2006 | 20,737 | 507 | 55 | 17 | 37 | 21,353 | | | | | | | | |
| 2007 | 19,107 | 704 | 85 | 7 | 25 | 19,928 | | | | | | | | |
| 2008 | 14,864 | 892 | 268 | 21 | 54 | 16,099 | | | | | | | | |
| 2009 | 14,821 | 590 | 52 | 22 | 36 | 15,521 | | | | | | | | |
| 2010 | 17,050 | 362 | 111 | 46 | 25 | 17,594 | | | | | | | | |
| 2011 | 18,201 | 814 | 70 | 6 | 283 | 19,373 | 90.3% | 15,882 | 9.6% | 1,687 | 0.1% | 25 | | |
| 2012 | 17,146 | 410 | 93 | 45 | 113 | 17,806 | 88.4% | 17,130 | 11.4% | 2,205 | 0.2% | 39 | | |
| 2013 | 19,988 | 391 | 36 | 8 | 81 | 20,503 | 90.4% | 16,092 | 9.4% | 1,670 | 0.3% | 45 | | |
| 2014 | 25,513 | 456 | 97 | 14 | 57 | 26,138 | 85.9% | 17,614 | 14.1% | 2,889 | 0.0% | 0 | | |
| 2015 | 29,157 | 430 | 29 | 15 | 218 | 29,849 | 89.3% | 23,328 | 10.8% | 2,810 | 0.0% | 3 | | |
| 2016 | 21,106 | 465 | 52 | 6 | 406 | 22,035 | 90.1% | 26,900 | 9.7% | 2,883 | 0.2% | 66 | | |
| 2017 | 20,243 | 483 | 10 | 8 | 549 | 21,294 | 90.0% | 19,820 | 10.0% | 2,197 | 0.1% | 18 | | |
| 2018 | 20,166 | 2,763 | 31 | 4 | 45 | 23,008 | 96.2% | 20,478 | 3.7% | 794 | 0.1% | 19 | | |
| 2019 | 22,177 | 1,029 | 22 | 3 | 59 | 23,291 | 83.4% | 19,189 | 16.5% | 3,801 | 0.1% | 18 | | |
| 2020 | 16,418 | 845 | 26 | 7 | 60 | 17,356 | 79.0% | 18,390 | 21.0% | 4,884 | 0.1% | 16 | | |
| 5-yr. Avg. 2015-2019 | 22,570 | 1,034 | 29 | 7 | 255 | 23,895 | 87.7% | 20,956 | 12.2% | 2,912 | 0.1% | 27 | | |
| 10-yr. Avg. 2010-2019 | 21,075 | 760 | 55 | 16 | 184 | 22,089 | 88.3% | 19,482 | 11.6% | 2,582 | 0.1% | 25 | | |

¹ This table reflects entries to the online database from 2011 through **07/15/2021**. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

² Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that reported.

Table 2. Glennallen Subdistrict Federal Reported and Expanded Subsistence Fishery Harvests¹

| Year | Percentage | | Sockeye | | Chinook | | Coho | | Steelhead/Rainbow Trout | | Other Species | | All Species | |
|-----------------------|----------------|----------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|
| | Permits Issued | Reported | Reported | Harvest | Reported | Harvest | Reported | Harvest | Reported | Harvest | Reported | Harvest | Reported | Harvest |
| | | | Harvest Estimate ² | Estimate ² | Harvest Estimate ² | Estimate ² | Harvest Estimate ² | Estimate ² | Harvest Estimate ² | Estimate ² | Harvest Estimate ² | Estimate ² | Harvest Estimate ² | Estimate ² |
| 2002 | 201 | 80.6 | 7,944 | 9,856 | 564 | 700 | 81 | 100 | 62 | 77 | 35 | 43 | 10,777 | |
| 2003 | 221 | 83.3 | 13,616 | 16,346 | 554 | 665 | 152 | 182 | 13 | 16 | 20 | 24 | 17,233 | |
| 2004 | 261 | 78.9 | 17,704 | 22,439 | 636 | 806 | 152 | 193 | 12 | 15 | 12 | 15 | 23,468 | |
| 2005 | 267 | 85.8 | 19,973 | 23,279 | 331 | 386 | 47 | 55 | 6 | 7 | 32 | 37 | 23,763 | |
| 2006 | 254 | 87.4 | 16,711 | 19,120 | 430 | 492 | 28 | 32 | 15 | 17 | 32 | 37 | 19,698 | |
| 2007 | 281 | 84.3 | 15,225 | 18,060 | 569 | 675 | 34 | 40 | 6 | 7 | 21 | 25 | 18,808 | |
| 2008 | 269 | 81.4 | 11,347 | 13,940 | 705 | 866 | 148 | 182 | 17 | 21 | 44 | 54 | 15,063 | |
| 2009 | 274 | 85.0 | 11,836 | 13,925 | 494 | 581 | 34 | 40 | 19 | 22 | 31 | 36 | 14,605 | |
| 2010 | 269 | 87.7 | 12,849 | 14,651 | 300 | 342 | 64 | 73 | 39 | 44 | 22 | 25 | 15,136 | |
| 2011 | 277 | 87.7 | 14,163 | 16,145 | 701 | 799 | 53 | 60 | 5 | 6 | 248 | 283 | 17,293 | |
| 2012 | 275 | 92.0 | 14,461 | 15,718 | 371 | 403 | 78 | 85 | 40 | 43 | 104 | 113 | 16,363 | |
| 2013 | 273 | 89.0 | 15,834 | 17,789 | 331 | 372 | 24 | 27 | 6 | 7 | 62 | 70 | 18,264 | |
| 2014 | 315 | 90.5 | 21,603 | 23,877 | 399 | 441 | 23 | 25 | 10 | 11 | 52 | 57 | 24,412 | |
| 2015 | 325 | 92.3 | 24,695 | 26,753 | 384 | 416 | 13 | 14 | 7 | 8 | 201 | 218 | 27,408 | |
| 2016 | 320 | 82.8 | 15,884 | 19,181 | 369 | 446 | 9 | 11 | 5 | 6 | 332 | 401 | 20,044 | |
| 2017 | 338 | 85.2 | 15,691 | 18,415 | 399 | 468 | 1 | 1 | 7 | 8 | 468 | 549 | 19,442 | |
| 2018 | 335 | 91.3 | 15,287 | 16,736 | 2,432 | 2,662 | 0 | 0 | 4 | 4 | 41 | 45 | 19,448 | |
| 2019 | 343 | 89.8 | 15,873 | 17,677 | 849 | 945 | 0 | 0 | 3 | 3 | 53 | 59 | 18,685 | |
| 2020 | 376 | 89.9 | 11,456 | 12,744 | 682 | 759 | 0 | 0 | 6 | 7 | 54 | 60 | 13,569 | |
| 5-yr. Avg. 2015-2019 | 332 | 88.3 | 17,486 | 19,752 | 887 | 988 | 5 | 5 | 5 | 6 | 219 | 254 | 21,005 | |
| 10-yr. Avg. 2010-2019 | 307 | 88.8 | 16,634 | 18,694 | 654 | 730 | 27 | 30 | 13 | 14 | 158 | 182 | 19,649 | |

¹ This table reflects entries to the online database from 2011 through 07/15/2021. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

² Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that reported.

Table 3. Chitina Subdistrict Federal Reported and Expanded Subsistence Fishery Harvests¹

| Year | Percentage of Permits Reported | | Sockeye | | Chinook | | Coho | | Steelhead/Rainbow Trout | | Other Species | | All Species | | |
|-------------|--------------------------------|----------|-------------------------------|------------------|-------------------------------|------------------|-------------------------------|------------------|-------------------------------|------------------|-------------------------------|------------------|-------------------------------|------------------|-------------------------------|
| | Issued | Reported | Harvest Estimate ² | Reported Harvest | Harvest Estimate ² | Reported Harvest | Harvest Estimate ² | Reported Harvest | Harvest Estimate ² | Reported Harvest | Harvest Estimate ² | Reported Harvest | Harvest Estimate ² | Reported Harvest | Harvest Estimate ² |
| | | | | | | | | | | | | | | | |
| 2002 | 122 | 73.0 | 788 | 33 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 833 |
| 2003 | 100 | 82.0 | 874 | 18 | 22 | 70 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 982 |
| 2004 | 109 | 76.1 | 1,597 | 7 | 9 | 18 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,629 |
| 2005 | 76 | 84.2 | 1,502 | 22 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,529 |
| 2006 | 75 | 85.3 | 1,379 | 13 | 15 | 20 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,655 |
| 2007 | 98 | 88.8 | 929 | 26 | 29 | 40 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,120 |
| 2008 | 82 | 85.4 | 789 | 22 | 26 | 74 | 87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,036 |
| 2009 | 68 | 91.2 | 817 | 8 | 9 | 11 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 917 |
| 2010 | 92 | 85.9 | 2,061 | 17 | 20 | 33 | 38 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2,459 |
| 2011 | 85 | 85.9 | 1,766 | 13 | 15 | 8 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,081 |
| 2012 | 89 | 93.3 | 1,332 | 6 | 6 | 8 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1,443 |
| 2013 | 99 | 90.9 | 1,999 | 17 | 19 | 8 | 9 | 1 | 1 | 10 | 11 | 0 | 0 | 0 | 2,239 |
| 2014 | 113 | 94.7 | 1,549 | 14 | 15 | 68 | 72 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 1,726 |
| 2015 | 111 | 92.8 | 2,231 | 13 | 14 | 14 | 15 | 7 | 8 | 0 | 0 | 0 | 0 | 0 | 2,441 |
| 2016 | 128 | 80.5 | 1,549 | 16 | 20 | 33 | 41 | 0 | 0 | 4 | 5 | 0 | 0 | 0 | 1,991 |
| 2017 | 132 | 79.5 | 1,454 | 12 | 15 | 7 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,852 |
| 2018 | 132 | 91.7 | 3,144 | 92 | 100 | 28 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,561 |
| 2019 | 181 | 90.1 | 4,053 | 75 | 83 | 20 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,606 |
| 2020 | 216 | 88.4 | 3,249 | 76 | 86 | 23 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,786 |
| 5-yr. AVG: | 137 | 86.9 | 2,486 | 42 | 47 | 20 | 24 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2,890 |
| 2015-2019 | 116 | 88.5 | 2,114 | 28 | 31 | 23 | 25 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2,440 |
| 10-yr. AVG: | 116 | 88.5 | 2,114 | 28 | 31 | 23 | 25 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2,440 |

¹ This table reflects entries to the online database from 2011 through **07/15/2021**. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

² Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that reported.

Table 4. Batzulnetas Federal Reported and Expanded Subsistence Fishery Harvests¹

| Year | Permits Issued | Percentage of Permits Reported | | Sockeye | | | Chinook | | | Other Species | | |
|-----------------------|----------------|--------------------------------|----------|-------------------------------|---------|------------------|-------------------------------|---------|------------------|-------------------------------|---------|------------------|
| | | Reported | Reported | Harvest Estimate ² | Harvest | Reported Harvest | Harvest Estimate ² | Harvest | Reported Harvest | Harvest Estimate ² | Harvest | Reported Harvest |
| 2002 | 1 | 100.0 | 208 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2003 | 1 | 100.0 | 164 | 164 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2004 | 1 | 100.0 | 182 | 182 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2005 | 1 | 100.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2006 | 0 | N.A. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2007 | 1 | 100.0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2008 | 1 | 100.0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2009 | 0 | N.A. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2010 | 3 | 100.0 | 106 | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2011 | 3 | 66.7 | 9 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2012 | 3 | 66.7 | 101 | 152 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2013 | 3 | 100.0 | 862 | 862 | 5 | 5 | 5 | 12 | 12 | 12 | 12 | 12 |
| 2014 | 2 | 100.0 | 146 | 146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2015 | 4 | 100.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2016 | 0 | N.A. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2017 | 1 | 100.0 | 254 | 254 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| 2018 | 1 | 100.0 | 468 | 468 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2019 | 1 | 100.0 | 209 | 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2020 | 1 | 100.0 | 67 | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5-yr. Avg. 2015-2019 | 1 | 100.0 | 186 | 186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-yr. Avg. 2010-2019 | 2 | 92.6 | 216 | 221 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

¹ This table reflects entries to the online database from 2011 through 7/15/2021. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

² Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that reported.



United States Department of Interior

NATIONAL PARK SERVICE
Yukon-Charley Rivers National Preserve
4175 Geist Road
Fairbanks, Alaska 99709



Yukon-Charley Rivers National Preserve Eastern Interior Regional Advisory Council Meeting October 14-15, 2021

- **Eagle Subsistence Working Group:** NPS staff met with members of the working group via teleconference on May 11, 2021. Items discussed were: moose and wolf studies being conducted in the Preserve, king salmon declines and the use of non-salmon species, the Preserve compendium, and navigable waters implementation and guidance. The next working group meeting is scheduled for late October 2021 via teleconference. For more information, contact Marcy Okada, marcy_okada@nps.gov
- **Moose:** We had a successful spring capture and are currently monitoring 32 collared adult cows in the Preserve. Of the calves from 2020 that survived the summer, all survived the winter. This spring, calving was lower than last year – our calving rate was 66% (last year was 95%). Interestingly, the timing of calving was similar to that of last year, in that the average calving date was one day later. We plan to radio track our collared moose in November to count how many calves survived the summer. For more information, contact Matt Cameron, (907) 455-0626, matthew_cameron@nps.gov
- **Wolf Studies:** We are currently monitoring 8 packs within the Preserve and all packs denned during the summer. The spring pack count averaged 3.5 wolves, which is much lower than the long-term average (5.7 wolves). Over the 2020 biological year (May 2020-May 2021) we tracked 24 GPS-collared wolves. Of the 24 wolves, 12 died and 2 dispersed outside of the Preserve. We are working on studies evaluating how wolf deaths in the pack affects pack structure and productivity and identifying pup-rearing sites.
- We completed a study that evaluated the pattern of disease transmission in gray wolves across North America. At a continental scale, human density was a major driver of pathogen exposure, the prevalence of pathogens increased as wolves aged, and denser wolf populations had a greater risk of exposure. The prevalence of all pathogens in wolves from Yukon-Charley Rivers National Preserve was either lower than or equal to the average of all wolf populations, suggesting they are a relatively healthy population. The lower human density within and adjacent to the preserve likely reduces transmission between dogs (or other pets) and wolves, since human density may be a proxy for density of unvaccinated dogs that act as reservoirs for infectious diseases that spillover into wolves. For additional information, visit: <https://www.nps.gov/articles/000/wolfpathogens.htm>.
For more information, contact Mat Sorum, (907) 455-0676, mat_sorum@nps.gov
- **Dall's Sheep:** NPS plans to conduct a sheep survey within Yukon-Charley Rivers National Preserve in summer 2022. The last survey was conducted in 2018.

Contact Mat Sorum for more information: mat_sorum@nps.gov, (907) 455-0676.



- **Caribou:** In a summary article, NPS and ADF&G biologists discussed how methods to detect calving in caribou were found to work beyond just the Western Arctic Herd, for which these methods were validated earlier. These findings highlight that these methods may be more broadly applicable to other caribou herds around the state. More information can be found at: <https://www.nps.gov/articles/000/aps-20-1-9.htm>.

NPS biologists are collaborating on the Global Initiative on Ungulate Migration, which will work to document the movements of migratory ungulates in a global atlas. The goals are to address conservation needs of species and their habitats globally, find out more at: <https://www.nps.gov/articles/000/migrationmapping.htm>.

Building Partnerships and Capacity for Federal Subsistence Fisheries Management and Research in the North

Partners for Fisheries Monitoring Program (PFMP)

Introduction

The Partners for Fisheries Monitoring Program was established in 2002 to increase the opportunity for Alaska Native and rural organizations to participate in Federal subsistence management. The program provides funding for fishery biologist, social scientist, or educator positions within the organization, with the intent of building and sustaining the organization's fisheries management expertise. In addition, the program supports a variety of opportunities for local, rural students to connect with subsistence management through science camps and paid internships.

The program has provided funding to mentor more than 100 college and 450 high school students, some of whom have gone on to become professionals in the field of natural resource conservation. To date with 13.3 million dollars spent, the program has supported nine Alaska Native organizations in building capacity. Organizations are funded for up to four years through a competitive grant process.

How to Get Involved

The next funding opportunity will open in 2023; it is never too early to reach out and to begin planning the components of a proposed PFMP program. The Office of Subsistence Management (OSM) is happy to answer questions and provide advice regarding its various funding programs.

OSM also partners with the Alaska Native Science and Engineering Program (ANSEP) to provide internship opportunities that expose students to careers in natural resource management. If your existing Alaska based fisheries program could benefit from a student internship, or if your program has exciting fisheries-related opportunities to challenge and educate Alaska's rural youth, please be sure to let us know!

For more information, please visit our site at <https://www.doi.gov/subsistence/partners>. You can also contact the program's coordinator, Karen Hyer at karen_hyer@fws.gov or 907-786-3689.

Partner Contacts

- **BBNA:** Cody Larson, clarson@bbna.com
- **YTT:** Jennifer Hanlon, jhanlon@ytttribe.org
- **NVE:** Matt Piche, matt.piche@eyak-nsn.gov
- **NVN:** Dan Gillikin, dangillikin@gmail.com
- **ONC:** Janessa Esquible, jesquible@nativecouncil.org

- **TCC:** Brian McKenna, brian.mckenna@tananachiefs.org
- **QTU:** Chandra Poe, chandra@qawalagin.com

2021 Partners Program Participant Summaries

Bristol Bay Native Association (BBNA)

The Bristol Bay Native Association (BBNA) researches and highlights the role of fish used in satisfying a way of life, through collaborative investigations with our member tribes, universities, and state and federal managers. These partnerships inform our citizens of any changes to the public's relationships with fish and emphasize the value in the co-production of traditional knowledge and contemporary sciences research.

The BBNA Partners program funding is used in supporting the conversation between our residents, communities, and the managers tasked with decision-making on essential food resources. The program reinforces public input to the region's Fish and Game Advisory Committees, NPS Subsistence Resource Commissions, and the Federal Regional Advisory Council, while relaying information gathered from the social science investigations. Recent focus has been on subsistence fishery funding from section 12005 of the Cares Act, and the Chignik Fisheries disaster relief efforts.

Over the past year, the program informed and collaborated on multiple investigations and recent publications, some of which are available online and focus on; The Naknek River Subsistence Salmon Harvest, Subsistence Salmon Sharing Networks on the Alaska Peninsula, Voices of Alaska Native Women Fishers, Sharing Food and Community Resilience, and a Subsistence Harvest Assessment and Stock Composition of Dolly Varden and Nonsalmon Fish Stocks in the Togiak National Wildlife Refuge.

BBNA's program has coordinated dozens of internships with partners like Lake Clark National Park, Togiak National Wildlife Refuge, Alaska Dept. of Fish and Game, and the University of Washington. The leaders involved in these summer experiences have guided many students into careers in natural resource management. Some of those students have now become the mentors to the next cohort of future leaders. While the 2020 summer internships were successfully held virtually, we are looking forward to getting the hands-on field experiences in 2021!

Yakutat Tlingit Tribe (YTT)

Yakutat Tlingit Tribe (YTT) is a federally recognized tribe with 820 enrolled Tribal Members located on the northern coast of the Gulf of Alaska. Developing conservation concerns about local salmon stocks have highlighted the need for building capacity for fisheries monitoring and management in the YTT Environmental Department. Through the Partners Program, YTT hired a full time Fisheries Biologist in 2020 to participate in subsistence management and instill place-based knowledge on the Situk River. YTT's Fisheries Biologist partners with the Yakutat District River Ranger to serve as the primary contacts to the public on the Situk River (April-September).

The team's primary job is to contact Situk users to promote stewardship and cultural awareness. Being on the river during peak fishing seasons, they can communicate conservation messages to anglers streamside on topics like catch and release, don't tread on redds, salmon ecology, angler etiquette, current regulations, alternative fishing sites, and habitat degradation. The biologist provides river users with

context about history and cultural importance of salmon with the Situk being the primary source for subsistence in Yakutat. In the past, brown bears associating anglers with fish has been a safety concern for both people and bears on the Situk. However, in coordination with the USFS Wildlife Biologist and Fish and Game, the River Rangers have aggressively worked to curb the behaviors amongst fisherman that lead to this problem. The consistent presence of the partners alone will prompt stewardship and good behavior amongst the varied Situk River users.

The Partners Program has enhanced YTT's capacity by broadening the scope of resources and tools available to the Tribe such as allowing access to valuable data like river use, stream restoration trainings, and research methods like eDNA. This partnership forges a strong foundation that strengthens and supports the YTT Environmental Department's capacity to identify and respond to conservation concerns that impact tribal interests. YTT looks forward to expanding the department and welcoming an intern under the Partners Program.

Tanana Chiefs Conference (TCC)

The Tanana Chiefs Conference (TCC) serves as a non-profit organization for the Interior region of Alaska. The TCC region covers an area of 235,000 square miles and overlaps three separate National Wildlife Refuges (NWR): Kanuti, Koyukuk-Innoko-Nowitna, and the Yukon Flats. Since its creation, the TCC has become the provider of several programs in the Interior of Alaska. Through contracts with the Bureau of Indian Affairs, TCC is responsible for the management and delivery of services such as housing, land management, tribal government assistance, education and employment services, and natural resources management.

Within TCC's organizational structure, the Wildlife and Parks (W&P) Program is responsible for serving the subsistence needs of its tribes and tribal members. The Partners Program allows the TCC W&P Program the ability to maintain a fulltime fisheries biologist on staff and has allowed TCC to develop the capacity to address the subsistence needs of TCC tribes and tribal members by conducting a variety of fisheries research programs and also by participating in federal and state fisheries management meetings.

Through the Partners Program, TCC has successfully operated the Henshaw Creek Weir salmon monitoring project in the upper Koyukuk River. TCC strives to recruit and hire local technicians and youth to assist with the project each year. The Henshaw project also hosts an annual summer science and culture camp that is jointly operated by TCC and the Kanuti NWR. Elders and youth are brought together at the camp where the Elders teach students traditional skills (like setting nets, cutting and drying fish, and Athabascan language). TCC and Kanuti staff provide lessons in western science such as weir sampling, salmon biology and ecology and fisheries management.

Outside of the Henshaw Creek Weir project, TCC has been able to lead other fisheries investigations such as updating the Yukon River Chinook and chum salmon genetic baselines, mapping salmon spawning habitat and updating the Anadromous Waters Catalog and exploring the capabilities of small unmanned aerial systems to assist with salmon research and management. Additionally, each year they host one or two Alaska Native Science and Engineering Program (ANSEP) summer bridge students and provide them with the opportunity to gain hands on knowledge and experience in fisheries management within the Yukon River drainage.

Native Village of Eyak (NVE)

The Native Village of Eyak's Department of the Environment and Natural Resources (NVE-DENR) Fisheries Program focuses on population monitoring, filling data gaps, using traditional ecological knowledge to improve data collection, and working with partners to ensure a future with healthy robust fish populations while supporting sustainable fisheries. PFMP funds are used to support a permanent fish biologist responsible for leading the fisheries program and seasonal fisheries interns who gain valuable hands-on experience.

The current PFMP is also supporting the development of a youth science and subsistence camp and outreach with other organizations and researchers throughout the region. Current research led by NVE's Partners Program biologist includes Chinook salmon inriver abundance, Copper River (2003-2021); Chinook salmon distribution and stock specific run timing, Copper River (2019-2021); Klutina River salmon enumeration sonar pilot study (2021-2024).

Furthermore, NVE is continually sharing its resources and expertise to accomplish more work through partnerships with other researchers. Current partners on side-studies include Alaska Department of Fish and Game Division of Sport Fish and Commercial Fisheries, Prince William Sound Science Center, and Ahtna Intertribal Resource Commission.

Native Village of Napaimute (NVN)

The Native Village of Napaimute (NVN) is a federally recognized tribe and has about 100 members; the village is only seasonally occupied currently. The Napaimute Partners in Fisheries Monitoring Program main goals are to; improve effectiveness of local outreach related to fisheries management, provide opportunities in natural resource education and experience for local youth, build local capacity through strategic program and workforce development, and develop a sustainable natural resource program.

Outreach related to fisheries management is achieved by participating in management discussions with various advisory groups i.e., Kuskokwim River Inter Tribal Fish Commission, Kuskokwim Salmon Management Working Group, and agencies (ADF&G, USFWS). We routinely post in-season management actions on social media and around the Villages to keep fishers informed on the latest regulations.

Our youth outreach involves two projects; the Math Science Expedition (MSE) and the George River Internship (GRI). The MSE is tailored more to be leadership development experience with some exposure to fisheries ecology and data collection. The MSE typically accommodates 25-30 students on a two week-long rafting trip down the Salmon and Aniak Rivers.

The GRI is an advanced paid Internship opportunity on the George River where Interns learn about river ecology, hydrology, sampling techniques for fish and benthic macro- invertebrates, leadership skills and career opportunities in the area of natural resource management.

The PFMP has allowed us to build the capacity to peruse funding for and help support fisheries monitoring programs (Aniak Test Fishery & Salmon River Weir) funded through the USFWS Fisheries Resource Monitoring Program, along with several environmental monitoring and fisheries assistance projects. Projects are mostly staffed by local residents and Alaska Native Science and Engineering Students (ANSEP).

Orutsararmiut Native Council (ONC)

Orutsararmiut Native Council (ONC) is the Federally recognized Tribal Government for the Native Village of Bethel, Alaska and has greatly expanded its Partners Program since 2008. ONC Partners Program strives to support ongoing fisheries in season and postseason monitoring programs; serve as a mentor for rural, Alaska Native student interns in coordination with other state, federal, and tribal entities; communicate results of the fisheries monitoring program projects to various audiences to enhance federal subsistence management awareness in rural communities; continue youth internship programs; and pursue external funds and partnerships to expand the current Partners Program. In the past, with the support of the Partners Program, ONC was able to conduct annual Science & Culture Camps, as well as science, technology, engineering, and math (STEM) middle school career exploration programs in Bethel with the help of Alaska Native Science & Engineering Program (ANSEP) and several other partner agencies.

Our Partners Program also became involved with the Aniak & Salmon River Math & Science Expedition by fisheries educational outreach with youth from the middle Kuskokwim. ONC's involvement with youth camp programs throughout the years was able to reach many students ranging from 6th to 12th grade. Despite the difficulties and cancellations that came with the COVID-19 pandemic, ONC's Partners Program work has continued in a safe manner with new procedures and creative methods to engage youth. We would like to sincerely thank the Office of Subsistence Management and other partnering entities, for without their support, our program would not have had the ability to support the youth of the Yukon-Kuskokwim Delta. The support of our partners has allowed ONC to have great success in expanding its involvement on scientific and educational outreach projects and programs.

Qawalangin Tribe of Unalaska (QTU)

The Qawalangin Tribe of Unalaska is a federally recognized sovereign nation. The Unangan people have continuously occupied their homelands along the Aleutian and Pribilof Islands for thousands of years, relying on a close relationship with the sea and lands.

As a new participant in the Partners program, the Tribe is looking forward to continuing work to ensure healthy subsistence species and food sovereignty for generations to come.

A key project in our first year as a Partners program participant was collaborating with ADFG to operate a weir at McLees Lake, monitoring this sockeye run that is an important subsistence resource for the community. In our first year, we restored structures at the site that had fallen into disrepair during a 2-year gap in funding for the weir. Our staff gained experience in weir setup and operations and scale sampling. We are looking forward to building our staff capacity and increasing our presence at the weir in coming seasons and working to ensure continuity of this important salmon monitoring site.

In addition to continuing work at the McLees weir in partnership with ADFG, in the coming years we are looking forward to establishing a strong outreach and education program to build awareness and support of subsistence resource management, so important to our coastal community.

Winter 2022 Regional Advisory Council Meeting Calendar

Last updated 3/19/2021

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>Feb. 6</i> | <i>Feb. 7</i> <i>Window</i> <i>Opens</i> | <i>Feb. 8</i> | <i>Feb. 9</i> | <i>Feb. 10</i> | <i>Feb. 11</i> | <i>Feb. 12</i> |
| | | BB - Naknek | | SC - Anchorage | | |
| <i>Feb. 13</i> | <i>Feb. 14</i> | <i>Feb. 15</i> | <i>Feb. 16</i> | <i>Feb. 17</i> | <i>Feb. 18</i> | <i>Feb. 19</i> |
| | | NWA - Kotzebue | | WI - Galena | | |
| <i>Feb. 20</i> | <i>Feb. 21</i> PRESIDENTS DAY HOLIDAY | <i>Feb. 22</i> | <i>Feb. 23</i> | <i>Feb. 24</i> | <i>Feb. 25</i> | <i>Feb. 26</i> |
| | | KA - Kodiak | | | | |
| <i>Feb. 27</i> | <i>Feb. 28</i> | <i>Mar. 1</i> | <i>Mar. 2</i> | <i>Mar. 3</i> | <i>Mar. 4</i> | <i>Mar. 5</i> |
| | | YKD - Bethel | | SP - Nome | | |
| <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> |
| | | EI - Fort Yukon | | | | |
| | | NS - TBD | | | | |
| <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> |
| | | SEA - Sitka | | | <i>Window</i> <i>Closes</i> | |

Fall 2022 Regional Advisory Council Meeting Calendar

Last updated 8/5/2021

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>Aug. 7</i> | <i>Aug. 8 Window Opens</i> | <i>Aug. 9</i> | <i>Aug. 10</i> | <i>Aug. 11</i> | <i>Aug. 12</i> | <i>Aug. 13</i> |
| <i>Aug. 14</i> | <i>Aug. 15</i> | <i>Aug. 16</i> | <i>Aug. 17</i> | <i>Aug. 18</i> | <i>Aug. 19</i> | <i>Aug. 20</i> |
| <i>Aug. 21</i> | <i>Aug. 22</i> | <i>Aug. 23</i> | <i>Aug. 24</i> | <i>Aug. 25</i> | <i>Aug. 26</i> | <i>Aug. 27</i> |
| <i>Aug. 28</i> | <i>Aug. 29</i> | <i>Aug. 30</i> | <i>Aug. 31</i> | <i>Sep. 1</i> | <i>Sep. 2</i> | <i>Sep. 3</i> |
| <i>Sep. 4</i> | <i>Sep. 5 Labor Day Holiday</i> | <i>Sep. 6</i> | <i>Sep. 7</i> | <i>Sep. 8</i> | <i>Sep. 9</i> | <i>Sep. 10</i> |
| <i>Sep. 11</i> | <i>Sep. 12</i> | <i>Sep. 13</i> | <i>Sep. 14</i> | <i>Sep. 15</i> | <i>Sep. 16</i> | <i>Sep. 17</i> |
| <i>Sep. 18</i> | <i>Sep. 19</i> | <i>Sep. 20</i> | <i>Sep. 21</i> | <i>Sep. 22</i> | <i>Sep. 23</i> | <i>Sep. 24</i> |
| <i>Sep. 25</i> | <i>Sep. 26</i> | <i>Sep. 27</i> | <i>Sep. 28</i> | <i>Sep. 29</i> | <i>Sep. 30</i> | <i>Oct. 1</i> |
| <i>Oct. 2</i> | <i>Oct. 3</i> | <i>Oct. 4</i> | <i>Oct. 5</i> | <i>Oct. 6</i> | <i>Oct. 7</i> | <i>Oct. 8</i> |
| <i>Oct. 9</i> | <i>Oct. 10 Columbus Day Holiday</i> | <i>Oct. 11</i> | <i>Oct. 12</i> | <i>Oct. 13</i> | <i>Oct. 14</i> | <i>Oct. 15</i> |
| <i>Oct. 16</i> | <i>Oct. 17</i> | <i>Oct. 18</i> | <i>Oct. 19</i> | <i>Oct. 20</i> | <i>Oct. 21</i> | <i>Oct. 22</i> |
| <i>Oct. 23</i> | <i>Oct. 24</i> | <i>Oct. 25</i> | <i>Oct. 26</i> | <i>Oct. 27</i> | <i>Oct. 28</i> | <i>Oct. 29</i> |
| <i>Oct. 30</i> | <i>Oct. 31</i> | <i>Nov. 1</i> | <i>Nov. 2</i> | <i>Nov. 3</i> | <i>Nov. 4 Window Closes</i> | <i>Nov. 5</i> |

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*)

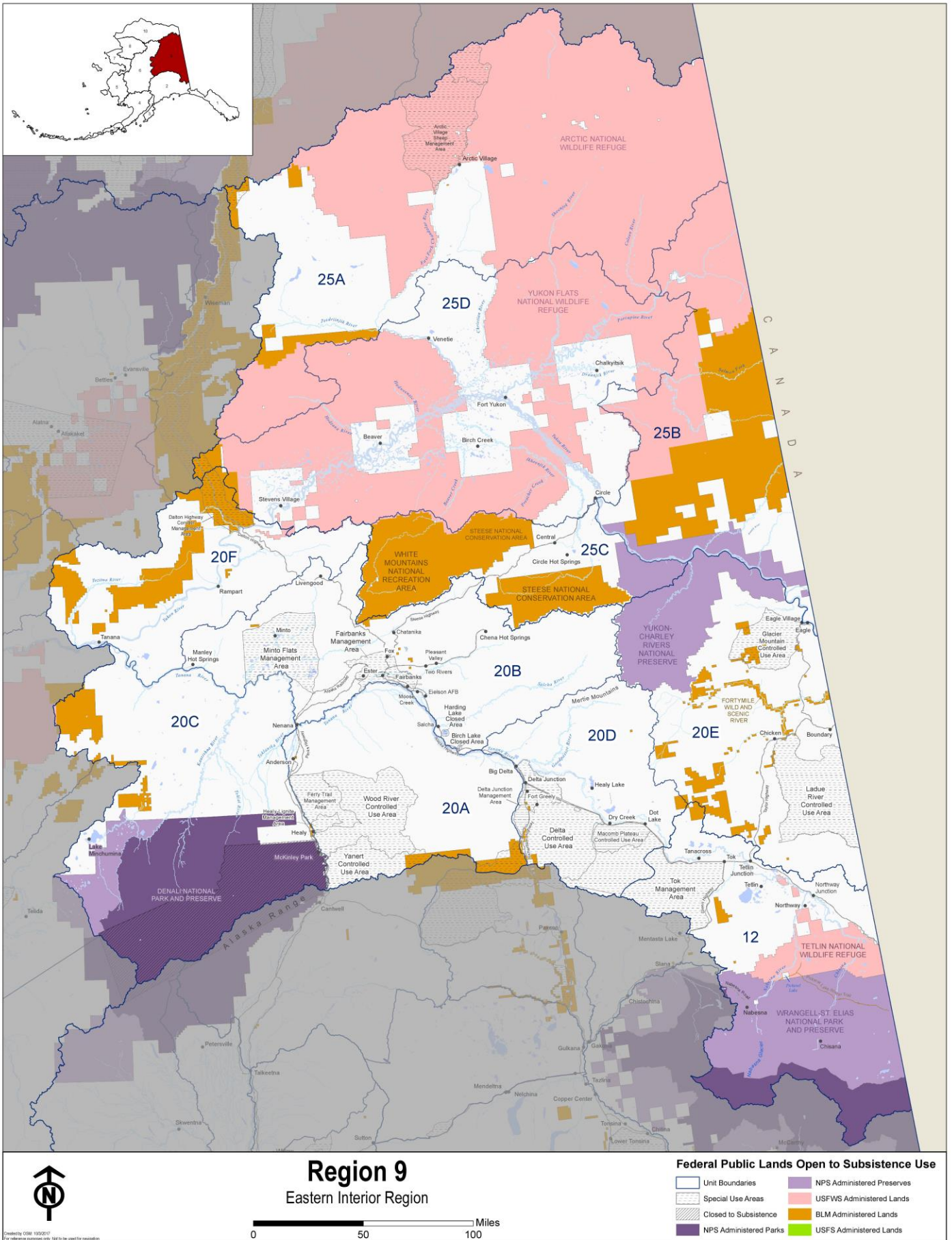
The Secretaries of Interior and Agriculture created the Federal Subsistence Board and delegated to it the responsibility for managing fish and wildlife resources on Federal public lands. The Board was also given the duty of establishing rules and procedures for the operation of the Regional Advisory 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.



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

Eastern Interior Alaska Subsistence Regional Advisory Council

Charter

- 1. Committee's Official Designation.** The Council's official designation is the Eastern Interior Alaska Subsistence Regional Advisory Council (Council).
- 2. Authority.** The Council is renewed by virtue of the authority set out in the Alaska National Interest Lands Conservation Act (ANILCA) (16 U.S.C. 3115 (1988)), 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 evaluation 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.
- (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 one member 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.
- i. Provide recommendations for implementation of Secretary's Order 3347: Conservation Stewardship and Outdoor Recreation, and Secretary's Order 3356: Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories. Recommendations shall include, but are not limited to:
 - (1) Assessing and quantifying implementation of the Secretary's Orders, and recommendations to enhance and expand their implementation as identified;
 - (2) Policies and programs that:
 - (a) increase outdoor recreation opportunities for all Americans, with a focus on engaging youth, veterans, minorities, and other communities that traditionally have low participation in outdoor recreation;
 - (b) expand access for hunting and fishing on Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service lands in a manner that respects the rights and privacy of the owners of non-public lands;
 - (c) increase energy, transmission, infrastructure, or other relevant projects while avoiding or minimizing potential negative impacts on wildlife; and
 - (d) create greater collaboration with States, Tribes, and/or Territories.

- j. Provide recommendations for implementation of the regulatory reform initiatives and policies specified in section 2 of Executive Order 13777: Reducing Regulation and Controlling Regulatory Costs; Executive Order 12866: Regulatory Planning and Review, as amended; and section 6 of Executive Order 13563: Improving Regulation and Regulatory Review. Recommendations shall include, but are not limited to:

Identifying regulations for repeal, replacement, or modification considering, at a minimum, those regulations that:

- (1) eliminate jobs, or inhibit job creation;
- (2) are outdated, unnecessary, or ineffective;
- (3) impose costs that exceed benefits;
- (4) create a serious inconsistency or otherwise interfere with regulatory reform initiative and policies;
- (5) rely, in part or in whole, on data or methods that are not publicly available or insufficiently transparent to meet the standard for reproducibility; or
- (6) derive from or implement Executive Orders or other Presidential and Secretarial directives that have been subsequently rescinded or substantially modified.

All current and future Executive Orders, Secretary's Orders, and Secretarial Memos should be included for discussion and recommendations as they are released. At the conclusion of each meeting or shortly thereafter, provide a detailed recommendation meeting report, including meeting minutes, to the Designated Federal Officer (DFO).

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 \$175,000, 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 the provisions of section 14 of the FACA. The Council will not meet or take any action without a valid current charter.

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

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

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

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

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

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 DFOs approval, subcommittees may be formed for the purpose of compiling information and 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.** 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).



Secretary of the Interior

DEC 12 2019

Date Signed

DEC 13 2019

Date Filed

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