



EASTERN INTERIOR ALASKA
SUBSISTENCE REGIONAL
ADVISORY COUNCIL

*October 22-23, 2015
Fairbanks, Alaska*



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On the cover...

A Dall's sheep ram stands against the backdrop of a cold day in late fall.



Karen Deatherage

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EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

Pike's Waterfront Lodge, Fairbanks

October 22-23

8:30 a.m. – 5:30 p.m.

TELECONFERENCE: call the toll free number: 1-866-560-5984, then when prompted enter the passcode: 12960066

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

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

AGENDA

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- g. Council review and recommendation on relevant 2015-2016 Alaska Board of Fisheries proposals*

12. Agency Reports

(Time limit of 15 minutes unless approved in advance)

2014 Yukon River In-Season Salmon management review (*USFWS /ADFG joint presentation*)

Native Organizations

Tanana Chiefs Conference fisheries research and education initiatives (*Brian McKenna*)

ADF&G

Subsistence Division: Upper Yukon Customary Trade, Patterns & trends in salmon fishing in the Yukon River, Local traditional knowledge of freshwater salmon ecology, and Alaska LNG (*Caroline Brown, Yukon Area Subsistence Resource Specialist*)

Yukon River Drainage Fisheries Association (*Wayne Jenkins*)

Tribal Governments

Northway subsistence update (*Jamie Marunde*)

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- Arctic National Wildlife Refuge

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14. Closing Comments and confirm FY2015 Annual Report topics

15. Adjourn (*Chair*)

To teleconference into the meeting, call the toll free number: 1-866-560-5984, then when prompted enter the passcode: 12960066

Reasonable Accommodations

The Federal Subsistence Board is committed to providing access to this meeting for all participants. Please direct all requests for sign language interpreting services, closed captioning, or other accommodation needs to Eva Patton, 907-786-3358, eva_patton@fws.gov, or 800-877-8339 (TTY), by close of business on October 15, 2015.

REGION 9
Eastern Interior Alaska Subsistence Regional Advisory Council

Seat	Year Apptd Term Expires	Member Name and Community
1	2001 2016	Susan L. Entsminger Mentasta Pass Chair
2	2007 2016	Andrew P. Firmin Fort Yukon Secretary
3	2010 2016	Larry Williams Sr. Venetie
4	2007 2016	Lester C. Erhart Tanana
5	2005 2016	William L. Glanz Central
6	2002 2017	Andrew W. Bassich Eagle
7	2014 2017	Rhonda O. Pitka Beaver
8	2012 2015	Will M. Koehler Horsfeld
9	2009 2015	Donald A. Woodruff Eagle
10	2001 2015	Virgil Umphenour North Pole Vice Chair

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL
Meeting Minutes**

March 5, 2015
Pike's Waterfront Lodge
Fairbanks, Alaska

Council Members Present:

Sue Entsminger, Chair
Virgil Umphenour
Andrew Firmin
Lester Erhart
Rhonda Pitka
Bill Glanz
Larry Williams
Donald Woodruff
Andy Bassich
Will Koehler

Agency Staff:

Eva Patton, Council Coordinator, Office of Subsistence Management
Carl Johnson, Council Coordination Division Chief, Office of Subsistence Management
Adrienne Fleek, Council Coordinator, Office of Subsistence Management
Orville Lind, Native Liaison, Office of Subsistence Management
Tom Evans, Wildlife Biologist, Office of Subsistence Management
Palma Ingles, Office of Subsistence Management
Pat Petrivelli, Interagency Staff Committee, Bureau of Indian Affairs
Bud Rice, Interagency Staff Committee, NPS
Trevor Fox, Interagency Staff Committee, US Fish and Wildlife Service
Tom Whitford, Interagency Staff Committee, Forest Service
Steve MacLean, North Pacific Fisheries Management Council
Greg Dudgeon, Superintendent, Gates of the Arctic National Park and Preserve and Yukon-Charley Rivers National Preserve
Marcy Okada, Yukon Charlie Rivers National Preserve
Barbara Cellarius, Wrangell St. Elias National Park and Preserve
Amy Craver, Denali National Park and Preserve
Vince Mathews, Refuge Coordinator, Yukon Flats, Arctic and Kenuti NWR
Joann Bryant, Arctic National Wildlife Refuge, USFWS
Brian Glaspell, Refuge Manager Yukon Flats NWR
Steve Berendzen, Refuge Manager Yukon Flats NWR
Mark Bertram, Wildlife biologist, Yukon Flats NWR
Mimi Thomas, Law Enforcement, Yukon Flats NWR
Nathan Hakaluk, Wildlife Biologist, Yukon Flats NWR

Shawn Bayless, Refuge Manager, Tetlin NWR, Tok,
Jerry Hill, Deputy Manager Tetlin NWR, Tok,
Nathan Hakaluk, Wildlife biologist, Yukon Flats NWR
Tracey McDonnell, Refuge Supervisor, USFWS Anchorage

Mitch Ellis, Chief of Refuges, USFWS Anchorage
Serena Selbo, Deputy Chief of Refuges, USFWS Anchorage

Jim Hjelmgren, Chief of Law Enforcement, Refuges, USFWS
Mike Spindler, Refuge Manager Kanuti NWR, USFWS
Tina Moran, Deputy Refuge Manager, Kanuti, NWR, USFWS
Kenton Moos, Refuge Manager, Koyukuk Nowitna NWR, Galena
Jeremy Havener, Refuge Subsistence Coordinator for Koyukuk, Nowitna, and Innoko National Wildlife Refuges
Ruth Gronquist, Bureau of Land Management, Fairbanks
Fred Bue, Yukon Subsistence Fisheries Manager, USFWS Fairbanks
Gerald Maschmann, Yukon Subsistence Fisheries Biologist, USFWS Fairbanks
Aaron Martin, Subsistence Fisheries Research Biologist, USFWS Fairbanks
Jeremy Mears, Yukon Subsistence Fisheries Biologist, USFWS Fairbanks
Jeff Estensen, Yukon fall season commercial fisheries manager, Alaska Dept. of Fish and Game
Stephanie Schmidt, Yukon Fisheries Research Biologist, Alaska Dept. of Fish and Game
Sabrina Garcia, Summer Season Yukon Fisheries Manager, Alaska Dept. of Fish and Game
Hazel Nelson Director, Subsistence Division, Alaska Dept. of Fish and Game
Caroline Brown, Subsistence Division, Alaska Dept. of Fish and Game
Joe Gustafson, Alaska Dept. of Fish and Game
Christy Gleason, Alaska Dept. of Fish and Game
Rita St. Louis, Alaska Dept. of Fish and Game
Jennifer Yuhas, Subsistence Liaison lead, Alaska Dept. of Fish and Game
Nissa Pilcher, Board Support, Alaska Dept. of Fish and Game
John Burr, Sportfish Division, Alaska Dept. of Fish and Game
Glenn Stout, Alaska Dept. of Fish and Game
John Chythlook, Sportfish Division, Alaska Dept. of Fish and Game
Becca Robbins Gisclair, Yukon River Fisheries Drainage Association
Wayne Jenkins, Yukon River Fisheries Drainage Association

Via teleconference:

Gloria Stickwan, Ahtna Inc. and SCRAC
Pippa Kenner, Anthropologist, OSM
Don Rivard, fisheries biologist, OSM
Robbin Lavine, Anthropologist, OSM
Karen Deatherage, Council Coordinator, OSM
Dan Sharp, Interagency Staff Committee, BLM
Mary McBurney, Interagency Staff Committee, NPS
Drew Crawford, Subsistence Liaison team, Alaska Dept. of Fish and Game
Holly Gaboriault, USFWS, Anchorage
Heather Tonneson, USFWS, Regional Office Anchorage

Tribes and Native Non-Profit Organizations:

Orville Huntington, Tanana Chiefs Conference, Director Wildlife and Parks Dept.
Victor Joseph, Tanana Chiefs Conference
Ben Stevens, Tanana Chiefs Conference
Brian McKenna, Tanana Chiefs Conference, Fisheries Biologist (Wildlife and Parks Dept.)
Victor Lord, Nenana Native Council
Rondell Jimmie, Nenana Native Council
Glenn Carlo, Denakkanaaga
Fred Alexie, Kaltag, Denakkanaaga, Inc
Luke Titus, Denakkanaaga
Alfred Demientieff, Holy Cross Tribe
Charles Wright, Sr. Tanana Tribal Council

Wilfred Adams, Tetlin Village Council
Donald Adams, Tetlin Village Council
Peter Demoski, Nulato Tribal Council
Arnold Demoski, Nulato Tribal Council
Leo Lolnutz, Koyukuk Tribal Council
Birdie Billie, Beaver Tribal Council
Walter Peter, Fort Yukon Tribal Council
Alfred Demientieff, Holy Cross Tribal Council
Wilson Justin, Chees'na Tribal Council
Jane Brandy, Northway

Public:

Jack Reakoff, Wiseman, WIRAC
Carrie Stevens, Fairbanks, UAF
Kristin Charlie, Tetlin
Shirley Fields, Fort Yukon
Jaia Koehler, Wrangell Outfitters
Al Barrette, Fairbanks
Garold David, Allakaket, UAF Student
Richard (Paul) Williams, Beaver

Roll Call and Establish Quorum: All 10 Council members present.

Review and Adopt Agenda*

Council adopted the agenda with modifications to the order accommodate guest speaker timelines.

*Asterisk identifies action item.

Review and Approve Previous Meeting Minutes*

No corrections were found and previous meeting minutes were approved by unanimous vote.

Council member reports were provided during the March 4 joint meeting with the Western Interior Regional Advisory Council.

Election of Officers*

Motion by Donald Woodruff to maintain the Chair and Vice chair officers as currently set, Seconded by Bill Glanz. Council vote unanimous to maintain Sue Entsminger and Chair, Virgil Umphenour as Vice Chair, and Andrew Firmin as Council Secretary.

Tribal and Public Comment

Glenn Carlo with Denakkanaaga extended an invitation to all to join in their conference on June 1st through June 5th in Anvik. The 42 TCC Villages come together for information, singing and dancing and good food. Agencies are invited to share information that can be brought back to the villages. Any donations of fish for the potlatch gathering are welcomed.

Old Business

*Rural Determination Process**

Palma Ingles of OSM provided an overview of the history and current process beginning with the 2009 Secretarial Review of how the Federal Subsistence Program is meeting the purpose of Title 8 of ANILCA and how the program is serving rural subsistence users as was envisioned when the program began in the 1990's. One of the recommendations was to review the Rural Determination process with

Council and public participation. This was initiated in 2013 with seeking feedback from RAC's and public at Council meetings and public hearings held around the State.

The Federal Subsistence Board reviewed over 475 public comments and made a recommendation to the Secretary of the Interior to change the process to determine which communities are "non-rural" based on public and Council input and all other communities would therefore be determined Rural. The Secretary supported this and published the proposed rule for public and Regional Advisory Council recommendations. A public hearing was held in the evening in conjunction with the Council meeting on March 4, 2015.

Council discussion and recommendation on Rural: Many Council members expressed concern about lack of any guiding criteria to inform the decisions about what is rural or non-rural. Some noted that there are user conflicts in the area with pressure on limited subsistence resources especially around road accessible by non-rural regions. The Council overall was supportive of the RACs having more involvement in the determinations but was concerned that the guiding criteria plays an important role informing how those determinations are made. The Council felt that moving the authority to make determinations from the Secretary of the Interior closer to the rural communities by having the Federal Subsistence Board define the rural characteristics with the input of the RACs but still was concerned that some guiding criteria would be required to keep the process transparent and give communities a way to know what thresholds would be for non-rural status. The Council discussed what feedback other regions had provided thus far.

*Motion to adopt the Rural Determination proposal as written with the addition of language requiring deference to the Regional Advisory Councils.: (A) the Board determines which areas or communities in Alaska are non-rural and current determinations are listed. And they would list it. For (B) all other communities and areas are therefore rural.

Vote: 5 No, 4 Yes, 1 Abstain. Motion failed.

The Council agreed to draft a letter based on their discussion of the concerns about this proposal expressed by Council members. Primarily the Council was concerned about the lack of any guiding criteria for determining rural or non-rural but overall supportive of communities and the Council having more involvement in the process – decision making closer to those affected.

Customary & Traditional Use Determination (Update)

Palma Ingles of OSM provided the Council with a brief update on the review process for C&T. At the request of the Southeast Regional Advisory Council, OSM analyzed the affects of 1) Eliminating the eight factors from the customary and traditional use determination process and using Section .804 of ANILCA to determine priority in time of shortage 2)Allowing each Regional Advisory Council to determine its own process to identify subsistence users and 3) requiring the Board to defer to Regional Advisory Council recommendations on customary and traditional use determinations. The purpose of the briefing provide the Council is to inform the Southeast Alaska Council and other Councils of the possible affects of specific changes to the determination process.

After RAC meetings last year, some three Councils voted to change the customary and traditional use process, three Councils voted to keep the determination process as it is and four Councils voted to postpone the action until this meeting cycle because they wanted to have more time to talk to people in their communities and understand what the effects of the changes would be. The Eastern Interior last year voted to keep the process as is.

New Business

*Charter Revisions**

The Council reviewed and discussed the proposed revisions to the charters that were based on recommended changes to address the appointments process. The Changes recommended were to change the Council member appointments from 3 year term to 4 year terms for less turnover and less hassle of re-applying for long serving members, allowance of 120 day extension for appointments to expire so seats do not lapse in the event appointments are not able to finalized by the Secretaries office before the end of current terms. Also official alternate selections so that alternates can be designated by the Secretary of the Interior to be able to serve on the Council immediately in the event of an unexpected vacancy. *The Council voted to approve the amendments to the charter.

*Call for Federal Hunting and Trapping Proposals**

The Board will consider proposals to change Federal hunting and trapping seasons, harvest limits, methods of harvest, customary and traditional use determinations on Federal public lands. The Federal public lands include National Wildlife Refuges, National Parks, monuments and preserves, National Forests, National Wild and Scenic Rivers, BLM Areas that are not part of the National Conservation system.

Tom Evans, OSM Wildlife biologist presented an overview of the proposal submission process. Following that, the Council discussed proposals with the public and feedback from their communities and region and took the following action:

- Walter Peter of Fort Yukon discussed changing the trapping season dates for Lynx in Units 25A, B and D, making the season November 1 to March 31. The Council discussed the benefits of having the same season dates throughout the Unit and increased subsistence opportunity and voted to submit a proposal for all of Unit 25 for Lynx for those season dates.
- The Council voted to submit a proposal to extend the wolverine trapping season in Unit 25C, which would then bring the ending trapping seasons for both Lynx and Wolverine in all of Unit 25 into alignment.
- The Council voted to change beaver hunting in Unit 25, minus Unit 25C, to eliminate the limit up until June 10, then to go back to the limit of 1 per day.
- The Council voted to change Unit 25 coyote trapping regulations to coincide with the coyote hunting season, making the season Oct. 1 to April 30, to align with wolf trapping season in that unit.
- The Council voted to submit a proposal regarding Unit 11 sheep hunt, changing from the current standard of “any sheep” to requiring 3/4 curl ram. This would address the conservation concern of the declining population, protecting ewes and lambs from hunting.

*Board of Fisheries Proposals**

The Council discussed District 5 fall chum protections and submitting a proposal to the State Board of Fisheries; the deadline for proposals is April 10. The proposal would be: when projected run estimates are at 600,000 fall chums or fewer, a second pulse protection would be put in place with no commercial fishing up to District 5. The goal would be to allow people in the upper river district to have more fall chums, which are necessary for food but also to feed dog teams, which are still heavily used in the area.

Council member Andy Bassich of Eagle stressed that due to the decline of Chinook, fall chum was becoming more important as a source of subsistence food for upper Yukon communities that do not have access to summer chum and little Coho salmon. The Council discussed precautionary measures to avoid inadvertent overharvest by the lower river commercial fisheries and to ensure fall chum escapement and subsistence needs will be met in the upper main stem Yukon River and also the Porcupine River. The proposal raises the threshold at which a commercial fishery would be opened from 500,000 to 600,000 chum in effort to avoid overharvest prior to the run strength being fully realized. There is no intention to create any allocation.

Council members from upper Yukon communities discussed the hardship they had experienced in years when the chum run was not as large as initially projected by fisheries managers and subsistence fishing in the upper river was closed or limited after sizable commercial harvest had already taken place in the lower river. Council member Bassich referred to this scenario as “oops management”

*MOTION to submit a proposal to Board of Fish as follows: In times of projected run estimates of 600,000 fall chum or less, second pulse protection should be put in place to -- with no commercial fishing up through District Five. Passed by unanimous vote.

Agency Reports

USFWS National Wildlife Refuge's Proposed Rule on Hunting

Mitch Ellis Director of Refuges provided a follow overview and discussion of the Refuges proposed rule. Both the EIRAC and WIRAC received a presentation on the proposed rule during their joint meeting on March 4th. At the request of the Eastern Interior Council, Mr. Ellis offered to stay on another day to discuss it further, answer questions and have more time for feedback from the Council. A power point presentation was prepared but the Council preferred to discuss the key points, ask questions, and provided feedback.

Mr. Ellis reiterated Refuges is consulting with Tribes and seeking feedback from the public and Councils and have been modifying the draft proposed rule based on that feedback. The final proposed rule will likely be published some time at the end of May and there will be a formal 60 day comment period at that time. In the meantime they are still seeking input.

The primary points of the proposed rule were to address predator control on refuge land where differences arise between State and Federal management and also to address closure procedures to create a single set of regulations for closures for public safety, research areas, protection of resources including wildlife or cultural resources.

Separate closure procedures for subsistence uses would still remain in place under the process by the Federal Subsistence Program. The proposed rule is not intended to affect current subsistence regulations. This rule will apply only to the general hunting regulations as long as it's consistent with the purposes of the Refuge.

The terms natural diversity, biological integrity, and environmental health were discussed with the Council. Mr. Ellis noted where the language and policies originated from, noting the natural diversity phrase comes directly from ANILCA and congressional record and is a purpose for every Refuge in Alaska to maintain natural diversity on Refuges. The biological integrity and environmental health comes directly from the National Wildlife Refuge System Improvement Act, which was passed in 1997. And so the regulations in 50 CFR 18 36, these closure procedures haven't been updated for decades.

The Refuge is proposing to enact these policies in regulation with guiding criteria so that managers have clearly defined regulations to guide how they institute closures. I think it's in the public's interest to know exactly what the framework is on those closures.

The Council discussed at length concerns about making policies into rigid regulations and loss of subsistence opportunity by elimination of certain methods or means currently utilized by rural residents on refuge lands. The Council stressed concern for loss of opportunity for rural residents that hunt under general state regulations that would be affected by the proposed rule. Many Council members expressed liberal hunting and trapping regulations allow for greater opportunity for harvest of meat and furs while also may assist in overall balance of predator and prey. Overall the Council was concerned about the proposed extended closure time without public review and also suggested that any wildlife closures be handled separately so that the public was alerted by any closure that may affect harvest opportunity. The Council feels that large portion of people's harvest will be eliminated by this rule and expressed that the rules directed at predator control overall would effect their subsistence harvest and ability to provide for their families.

*MOTION: The Council made a motion to oppose the proposed regulations and read into the record a statement that would be the main points to include in a letter on the Councils position and recommendations.

Motion Read into the record by Will Koehler: "This is the main body of a letter that we would send to the U.S. Fish and Wildlife Service our opposition to the proposed changes in public participation and closure procedures. The Eastern Interior Advisory Committee opposes all updates to the public participation and closure procedures proposed by the U.S. Fish and Wildlife Service. These changes reduce subsistence opportunities for Alaskans and rural residents. The ban on taking brown bear over bait is particularly restrictive as hunting these bears in the timbered areas is very difficult without bait. The Council opposes the proposed extension of temporary closures to five years because it believes the public comment and participation should be reviewed at least every 12 months. The Eastern RAC is very concerned that these proposed additions to regulation have no biological purpose and are part of a trend by the Agency to make access and activity in their areas more difficult for Alaskans and subsistence users. The RAC references the letters and comments by local Tribes, particularly the letter to Refuge Manager Bayless from the Northway Village Council".

The Council voted unanimously to submit a letter to Refuges encompassing the points in this motion and the key concerns expressed by the Council during the discussion on the proposed rule.

Arctic National Wildlife Refuge

Brian Glaspell, Refuge Manager provided the Council with a handout summary of the research and monitoring projects ongoing on the Refuge within the last year that may be of interest to the Council and were recently reported on last fall. New news is the final version of the Arctic National Wildlife Refuge Comprehensive Conservation Plan was released in January and the summary was provided to the Council in a handbook. Mr. Glaspell provided the key points of the wilderness designation and vision statement portion of the document and the second portion "meat" of the plan which provides management guidance, through nine broad goals and further defined objectives. The Refuge in consultation with appropriate parties addresses concerns about proposed actions that may be substantially or directly affect subsistence or cultural resources, rural subsistence or cultural uses or the rights of Tribes.

We got quite a bit of feedback on that goal. And it speaks directly to what the Council here is convened to do. And I'll just read that one outright. The Refuge in consultation with appropriate parties addresses concerns about proposed actions that may be substantially or directly affect subsistence or cultural

resources, rural subsistence or cultural uses or the rights of Tribes. So the important point here is this is one of nine key goals that's going to guide our annual budgeting and work planning process for the next 15 or 20 years.

I'd like to emphasize that a wilderness recommendation is just that. It takes an act of Congress to create any new wilderness. And unless and until Congress acts on the recommendation in this plan, we'll continue to manage the Refuge just like we do now. If at some future date Congress passed a bill and designated any additional portions of the Refuge wilderness, there's very little that would change in terms of public use and access or subsistence activities protected under ANILCA. Habitats that support the wildlife that they depend on would be protected in perpetuity but subsistence access to hunt would remain the same.

He has traveled with various other members of my staff and representatives Kaktovik, Arctic Village, Venetie, and Fort Yukon. We presented the details of this plan to the Tribal Councils and other community members in each of those places. He noted that while there has not been unanimous support for everything, they received generally pretty strong, positive feedback.

The Council asked questions about how the feedback on the plan was analyzed and was pleased at how the information was presented – with transparency that comments were analyzed by substantive recommendations or providing critical information that was missing, or point out a flaw in reasoning and not by volume such as form letters. Mr. Glaspell responded to Council questions, clarifying use of snow machines for subsistence - snow machines are authorized in wilderness and outside of wilderness for subsistence access protected in 1110(a) of 19 ANILCA and also authorized use Chainsaws for subsistence. Use of four-wheelers on the Refuge is prohibited.

Yukon Flats National Wildlife Refuge

Steve Berenzen, Refuge Manager provided the Council with summary handout and provided a brief update on research and monitoring projects within the Refuge.

Julie Mailer introduced herself as the new local hire from Fort Yukon. She has been working with kids in camps and then traveling, doing the AMBCC waterfowl survey, and a lot of other work. She expressed how much she enjoys working with the Refuge and her people. The Refuge hopes to secure funding to keep her position on beyond her current term.

Mark Bertram and wildlife biologist with Yukon Flats introduced work that's been done by Tyler Lewis one of the UAF PhD candidates the Refuge. Tyler Lewis provided a power point presentation and summarized his data collected from 2010 to 2012 focused on the wetlands out on Yukon Flats and looking at some of the long term changes that have been observed. Yukon Flats has about 40,000 lakes out there, which are major breeding area for waterfowl in the summer. But habitat concerns are of interest due to increased forest fire activity as a major natural disturbance. The study investigated changes to the lake habitat and food chain resulting from increased fire activity.

Tetlin National Wildlife Refuge

Sean Bayless, refuge manager for Tetlin National Wildlife Refuge and deputy project leader and supervisory wildlife biologist for Jerry Hill. This is Sean's second EIRAC meeting and Jerry's first since he transferred to Tetlin from four years of work in McGrath.

Mr. Bayless and staff provided a brief overview of key wildlife research projects they have been involved with. Last fall they began a lynx study with refuge biologist Nate Berg as PI. They have been conducting a moose survey cooperatively with the ADF&G and Wrangell-St. Elias National Park and had good

success with good weather on that. The study is designed as part of the Chisana Caribou Management Plan to better understand predator prey relationships within the Refuge.

The refuge provided updates on subsistence moose and caribou hunts, season and permits issued. For the caribou herd, 84 permits were issued with the caribou hunt that started late October. That's a varying start date based on where we see the caribou and if there is any mixing between the Nelchinas and the Mentasta Herds. We're focusing on Nelchina caribou. The hunt typically runs through April unless radio telemetry shows any mixing with the Mentasta herd it will be closed for that reason.

Yukon-Charley Rivers National Preserve

Marcy Okada, Subsistence Coordinator, provided an update for Yukon-Charley Rivers National Preserve research and monitoring projects.

The last moose survey that was conducted on Yukon-Charley was in 2012. They are planning to conduct another survey in 2016. Surveys conducted in Yukon-Charley Rivers in the fall of 2012 show the population of moose dropping back down from an above normal increase in 2009 to a near the long term average of approximately 936 moose.

The last Dall sheep survey was conducted in 2009. The Park hopes to complete a sheep survey this summer if funding is available. They recognize that there is a need for a new sheep survey in the Preserve, especially since the EIRAC had submitted a proposal for customary and traditional use of Dall sheep in Yukon-Charley.

The Wolf Monitoring Project is winding down. There are currently three collared wolves in the Preserve. There is about 22 years of data and are working on a new protocol to monitor wolves and their ecology within the Preserve.

The Central Arctic Inventory and Monitoring Network, which is a branch off of the National Park Service, has conducted several vegetation and habitat surveys. A soil survey was completed in 2014 and there are ongoing vegetation mapping and fire ecology studies within the Preserve. Those studies are conducted every summer field season.

Wrangell-St. Elias National Park and Preserve

Barbara Cellarius, Anthropologist/Subsistence Coordinator, provided the Council with written updates on the Chisana Caribou herd which were covered at the fall meeting. A four-page summary of the Community harvest assessments in Park-affiliated communities of Gakona, Chitina, McCarthy, and Kenny Lake was also provide to the Council. The full report completes collaborative work with ADF&G for communities in the Copper Basin and is available if anyone is interested. Community harvest survey was also recently conducted with the community of Northway and those results will be reported in the future.

Barbara Cellarius has been working on a Nabesna community history with Mt. Sanford Tribal Consortium and the Cheesh'na Tribal Council to do a narrative report about Upper Ahtna ties to the northern part of Wrangell-St. Elias. That publication is in the process of being printed copies will be available at your next meeting.

Also the Park is getting started on a wilderness stewardship back country management plan and will be initiating the public involvement on that this summer. A report with Federal subsistence hunting permits issued by the Park was provided with a basic breakdown of type of permit, how many people hunted,

how many animals were harvested.

Wildlife biologist Judy Putera provided a population estimate for the Chisana Caribou Herd. Approximately every three years a census is conducted then composition counts conducted in between. The population appears to have remained stable.

Denali National Park and Preserve

Amy Craver provided updates on highlights of the Park and SRC. Handouts were provided for an overview of the Denali research and monitoring projects and report which include a Denali local knowledge of climate change project and another student looking at understanding subsistence use and identity construction in the communities surrounding Denali brief overview of current moose and caribou research was also provided.

Amy Craver is working with Ray Collins and Telida Village Council on a place name project on the Upper Kuskokwim River areas.

As part of the Denali Park 2016 Centennial Initiative is working to make the Park relevant to its local communities and users and neighbors such as engaging local kids to be more actively involved in the Park.

The Denali Subsistence Resource Commission met in Fairbanks at the end of February. Council member Lester Erhart is on the Denali SRC and attended this meeting. Discussion included the request by subsistence residents for ORV use for retrieval of moose in the park. It was noted that there was much more involvement by Denali NPS upper management on subsistence this year. Much of the upper management is new and a new superintendant Don Striker who has been with the park for a year and a half now has been actively reaching out to meet with local area Tribes and subsistence communities. The SRC had recommendations for funding subsistence projects as part of the centennial such as a potlatch Kantishna and elders and youth camp program around the Nicholai community sheep harvest recently passed by the FSB. A handout was also provided on a “Women in the Park” history paper that featured local area residents.

The Council expressed positive feedback and appreciation for all the community and subsistence research reports and handouts and they were very interested in and supportive of these projects and opportunity to discuss it at the RAC meeting.

Alaska Department of Fish & Game

Rita St. Louis, planner, provided a brief update on the wood bison reintroduction describing how approximately 50 bison would be flown into Shageluk on cargo planes. The bison will be held in pens for “soft release” and then lured about 5 miles away with food. Area biologists and communities have been assisting with the planning and building of the pens.

Rita St. Louis highlighted the spirit of cooperation that has been a big part of the planning process and 10-j ruling. State and Federal managers, Tribal and Native Corporation representatives and over 28 interest groups came together and met with a professional facilitator and worked together to create the wood bison reintroduction and management plan. Many expressed just how exciting and encouraging the collaborative process has been – very positive feedback all around for the consensus building with such a large and diverse group.

Bureau of Land Management

Ruth Gronquist wildlife biologist with the Eastern Interior Field Office Bureau of Land Management

provided an overview on the joint management of the Fortymile Caribou Herd. This has been a collaborative process (with many EIRAC representatives involved) for many years starting with some management planning back in 1995.

Most of the caribou stayed in Alaska this year, unlike last year. They are spread out right now pretty much from the Steese Highway across to the border, but avoiding that area north of the Fortymile Bridge and a great deal of the Yukon-Charley Preserve. A census has not been done since 2010 due to weather and fires but the fall estimate was about 50,000 to 55,000 caribou in this herd.

Council member Bill Glanz expressed he thought the caribou season went well this winter hunt. He felt Jeff Gross and area managers did an excellent job in jointly managing the Fortymile herd.

Rita ST. LOUIS, ADF& also added an update on the Fortymile Coalition successfully securing approval for 30 permits for a youth hunt that would let the kids hunt wherever the caribou are. The concept was taken to the Board of Game and they approved discretionary authority that wherever the caribou are, that the kids could hunt. She had the opportunity to meet some of the families and the kids were so excited to get their first caribou – it was a very positive experience for all.

Ruth Gronquist provided an update for Jeanie Cole on the BLM Eastern Interior Management Plan. Public scoping initially began in 2008. Right now they are in the process of writing the analysis for our proposed alternative which will look more like Alternative B. (In 2012 – 2013, the EIRAC drafted several letters and formed a working group to work with their communities and develop recommendations on this management plan) BLM has nearly finished incorporating public comment.

Since the draft RMP proposed a nomination was made during the public comment period to create an area of critical environmental concern (ACEC) for the Mosquito Flats for various reasons. It will be evaluated on criteria for whether it meets the relevance and importance to be designated and ACEC and then what kind of management can be applied to protect those relevant resources. The Fortymile ACEC was also expanded primarily protect caribou and sheep.

The Council discussed caribou management in the area and changes that have been made to harvest permits to protect the herd around road access areas. Some Council members requested more monitoring to better understand high pressure areas particular on sensitive or declining herds.

Office of Subsistence Management

Carl Johnson provided staffing updates for many of the ongoing OSM vacancies with highlights on the new Native liaison, Orville Lind, and also new Anthropology Division Chief Jennifer Hardin.

Update on All Councils meeting set for Winter 2016. Planning for all 10 Councils to meet in Anchorage at the same time is underway. Joint meetings with all Councils on common subjects and breakout session by common topic by region (e.g. Yukon fisheries) and also educational workshops requested by Councils are being developed such as in depth background on ANILCA, Tribal Consultation policy, Panels on various subsistence regulations, management groups and how they interact (e.g. State AC's, Alaska Migratory Bird Co-management Council etc.)

*Review and approve Draft FY2014 Annual Report**

The Council reviewed and approved its draft annual report at the conclusion of the meeting.

The Council discussed the WIRAC report topic (addressed during the joint meeting on March 4) of challenges experienced by rural residents with accessing regulations.gov to submit proposals or comment on regulations. The Council agreed with these difficulties and would also like to request less cumbersome access in their Annual Report.

The Council also revisited the discussion of a hunter education program which was addressed in their previous annual report and ideas and solutions discussed with the WIRAC at their joint meeting the previous day on March 4th. Seeking engagement and a clear commitment from the Federal Subsistence Program in this regard the Council wishes to write a letter to OSM and the Federal Subsistence Board on the ideas and next steps to be taken to pursue hunter education/ etiquette across user groups and what support OSM can provide to achieve this.

Closing comments

Council members shared their appreciation for the opportunity to meet jointly with the Western Interior Council the day prior and discuss common issues on the Yukon. The Council was very pleased to have the participation of the many students attending the UAF Tribal Management class and it greatly increased representation from the many rural communities in the region.

Council members expressed that they would like to have more time for public and Tribal input at the meeting. The Council shared that they felt it was a priority to have ample time for discussion and information sharing with the public and perhaps less time spent on agency reports.

Future Meeting Dates*

Fall 2015 Meeting Dates: October 22 and 23, 2015 was selected to be held in Fairbanks. The dates were difficult to arrive a time after fall hunting season but before freeze up conditions that make it difficult for travel. The Council also worked around overlapping SRC and Southcentral RAC meeting dates.

Winter 2015 Meeting Dates: March was discussed as the best timeframe for an all Council meeting

The meeting adjourned by unanimous consent.

I certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

Eva Patton, 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 2015 public meeting. Any corrections or notations will be incorporated in the minutes of that meeting.



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

Federal Subsistence Board News Release



Forest Service

For Immediate Release:
July 29, 2015

Contact: Deborah Coble
(907) 786-3880 or (800) 478-1456
deborah_coble@fws.gov

Federal Subsistence Board work session summary

During its work session held on Tuesday, July 28, 2015 the Federal Subsistence Board (Board) discussed deferred Request for Reconsideration RFR14-01. The motion to accept the State's request for reconsideration failed unanimously with a vote of 0-8. The Red Sheep and Cane Creek drainages will remain closed to non-Federally qualified subsistence users during the Aug 10-Sept. 20 sheep season in the Arctic Village Sheep Management Area of Unit 25. No further public comments were received regarding the issue at this work session.

The Rural Determination Process briefing was divided into three phases. Phase I addressed the Board's recommendation on the current secretarial proposed rule. The Board voted to recommend to the Secretaries to adopt the proposed rule as written. Phase II was determining a starting point for non-rural communities/areas. The Board voted to publish a direct final rule adopting the pre-2007 non-rural determinations. Phase III was direction on future non-rural determinations. The Board voted to direct staff to develop options to determine future non-rural determination for the Board's consideration. All three requests passed unanimously (8-0). OSM staff is expected to have a draft of options for the Board by the January 2016 meeting.

The Ninilchik Traditional Council submitted requests concerning the Kenai River gillnet fishery to the Board. The Board voted 7-1 to direct USFWS to continue working with NTC on an operational plan for the fishery. The request to rescind USFWS in-season manager's delegation of authority failed unanimously in a 0-8 vote. The request to reverse the emergency special action that closed the subsistence fishery for Chinook Salmon on the Kenai River failed in a 4-4 vote. NTC's final request to remove or amend current regulatory language on the Kenai River gillnet fishery was deferred and may be addressed during the next regulatory cycle.

Also discussed today during the work session was the 10 Subsistence Regional Advisory Council's Annual Report Replies. The RAC nominations discussion will occur during a closed executive session today, July 29, 2015 and is not open to the public.

1011 East Tudor Road MS-121 • Anchorage, Alaska 99503-6199 • subsistence@fws.gov • (800) 478-1456 / (907) 786-3888
This document has been cleared for public release # 1807292015.

Additional information on the Federal Subsistence Management Program may be found on the web at www.doi.gov/subsistence or by visiting www.facebook.com/subsistencealaska.

Missing out on the latest Federal subsistence issues? If you'd like to receive emails and notifications on the Federal Subsistence Management Program you may subscribe for regular updates by emailing fws-fsb-subsistence-request@lists.fws.gov.

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Options for Board Recommendation on Current Secretarial Proposed Rule

The Board has four options for consideration:

1. Adopt as written;
2. Reject,
3. Adopt with Modification; or
4. Adopt and include in the preamble, direction for OSM and the ISC to develop a policy to address future nonrural determinations.

Program staff recommend the proposed rule be adopted as written. This action would be in line with the majority of the Regional Advisory Councils recommendations and public comments. It would also provide the shortest timeline and greatest opportunity for the resolution of this issue prior to the May 2017 deadline. If the Board does not take action prior to the deadline, communities that were selected to change from rural to nonrural in the 2007 final rule will become effective.

Options for Board Action to Determine Start-point for Nonrural Communities/Areas

The Board has three options to address rural determinations following action on the proposed rule. *If no action is taken, the 2007 final rule will become effective in May 2017.*

1. Initiate a direct final rule to adopt the pre-2007 rural determinations;
2. Initiate normal rulemaking to adopt an earlier rural determination;
3. Initiate rulemaking that would not address a start point and address each community individually.

Program staff recommend the Board initiate a direct final rule that would adopt the pre-2007 rural determinations. This action would resolve any current issues with communities/areas that were changed to nonrural in the 2007 final rule. If significant negative response from the public occurred, the direct final rule could be withdrawn and normal rulemaking could be undertaken. This option provides the shortest timeline and greatest opportunity for the resolution of this issue prior to the May 2017 deadline.

Options for Board to Direct Future Nonrural Determinations

To address future nonrural determinations, the Board has two options. The Board may direct staff to develop a draft nonrural determinations policy on how future determinations will be made; or, the Board may initiate rulemaking to address future determinations.

Program staff recommend the Board direct a policy to be drafted to address future nonrural determinations. This action will allow the greatest flexibility for Board action and the inclusion of regional variations. This option addresses concerns raised by some of the Councils (what the process of future nonrural determinations will be). Additionally it would require less time and the policy could be revised without formal rulemaking. Potential policy components could address nonrural characteristics with weighting potential that would accommodate regional variation and criteria for initiating a review of a community or area. The rural subcommittee, whose membership consists of program staff and ISC members, would develop the policy with input from the Councils, tribes, and public over the next 18 months with a goal of adoption by the Board in early 2017.

Rural Determination Recommendation Phases July 28, 2015

Phase I
Options for Board Recommendation on Current Secretarial Proposed Rule

Board Option	Pro	Con	Timeline	Notes
1. Adopt as written	<ul style="list-style-type: none"> - Shortest timeline - Majority of comments support 	<p>Lacks guidance on future actions</p>	<p>Publish mid-August 2015 (timeline is based on how long it would take staff to process the final rule; the response time from the Secretaries will be critical in any timeline)</p>	<ul style="list-style-type: none"> - This option provides the greatest opportunity for the Board to resolve this issue well prior of the May 2017 deadline - Guidance for future actions could be addressed in preamble of final rule
2. Adopt with directive to develop/maintain policy	<ul style="list-style-type: none"> - Would address some of the public comments - Likely will meet proposed timeline for rule completion 	<ul style="list-style-type: none"> - Would probably add 60 days to the publication date - Secretaries could direct another round of public comments, adding considerable time and possibility that will not meet intended timeline for decision making 	<p>Publish October 2015</p>	<ul style="list-style-type: none"> - This option may not meet the May 2017 deadline if the Board is directed to allow for additional public comment - The preamble could address the Board's policy making plan (if that option is selected)
3. Adopt with substantial modification (a) RAC deference (b) List nonrural criteria	<ul style="list-style-type: none"> - Would address some of the public/RAC comments 	<ul style="list-style-type: none"> - Goes against Secretaries' intent to simplify the process - Would likely require additional public comment period - May require additional proposed rule, which could affect ability to meet May 2017 deadline 	<p>Publish November 2016</p>	
4. Reject		<ul style="list-style-type: none"> - 2007 final rule becomes effective on May 7, 2017 - Does not follow Secretarial directive to address rural issue - Does not address the majority of public comments received 	<p>No action to be taken</p>	

Rural Determination Recommendation Phases July 28, 2015

Phase II
Options for Board Action to Determine Start-point for Nonrural Communities/Areas

Board Option	Pro	Con	Timeline	Notes
1. Direct final rule adopting the nonrural communities pre-2007 final rule	- Shortest timeline - Provides foundation for nonrural	Possible public disapproval due to lack of current public input	Publish September 2015	Communities that were ruled as nonrural in 2007 final rule would become rural
2. Initiate new formal rulemaking to revert to pre-2007 rural determinations	- Would have RAC and public comment periods	Process could take up to a year to complete	Publish July 2016	
3. Initiate new formal rulemaking with no “start point” and address each nonrural community on a case by case basis.		- Process could take 2+ years to complete - 2007 final rule becomes effective on May 7, 2017	Publish July 2017 or later	Communities selected in 2007 final rule to change status from rural to nonrural become nonrural

Phase III
Options for Board to Direct Future Nonrural Determinations

Board Option	Pro	Con	Timeline	Notes
1. Direct staff to draft policy on nonrural determinations	- Allows greatest flexibility for Board actions and the inclusion of regional variations - Requires less time than formal rulemaking		Would depend on Board’s direction for public, RAC and Tribal input	
2. Direct staff to initiate formal rulemaking to address future nonrural determination		Any future revisions would require formal rulemaking	Approximately 1 year	



Federal Subsistence Board

1011 East Tudor Road, MS121
Anchorage, Alaska 99503



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

FOREST SERVICE

SEP 02 2015

FWS/OSM 15054.PM

Mr. Sam Cotten, Commissioner
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, Alaska 99811-5526

Dear Commissioner Cotten:

This letter is to inform you of the action taken by the Federal Subsistence Board (Board) on your request for reconsideration, RFR14-01 dated June 17, 2014, addressing Wildlife Proposal WP14-51. The Alaska Department of Fish and Game requested that the Board reconsider its actions on WP14-51, which requested reopening of the Red Sheep and Cane Creek drainages in the Arctic Village Sheep Management Area of Unit 25A to non-Federally qualified subsistence users August 10 through September 20, while also requiring hunters to complete a State-approved hunter ethics and orientation course.

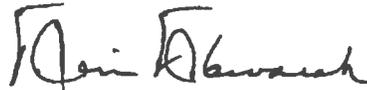
Under Federal regulation 50 CFR Part 100.20, the Board will accept a request for reconsideration if it is received in a timely manner, is based upon information not previously considered by the Board, and demonstrates that the existing information used by the Board was incorrect, or demonstrates that the Board's interpretation of information, applicable law, or regulation was in error or contrary to existing law.

While the request was received within the time required, the Board has concluded that none of the claims in the request met the criteria to warrant further reconsideration as set forth in 50 CFR Part 100.20, and the request was therefore denied. Enclosed is a copy of the Interagency Staff Committee recommendation and the threshold analysis, which the Board used in reaching its conclusion.

Commissioner Cotten

If you have any questions, please contact Eugene R. Peltola, Assistant Regional Director for the Office of Subsistence Management, at (907)786-3888.

Sincerely,



Tim Towarak
Chair

Enclosures

cc: Federal Subsistence Board

Eugene R. Peltola, Jr., Assistant Regional Director, Office of Subsistence Management
Chuck Ardizzone, Deputy Assistant Regional Director, Office of Subsistence Management
Amee Howard, Policy Coordinator, Office of Subsistence Management
Carl Johnson, Council Coordination Division Chief, Office of Subsistence Management
Council Coordinator, Eastern Interior Alaska Subsistence Regional Advisory Council
Chair, Eastern Interior Alaska Subsistence Regional Advisory Council
Council Coordinator, North Slope Subsistence Regional Advisory Council
Chair, North Slope Subsistence Regional Advisory Council
Drew Crawford, Federal Subsistence Liaison, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

DRAFT THRESHOLD ANALYSIS REQUEST FOR RECONSIDERATION RFR14-01

ISSUE

In response to a proposal (WP12-76) submitted and supported by the Eastern Interior Alaska Subsistence Regional Advisory Council, and also supported by the North Slope Alaska Subsistence Regional Advisory Council, the Federal Subsistence Board (Board) closed sheep hunting in the Red Sheep Creek and Cane Creek drainages in the Arctic Village Sheep Management Area (AVSMA) to non-Federally qualified users. The AVSMA is within Unit 25A and was closed to non-Federally qualified users for sheep hunting for the entire Aug. 10–Apr. 30 season. The State season would have normally run from Aug.10–Sept. 20. The State of Alaska subsequently submitted a proposal (WP14-51) in which the State sought to lift that closure and require hunters to complete a State-developed hunter ethics and orientation course. The Board rejected the State’s proposal at its January 2014 public meeting. There were no specific details about the ethics and orientation course provided to the Board. Subsequently, the Board members considered the proposed alternative solutions and determined they were inadequate to resolve the problem of limited subsistence opportunity (FSB 2014). In a letter dated June 17, 2014, the State submitted a timely request for reconsideration of the Board’s action on WP14-51 (also referred to hereafter as “RFR” or “petition”).

The Board will accept a request for reconsideration only if the request meets one or more of the following criteria from 36 CFR 242.20(d) and 50 CFR. 100.20(d) (Appendix A.):

- Provides information not previously considered by the Board
- Demonstrates that existing information used by the Board is incorrect
- Demonstrates that the Board’s interpretation of information, applicable law, or regulation is in error or contrary to existing law

BACKGROUND

In submitting WP12-76, the Eastern Interior Alaska Subsistence Regional Advisory Council (Eastern Interior Council) stated that the Red Sheep Creek and Cane Creek drainages were important subsistence

and cultural areas for residents of Arctic Village, and that the influx of non-Federally qualified users into these drainages interfered with traditional uses and practices of Arctic Village residents.

The establishment of the AVSMA and the opening and closing of sheep hunting in the Red Sheep Creek and Cane Creek drainages to non-Federally qualified users have been before the Board eleven times since 1991 (see WP12-76 Appendix A for a listing of proposals). Proposals WP12-76 and WP14-51 were the tenth and eleventh time the Board considered issues related to sheep hunting in these drainages, respectively. Over this time, a substantial record has been established (e.g., FSB 1991, 1995, 2006, 2007, 2012, 2014). Residents of Arctic Village have testified repeatedly concerning their use of the Red Sheep Creek and Cane Creek drainages (e.g., EIRAC 2006: 125-135) and have sought to protect their use of the sheep by requesting closures to non-Federally qualified subsistence users. In response, other user and interest groups have been trying to keep these drainages open to non-subsistence users. The issue has been contentious.

In 1995, the AVSMA was closed to sheep hunting to all but Federally qualified subsistence users and was expanded to include the Red Sheep Creek and Cane Creek drainages. The initial closure was established to provide for continued subsistence uses of sheep in the area (FSB 1995). In 2006, the Alaska Department of Fish and Game (ADF&G) submitted proposal WP-06-57, which requested opening the AVSMA to all hunters. The Board rejected the proposal in May 2006, but requested that the Arctic National Wildlife Refuge staff conduct a sheep population survey within the affected area. The Board intended to revisit the issue at its May 2007 meeting, pending the results of the population survey and a revised analysis.

In July 2006, the U.S. Fish and Wildlife Service submitted Wildlife Special Action WSA06-03, which requested that the closure to non-Federally qualified users for harvesting sheep in the Red Sheep and Cane Creek drainages be lifted during the Aug. 10–Sept. 20 portion of the 2006 season. This request followed a commitment by the Board to address the closure to all but Federally qualified subsistence users in the AVSMA following completion of a sheep population survey. The survey revealed that the sheep population in these drainages could support harvest by both subsistence and non-subsistence hunters; therefore, the Board approved the Special Action effective for the 2006 season. Subsequent to this action on Special Action WSA06-03, ADF&G submitted Proposal WP07-56, which requested the Federal closure within the Red Sheep and Cane Creek drainages be lifted permanently. The Board adopted this proposal in May 2007 (FSB 2007:305).

In January 2012, the Board adopted wildlife proposal WP12-76, which closed the Red Sheep and Cane Creek drainages to non-Federally qualified users for sheep hunting. Both the Eastern Interior and the North Slope Regional Advisory Councils supported the closure. Eight Arctic Village residents testified in favor of the closure in person at the Eastern Interior Council meeting and ten residents testified by teleconference; four people testified in favor of the closure at the Board meeting (FSB 2012:191). The Yukon Flats Fish and Game Advisory Committee supported closing the area. One Board member (the Regional Director of the U.S. Fish and Wildlife Service) emphasized at the Board meeting that the Red Sheep and Cane Creek area falls entirely within the Arctic National Wildlife Refuge or Native allotments. He made a motion to support the closure with the following justification: 1) “Pressure from non-local hunting is affecting the use of and access to traditional prime sheep hunting areas and camp area[s]”; 2) the State’s proposal to require hunter education and ethics orientation did not “go far enough”; 3) the activities in the area by non-Federally qualified users “have resulted in displacement of sheep, pushing them out of range which has then prevented Federal subsistence hunters from being able to harvest sheep”; and 4) the Arctic National Wildlife Refuge staff supports the closure (FSB 2012:224-226). The Board passed the motion unanimously.

The Board subsequently rejected the State’s proposal (WP14-51) to lift the closure and require hunters to complete a State-developed hunter ethics and orientation course, a requirement adopted by the State.¹ The State responded with this request (RFR14-01) to the Board to reconsider its decision.

REGULATORY LANGUAGE REGARDING REQUESTS FOR RECONSIDERATION

The applicable regulatory language associated with requests for reconsideration can be found in **Appendix A**.

PRELIMINARY ASSESSMENT OF REQUESTOR’S CLAIMS

The State bases its request for reconsideration on a number of claims, some of which address the Board’s criteria for accepting a request for reconsideration, others of which address other issues. The form of the State’s request, however, has made it difficult to relate each of the State’s arguments to each specific criterion the Board considers in accepting a request for reconsideration. For instance, the State’s petition

¹ 5 AAC 92.003 Hunter education and orientation requirements. (i) Before a person hunts within the Red Sheep Creek/Cane Creek portion of the Arctic Village Sheep Management Area of Unit 25A, that person must possess proof of completion of a department-approved hunter ethics and orientation course, including land status and trespass information. Note that although in State regulation, such a course has not been developed.

refers to “unfounded statements,” “egregious” evidentiary failures, “unsubstantiated comments,” “buried” evidence, a situation where the Board “leap” to conclusions, “selective and misleading presentation of the evidence,” and reliance on “rumors and hearsay,” as forming the basis for the Board’s decision. While each and every such reference is not necessarily cited herein, the State’s general contentions are collectively analyzed when considering whether or not there is information not previously considered by the Board; demonstrates that the existing information used by the Board was incorrect, or the Board’s interpretation of information was in error.

Criterion 1. Information previously not considered by the Board

Throughout its petition, the State argues that the Board members either failed to consider or were not given certain relevant information that could have supported a finding that a closure is not necessary to provide a meaningful preference for Federally qualified subsistence users.

Claim 1.1

One of the State’s specific claims regarding inadequate information is as follows: “Particularly egregious is OSM’s [Office of Subsistence Management’s] failure even to report to the Board in 2014 the best and most recently available data, which was presented to the Eastern Interior RAC [Regional Advisory Council] but not to the Board” (Petition at 3.).

The information being referred to by the State came from Hollis Twitchell, Arctic National Wildlife Refuge Assistant Refuge Manager. According to the State, Mr. Twitchell informed the Eastern Interior Regional Advisory Council “that in several weeks he spent in the drainages in August and September of 2012 and again in 2013 monitoring use of the area, he *saw no local hunters in the area in 2012 and only one local hunter in 2013*” (emphasis in original; EIRAC 2013:262).

Preliminary assessment of Claim 1.1

The written analysis of WP14-51, which was presented to the Board at its April 18, 2014 public meeting and incorporated into the administrative record, contains the following passage:

At the Eastern Interior Subsistence Regional Advisory Council in Fairbanks, Alaska in November of 2013, Hollis Twitchell, the Assistant Refuge Manager and Pilot with Arctic National Wildlife

Refuge, discussed issues related to the Red Sheep and Cane Creek drainages. Mr. Twitchell spent several weeks in the area in August and September of 2012 to conduct law enforcement activities. There was a concern that non-Federally qualified hunters might access the closed area that summer since the State hunting regulations handbook had neglected to include information about the area being closed to sheep hunting for those users. Mr. Twitchell did end up making contact with a group that was actively hunting in the Red Sheep drainage. They did not harvest any sheep and left the area after being informed of the closure. Another party was contacted in relation to a trespass issue on a native allotment in the area. Similar work was carried out during the summer of 2013. Eight to ten parties were dropped off in the area and they hiked up the drainages to access other portions of the refuge. Therefore, the closed area continues to be used by non-Federally qualified users as an access point to other areas (EIRAC 2013: 260-264).

This passage does not address the number of locals (Federally qualified subsistence users) Mr. Twitchell saw over about five to six weeks in August and September, 2012, and over about two weeks in August and September, 2013. The State claims that the number of local hunters Mr. Twitchell did or did not see in the Red Sheep Creek and Cane Creek drainages constitutes “the best and most recently available data” concerning local use of the area. The Eastern Interior Council was clearly unconvinced that this information was sufficient to alter its decision to oppose WP14-51.

Moreover, the State fails to contextualize Mr. Twitchell’s observations. Portions of Mr. Twitchell’s comments to the Eastern Interior Council provide that context. Speaking of the fall of 2012, Mr. Twitchell noted:

We had no local individuals hunting up in Red Sheep Creek and Cane Creek that year. Water levels were very, very low and access to Red Sheep Creek was nearly impossible by any water crafts, so the only way to get [there] would have been by air and we didn’t have anyone [i.e. local hunters] coming into those particular drainages in the fall hunt. That’s not to say they didn’t go up there in the wintertime, but in the fall hunt we didn’t have anyone present that summer (EIRAC 2013: 262).

Because local hunters typically access Red Sheep Creek and Cane Creek drainages by boat, and not by airplane, their absence in 2012 should not be taken as indicating a general lack of local use of those drainages. To the contrary, the record is replete with testimonial evidence from local residents indicating

that they do, in fact, hunt sheep in the drainages. Arctic Village resident Louie John, for example, noted the following at the 2006 Eastern Interior Regional Advisory Council meeting:

I forgot to tell you that I hunted that area back in 2004 and we shot two sheep, subsistence wise. The reason why I never report it is I don't pay for license. And I think of it because I am a traditional Native man and I hunt for a living and I don't see why that I should go over there and pay for license, I don't know why. I'm sure that most all of Native Alaskans are that way too. But I hunted that area and I wrote it down and gave it to Joel Tritt to hand over to your department but I don't know if it ever got there (EIRAC 2006:125-126).

At the same Council meeting, a letter from Louie John was read into the record:

I went solo on sheep hunt up river from Arctic Village to narrow Red Sheep Creek, shot one small ram for my subsistence need. After I pack all the sheep meat back to the camp then I made a wood raft and floated back to Cane Creek to scout the area for any more sheep. I only saw one and it not [sic] went after it. Stayed for about three more days and then went back to the village because I don't want my sheep meat to spoil.

Spent about six days around Red Sheep Creek area and the mouth couple days, at the end of the trees at the creek above Red Sheep Creek, and then spend about three days at the mouth Cane Creek. I also have another plan to hunt sheep past Red Sheep Creek about August 2006, this time with another friend (EIRAC 2006:128-129).

Conclusion: In light of the fact that the information cited by the State was included in the written analysis that was presented to the Board, the provided information is not dispositive because it is contradicted in the record. There does not appear to be merit to this claim.

Claim 1.2

The State asserts that "OSM fails to mention contrary evidence" relating to the history of Arctic Village residents' use of Red Sheep Creek and Cane Creek drainages (Petition at Fn. 2. See also Page 4). The State also takes issue with the "testimony of Dr. David Jenkins, saying exactly the same thing in 2012 as in 2014," to wit, that "the public record supports the fact that Arctic Village residents have a long history of using Red Sheep and Cane Creek drainages and that it continues to be a culturally significant area and

there's public testimony and previous analyses which attest to the significance and the continued use of Red Sheep Creek area for sheep hunting" (Petition at Fn. 2. See also Petition at 4).

As contrary evidence concerning the residents' use or non-use of the drainages, the State points to testimony from a single person, Arctic Village elder Gideon James. In 2012, Mr. James noted to the Board that "Cane Creek and Red Sheep Creek is one of our historical places that our people have traveled to, you know, they don't actually go there every year but, you know, they know that the sheep is there to - for them when they need it" (FSB 2012:201).

Preliminary assessment of Claim 1.2

Mr. James' testimony is not new—it was provided to the Board in 2012. Nor does Mr. James testimony contradict the extensive public record supporting the fact that Arctic Village residents have a long history of using Red Sheep Creek and Cane Creek drainages for subsistence. To the contrary, it supports that statement.

Conclusion: Offering neither new nor contradictory information, there does not appear to be merit to this claim.

Criterion 2. The existing information used by the Board is incorrect

In its petition, the State argues that the administrative record does not provide factual support for the Board's finding that a closure is necessary to provide a meaningful preference for Federally qualified subsistence users (Petition at 2). Specifically, the State makes numerous claims that the Board uses information that is "sparse," "inconclusive," and "without support."

Claim 2.1

The State claims that both OSM and the Board "acknowledged that evidence of subsistence use of sheep in the greater AVSMA including the drainages is "sparse" (Petition at 1, 2.).

Preliminary assessment of Claim 2.1

The State mischaracterizes the Board's position. The Board was aware, from the OSM staff report presented by Chris McKee, that "data on the reported use of the sheep management area by Federally qualified users is sparse and just how many sheep are harvested by Federally qualified subsistence users in the sheep management area is unknown" (FSB 2014:490). The lack of information on reported use reflects local cultural practices, which have been slow to accommodate State and Federal permitting and reporting requirements; the relative absence of bureaucratically-derived information on reported use does not indicate a lack of use.²

Contrary to what the State has alleged, the substantial public record developed over more than twenty years indicates the importance and use of the area for local peoples (e.g., EIRAC 2006, 2007, 2011, 2013; FSB 1991, 1995, 2006, 2007, 2012, 2014). This public record was referenced in WP14-51 and in WP12-76 and formed part of the rationale for the Board's closure decision. Far from being "sparse," the public record is extensive and robust, and is further supported by recent Tribal consultations (FSB 2014b,). See below for specific examples.

Conclusion: There does not appear to be merit to this claim.

Claim 2.2

In furtherance of its contention that the information relied upon by the Board is incorrect, the State claims that "[t]he anthropological studies that OSM cites in its staff analysis are equally sparse and inconclusive, are presented without discussion, and as reported do not support closure" (Petition at 2.).

Preliminary assessment of Claim 2.2

The analyses of WP12-76 and WP14-51 cite a small but comprehensive number of anthropological studies, including Caulfield 1983, Dinero 2003, Dinero 2007, and Gustafson 2004. As with the relative lack of subsistence harvest data, the relative paucity of anthropological studies in the area is not indicative of a lack of local use, as the State seems to suggest. Indeed, the relevant studies cited in analyses of WP12-76 and WP14-51 indicate the historical importance of the area to local peoples. The State has

² Recent research on harvest tickets (Chapin 2014) indicates widespread underreporting, which may be indicative of a general phenomenon in rural Alaska and not simply one of Arctic Village and other nearby communities. In other words, the reliability of harvest ticket information as useful data must be assessed in conjunction with other sources of information, including household surveys, testimony from local peoples, and Regional Advisory Council meeting transcripts, among other data sources.

provided no evidence, nor any additional anthropological studies, that suggest that the information the Board relied on is factually incorrect.

Richard Caulfield's 1983 report on the history of sheep harvest among Arctic Village residents is worth quoting at length.

The communities of Arctic Village, Venetie, Chalkyitsik, and Birch Creek have all historically harvested sheep, according to local informants, but in recent decades sheep have been taken almost solely by Arctic Village residents in the Brooks Range. A "longstanding" tradition of sheep hunting exists for Arctic Village (Jakimchuk 1974, Tritt n.d., Peter 1981). Annual harvest for that community in recent years has probably averaged less than 10 animals. Traditionally sheep were taken using bow and arrow and, occasionally, snares. Sheep meat is stored by drying or by freezing, and is prepared as dry meat, by boiling or baking.

Sheep are generally taken near Arctic Village in early fall (late August or early September) or in early winter (November). Residents usually hunt sheep on foot from hunting camps or through the use of snowmachines. Occasionally chartered aircraft are used to reach sheep hunting areas. In early winter sheep are said to be easy to hunt, as they often move down off high rocky slopes into valleys. Sheep hunting requires considerable expenditures of time and energy to obtain a relatively small quantity of meat. In November 1981, for example, two hunters on snowmachines traveled over 100 miles from Arctic Village to obtain one sheep. Hunters returning with sheep meat; however, are afforded considerable prestige because the meat is said to be highly-desirable "Native food," particularly for the elders in the community. In Arctic Village, furthermore, an effort is made to have sheep meat available for the Christmas potlatch.

The continued availability of sheep, according to one Arctic Village resident, provides a sense of security much like "having money in the bank." While large numbers of sheep are not taken, local residents take satisfaction in knowing that a relatively stable and accessible resource is nearby should the need arise. In a culture where "hungry times" are still fresh in the memory of elders, this knowledge is said to be of considerable significance (Caulfield 1983:68-69).

Steven Dinero, in his 2003 study of the mixed economy of Arctic Village, noted that fourteen percent of Arctic Village households pursued the harvest of Dall Sheep (2003:152), and that Dall sheep hunters relied on ATV use, "given the time and distance that one must travel to Red Sheep Mountain (in the lower

Brooks Range) in order to hunt sheep.” He also recognized, following Caulfield (1983), that harvesting sheep is highly prestigious, “though difficult to accomplish due to...logistical constraints” (2003:156).

Conclusion: There does not appear to be merit to this claim.

Claim 2.3

As mentioned above, the State contends that the Board 2012 meeting materials and transcripts contain no discussion of or support for the observation that Arctic Village residents have a long history of using Red Sheep Creek and Cane Creek drainages. “Rather, they show OSM staff making the same unsupported and sweeping conclusions in meeting after meeting, repeating themselves and citing their previous unfounded statements until these statements are assumed to be correct” (Petition at 3.).

Preliminary assessment of Claim 2.3

The foundation of staff statements and conclusions includes the extensive public record, personal communications from village residents, personal communications from knowledgeable Federal agency staff members, professional anthropological publications, discussions at relevant Regional Advisory Council meetings, and discussions at Federal Subsistence Board meetings. All of these are referenced in the analyses of WP12-76 and WP14-51.

The 2012 Board meeting materials contain a lengthy discussion of the importance and use of Red Sheep Creek and Cane Creek by Arctic Village residents and their difficulties in meeting their subsistence needs. In addition, there was a summary of information derived from public testimony at the 2011 Eastern Interior Council meeting contained in the analyses. Information documenting the use of sheep by residents of Arctic Village from the analyses of WP12-76 and WP14-51 along with excepted testimony about the long history of harvesting sheep in these areas, the significance of the use, and the difficulties in conducting their customary and traditional use in these areas from both of these meetings are noted below.

WP14-51

Subsistence Considerations

Of the five communities with recognized customary and traditional uses of Dall sheep in Unit 25A, the residents of Arctic Village have the strongest tie to the Red Sheep and Cane Creek

drainages (USFWS 1993; see also Reed et al. 2008, Gustafson 2004, Dinero 2003). Sheep hunting is a “longstanding” tradition for Arctic Village residents, most of whom are Gwich’in Athabascan (Caulfield 1983:68, Dinero 2003, Gustafson 2004, EIRAC 2006, 2007, 2011), and the Red Sheep and Cane Creek areas have been a longstanding focus of this activity. Sheep are a prestigious subsistence resource and providing sheep meat to the community is highly respected (cf. Caulfield 1983 and Dinero 2003 for discussion). Sheep are also known as an important “hunger food,” that is, a food source that is critical when caribou are unavailable (Caulfield 1983, Dinero 2011 pers. comm., Gilbert 2011 pers. comm.).

Local people report increasing uncertainty of caribou migrations in recent years, declining quality of caribou meat, and increasing difficulty and travel distance to obtain moose in recent years: in light of this, local residents claim that sheep are an increasingly important resource (Gilbert 2011 pers. comm., Swaney 2011 pers. comm.) As noted by one prominent elder, “...when we have no caribou, that’s the time we have to go up [to get sheep]” (Gilbert 2011 pers. comm.).

The public record supports the fact that Arctic Village residents have a long history of using the Red Sheep and Cane Creek drainages for sheep hunting, and that it continues to be a culturally significant area to them. Extensive discussion included in previous proposal analyses (cf. Proposal 58 in 1993 and Proposal 54 in 1994) pointed to regular use of these drainages by residents of Arctic Village (USFWS 1993 and 1995). In the final report for a Fisheries Resource Monitoring Program project, Gustafson discusses the importance and continued use of the Red Sheep Creek Area for sheep hunting (Gustafson 2004). Testimony by Arctic Village residents in 2006, 2007, and as recently as 2011 at the Eastern Interior Regional Advisory Council meeting about hunting in the Red Sheep and Cane Creek drainages demonstrates continued (though sporadic) hunting. Discussions with Refuge Information Technicians from Arctic Village, other Arctic National Wildlife Refuge staff, researchers working in the area, and subsistence hunters from Arctic village also confirm continued sheep hunting in the Red Sheep and Cane Creek drainages (Bryant 2011 pers. comm., Dinero 2011 pers. comm., John 2011, pers. comm.).

There is a story about how Red Sheep Creek was named which illustrates the link between subsistence and religious practices and beliefs among the Gwich’in of Arctic Village. It also underscores the importance of this area to local people. The story relates Red Sheep Creek to the Episcopalian Church, a primary influential factor in establishing Arctic Village, and also sheds some light on why Arctic Village residents consider Red Sheep Creek a revered place (Dinero

2007, 2011 pers. comm.). The story begins that people were hungry and one day at the church someone spotted something moving in the brush. People thought they saw caribou, but upon closer inspection the people realized they were sheep. They were not just any sheep, but these sheep had red stripes, or what many say were crosses on their coats. The next day, the people followed the red sheep far into the mountains where they were finally able to harvest them. The hides of the sheep were kept and passed down because of their distinctive markings (Dinero 2011 pers. comm.). It is significant that the story of the red sheep links a prestigious subsistence resource (sheep) to traditional and modern beliefs and practices (i.e., the Church and hunting sheep along Red Sheep Creek). This demonstrates the complementary nature of subsistence to place, tradition, culture, and modern beliefs.

Because of the importance of this area to residents of Arctic Village, they have repeatedly argued that it should remain closed to non-Federally qualified users. They feel strongly that these lands are theirs, and that access should be limited. As one Arctic Village resident stated at a public meeting in 2006, “Those are our traditional lands, our traditional homelands, our traditional hunting grounds that our fathers and forefathers have hunted for generations and generations” (EIRAC 2006:130). Arctic Village residents have also long argued that the presence of non-Federally qualified users has affected their access and reduced their harvest opportunities (EIRAC 2006, 2011a; FSB 1991, 1995, 1995, 2006, and 2007; USFWS 1993, 1995, 1996, 2006, 2007; Swaney 2011 pers. comm., Gilbert 2011 pers. comm., John 2011 pers. comm.). Arctic Village residents have repeatedly told the Board that they believe that plane traffic and use by non-Federally qualified users has interfered with their ability to successfully hunt sheep in the Red Sheep and Cane Creek drainages. Residents reported that plane flyovers “spooked” sheep and that, “older rams can climb to higher elevations, making them more difficult to hunt” (USFWS 1993: 4, Proposal 58; see also USFWS 1994, Proposal 54 for additional discussion). These disturbances have also been related by local residents (Swaney 2011 pers. comm., John 2011 pers. comm., Gilbert 2011 pers. comm.). One study corroborates this type of disruption: Frid (2003) found that fixed wing aircraft disrupted resting or caused fleeing behavior in Dall sheep in the Yukon Territory during overflights. This disruption was of a longer duration during direct flight approaches.

In summary, there are no present conservation concerns to close Red Sheep and Cane Creek to non-Federally qualified users for sheep hunting. In the summer of 2015, Arctic National Wildlife Refuge staff will conduct a sheep survey in the Red Sheep and Cane Creek drainages to update their population status

(Wald 2015 pers. comm.). However, from the perspective of local users, there are cultural reasons to keep the area closed to non-Federally qualified users. Arctic Village residents believe that allowing non-Federally qualified users to harvest sheep in Red Sheep Creek and Cane Creek during the State's August 10 to September 20 season adversely affects their experience in their traditional hunting area, and impairs their ability to successfully harvest sheep (FSB 2012: 45-348).

The Eastern Interior Council met on October 11 and 12, 2011 in Fairbanks. A total of 14 people testified in support of Proposal WP12-76; six called in and eight testified in person (EIRAC 2011b: 18-29, 164-167, 314-368). The testifiers were from Arctic Village or had ties to Arctic Village. One other testifier, a sheep-hunting guide, was neutral on the proposal (EIRAC 2011b: 18-29). The testimony supported the information provided in this analysis in the cultural considerations section; however, there was some new information provided in the testimony. A summary of the new information is as follows:

- Community harvest: Two people testified that they would like to see the sheep hunt be under community harvest provisions (EIRAC 2011b:342 and 348). One person said that “we have asked repeatedly for a community harvest system and the feeling was that the [community harvest system]...would be less threatening” (EIRAC 2011b:348).
- Harvest seasons: An earlier season prior to the State hunt would not solve the problem because it is too warm to hunt sheep during that time period (EIRAC 2011b:349). The preferred time to harvest sheep is after a particular berry turns half red (EIRAC 2011b:349). Sheep meat is only taken in the fall (EIRAC 2011b:338). The Gwich'in name for November means sheep (the name for September means moose, and October means caribou) (EIRAC 2011b:338; 346-347).
- Origin of the name for Red Sheep Creek: The name in Gwich'in for Red Sheep Creek means “my mother's land” (EIRAC 2011b:338-339). There's a red streak in the back of Red Sheep Creek that comes from the red clay, which is high in minerals. The name for Red Sheep Creek comes from the red clay in the area, which the sheep suck. The red rock is used for its medicinal properties. The Gwich'in consider Red Sheep Creek to be special and that it cannot be replaced by anything else. The medicine is sacred to the Gwich'in (EIRAC 2011b: 319 and 343).
- Origin of the respect for sheep: Red Sheep Creek is sacred to the Gwich'in. The Gwich'in have a special respect for any animal that takes a long time to become an adult, like

sheep. Because of this respect, the only time the backdoor of the house is used is when sheep meat is brought into the house (EIRAC 2011b:342).

- Sheep meat is a delicacy reserved for elders: Sheep meat is a delicacy and is only eaten by the elders (EIRAC 2011b:338). One man noted that he was finally old enough to eat sheep, even though he hunted for them many times (EIRAC 2011b:352).
- Uses of sheep: All parts of the sheep are used; there is a “juicy little sack between the big toe and the other toe” that is used like lip gloss and a taste of it can provide energy. The best part of the sheep is the chest. The “skin” is incredibly warm (EIRAC 2011b:344-345).
- Trespassing/ Native allotments: Trespassing and leaving trash on one woman’s Native allotment occurred recently (she was there three months prior to the Council meeting) (EIRAC 2011b:337). There are at least three allotments in the Red Sheep Creek area and one airstrip on an allotment (EIRAC 2011b:333 and 342). One man noted that there are three allotments on the map the Refuge provided, but he said there are more than that in the area. Allotments are 160 acres (EIRAC 2011b:343) (FSB 2012: 349-350).

Conclusion: The Board relied on relevant and factual information. There does not appear to be merit to this claim.

Claim 2.4

One of the State’s contentions, reiterated in several places, is that “[T]here is no evidence in the record at all that subsistence users have been prevented from or impaired in meeting their subsistence needs by non-subsistence hunting in the area” (Petition at 3. See also Petition at 1, 4, 8-9).

Preliminary assessment of Claim 2.4

Residents of Arctic Village have provided public testimony over many years that non-Federally qualified users hunting sheep in the Red Sheep Creek and Cane Creek drainages impair their subsistence opportunities by displacing sheep to higher elevations.³ In addition, Arctic Village residents have described being crowded out of the area, as well as a cultural preference and practice of excluding themselves from areas in which non-Federally qualified users have established camps or are hunting. At

³ See Frid 2003 on the effects of helicopters and fixed wing aircraft on sheep.

the November 2013 Eastern Interior Council meeting, Mr. Firman spoke concerning the conflict with other hunters:

Like I said, if you are going to go hunting and there's multiple airplanes and 15 people standing there, you probably aren't going to camp here next to you guys, okay. That's just not the way people are going to – well, I'm going somewhere else (EIRAC 2013: 289).

The State cites testimony about the self-exclusion, but misinterprets that testimony as a “desire to exclude outsiders” (Petition at 6-7.). To the contrary, the public testimony quoted by the State shows that the presence of others has caused local peoples to be crowded out from the Red Sheep Creek and Cane Creek drainages (Petition at Fn. 4, quoting testimony by Bob Childers at the 2012 FSB meeting). Public testimony is referenced in the various proposal analyses, is readily available in transcribed form, and provides evidence of impaired subsistence opportunity. In making its determination to keep the drainages closed to non-Federally qualified users, the Board found this public testimony to be credible (FSB 2012; FSB 2014).

OSM wildlife biologist Chris McKee noted the following at the November 20, 2013 Eastern Interior Alaska Regional Advisory Council meeting:

Arctic Village residents have testified repeatedly that allowing non-Federally qualified users to harvest sheep in Red Sheep Creek and Cane Creek during the State's season dates adversely affects their ability to hunt in their traditional hunting area and impairs their ability to successfully harvest sheep (EIRAC 2013:253).

At the same meeting, Arctic Village resident Edward Sam testified as follows:

There used to be plenty of sheep that the older people talk to us about, Dall sheep, when there is no animal around or the hunting is scarce, we'll be dependent on [sheep]. When the caribou is not migrating to our community, we have to depend on sheep. Matter of fact there's no caribou this winter in the valley of Arctic Village area. The meat is so scarce and I don't like to hunt from the Native store either when there's sheep that I could hunt. Matter of fact I'm going hunting in two weeks depending on the condition of the ice in the river.

I have hunted sheep for the past 85 [sic] years or seasons. We have to hunt further into the mountain because there have been too many traffics or people hiking through there. You can

understand the sheep have 10 times more visual power than human beings. They could hear you two miles downdraft or updraft. They can smell you for three miles. So it's kind of hard when you have to go charter a plane and you have to hike into the mountain and sometimes you get nothing. It's kind of sad when you have to travel that far (EIRAC 2013:269).

Edward Sam goes on to emphasize the difficulty of subsistence hunting when others have greater access to the area:

My understanding is why are there so many landing area[s] in that area north of Red Sheep Creek which we depend on? You know, it's kind of hard when you have to compete with hunters, both hunters. They got more access. We don't (EIRAC 2013:269).

Two years earlier, Arctic Village resident Charlie Swaney also testified to the Eastern Interior Council. He spoke on behalf of the entire village.

I come here today as I speak for my people. Ever since Red Sheep was opened to hunting, we got nothing. We got no moose and we got no sheep. Nothing. Ever since all the plane activity started, we got nothing.

My uncle is in the back right here. His name is Gideon James. Last year he spent \$1500 on gas, just gas alone, so we could go hunt. No, we came back with nothing. Nothing.

Arctic Village is where we live. It's not like we can go down to the store and buy food. No. No. No way. We make very little. You know, last year and this year I made \$12,000 annual income. \$12,000. This year, too. Can you live off of that? Every one of you. Every one of you. \$12,000 annual income. Can you live off of that? That's what I made.

So when we go out there in the woods and we hunt, we hunt for our food. That's our lifestyle. That's our lifestyle. That's our tradition. We make dried meat, everything. When we get moose or we get caribou or we get sheep. That's our lifestyle. That's how we live. We're from there. We're from there. Arctic Village. Arctic Village. We live off the land. I tell you straight up right now, eye-to-eye, all of you. Eye-to-eye, all of you, we live off the land. That's our lifestyle. That's how we live. When I was kid, even my grandkids now, my kids, my grandkids, that's how they live. I tell you, eye-to-eye right now, all of you, that's how we live. That's our lifestyle.

Ever since that Red Sheep Creek is open up, nobody's gotten moose upriver. Nobody's gotten sheep up river. We travel 70 miles by boat as far as we could go, and from there we got to hike 8, 9 miles, try to go up there and get sheep. No, not this year. Nobody. No. Even this fall. Even this fall. How many people went upriver, tried to get moose. No. Nobody succeeded. That's because of all of that plane activity is flying over and chase them out. We live up there. We live up there. That's our life. Our life is up there. That's the way we live. Our life is up there. Come around and jeopardize our living. That's why we're here, because we're not getting nothing. We're not getting nothing. All that plane jeopardize our living. Our living. Our lifestyle. All that plane activity.

I speak for my people, the whole village. That's why they sent me down here, to speak in front of you. They -- I'm out there all the time. I'm out there all the time. That's why they sent me down here. They want me to speak for them. I speaking for my people. I love my people. That's my family. That's my family. All the people of Arctic Village, that's my family. We live off the land, and we want to continue living off the land.

All this plane activity that's going on up there in Red Sheep Creek, no, we can't get no moose. We can't get no sheep. There's nothing. They chase them away. They run away. They run away. We hike 6, 7 miles up there. Nothing. Can you imagine that, any of you? Can you imagine that? Hiking all the way up there, and stay up there 6, 7 days. No, nothing. Nothing. Nothing. That's what's happening right now. That's what's happening right now.

I come to you today. I ask you; close Red Sheep Creek, because Arctic Village, we live in Arctic Village land that's our lifestyle now. We want to go out and continue hunting, and to go out there and get sheep and go out there and get moose, but that's not possible right now. That's not possible right now. After all that plane activity up there, it's not possible.

My uncle, Gideon James, way up here in the back, like I told you, last year he spent \$1500 on gas money alone, just gas money. No, came back with nothing. Can all of you imagine that? We're paying \$10 a gallon of gas in Arctic Village. \$10 a gallon of gas. It's hard.

Red Sheep Creek is open right now and it make it even harder on us. I'm not just speaking for myself. I'm speaking for my people. I'm speaking for my kids, my grandkids, all my

grandchildren up there. Everybody. They call me Babba (ph). They call me grandpa. All those kids up there, they call me grandpa Babba. Babba. I'm speaking for them. I'm speaking for them.

We've got a life up there. Why does our life have to be jeopardized? Why? Just so somebody can charter a plane, spend \$1500, \$1600 to go up there and get sheep? Well, here, us, we're spending \$10 a gallon of gas and all that, and we go up there and we get nothing.

This is where we're from. This is our village. We go way up there and we get nothing, because all that plane activity chased all that sheep, all that moose away. I can't say any more to it with my kids, my grandkids. That's their future. That's their future. They -- what we're trying to teach them, we're trying to live off our land. (EIRAC 2011:39)

Bob Childers, executive director of the Gwich'in Steering Committee, succinctly noted the sense of displacement felt by Arctic Village residents: "We did a number of interviews with all the families that hunted in Red Sheep Creek and Cane Creek in the early 90s when we were first putting this together. And I was incredibly struck by the similarity of what almost everyone said to me. And it was really this kind of sense of discomfort, that they were sort of displaced from a place that was always there, and they didn't feel comfortable going back" (EIRAC 2011:349).

OSM policy coordinator David Jenkins reflected public testimony with an observation at the April 18, 2014 Board meeting, summarizing the breadth of available information:

The State argues that the issue is mainly a user conflict and a trespass issue, but a review of the testimony over the last 20 years from the Arctic Village residents and a review of the ethnographic literature and the historical literature indicates that it's not a trespass issue but it's an issue of access that these people have been describing... (FSB 2014:492).

Conclusion: There does not appear to be merit to this claim.

Criterion 3. The Board's interpretation of information, applicable law, or regulation is in error or contrary to existing law

The State correctly cites ANILCA Title VIII Section 815 and the Board's Closure Policy as providing the legal basis for the Board's decision. The Board's authority to act is as follows. Title VIII, § 815(3) of

ANILCA addresses the restriction on the take of fish and wildlife for nonsubsistence uses. The Secretaries have empowered the Board to implement Title VIII of ANILCA. Title § 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;

(16 U.S.C. § 3125(3)).

The Board's 2007 closure policy notes the following:

Proposed closures of Federal public lands and waters will be analyzed to determine whether such restrictions are necessary to assure conservation of healthy populations of fish and wildlife resources or to provide a meaningful preference for qualified subsistence users. The analysis will identify the availability and effectiveness of other management options that could avoid or minimize the degree of restriction to subsistence and non-subsistence users (FSB 2007).

Claim 3.1

“The application of the incorrect legal standards [by the Board] in 2012 flowed through to and tainted the 2014 action, since Board members voted against the State's 2014 proposal because they believed nothing had changed since 2012. The vote was zero in support and eight in opposition (EIRAC 2013:511). Board members' application of incorrect closure standards warrants the Board's reconsideration of its decision” (Petition at 6, citing FSB 2014 at pp. 505-06, 510.). As part of this discussion, the State takes issue with one Board member's verbal discussion of the Board's obligation to give deference to Council recommendations (Id. at 5.).

Preliminary assessment of Claim 3.1

The State's request to the Board is to reconsider WP14-51. The State did not file a timely request to the Board to reconsider WP12-76. It cannot use this request for reconsideration to alter the Board's decision on another proposal.

The key consideration in regard to this claim is whether or not the Board properly relied on the closure authority set forth in ANILCA Section 815(3). A careful review of the record demonstrates that the Board did not rely on incorrect closure standards. To the contrary, the record shows that the Board found that credible public testimony, in conjunction with a number of other sources of information, demonstrated that restrictions on non-Federally qualified users were necessary to continue subsistence uses of those sheep (FSB 2012:347, FSB 2014:504). Moreover, it does not appear from the record that the Council's recommendation was contrary to any of the three criteria set forth in section 805(c) of ANILCA that would have then allowed the Board to decline to follow that recommendation.

Conclusion: For these reasons, there does not appear to be merit to the State's claim that the Board applied incorrect legal standards in its action.

Claim 3.2

A major heading in the State's petition, and a recurring theme throughout, is that "[t]he Board considered irrelevant and unlawful evidence in making its decision" (Petition at 6.).

Preliminary assessment of Claim 3.2

The State argues that the closure was driven by the desire of local residents to exclude others and that "Congress did not intend the Board to consider, and the Board should have been instructed that it cannot consider the desires of local residents and hunters simply to exclude others from the area." The State also contends that the Board should have been instructed to consider, and should have considered, only the actual impacts on subsistence from hunting by non-Federally qualified users" (Id. at 6-8.).

As noted in previous assessments of various State claims, the Board found credible the extensive public testimony of knowledgeable local residents on the negative impacts to subsistence from non-Federally qualified users in the area. Far from being irrelevant, local ecological and cultural knowledge provide the factual basis for many of the Board's decisions. Indeed, Congress created the Regional Advisory Council system for the purpose of enabling local residents with knowledge of local subsistence practices to provide meaningful input into the decision making process (ANILCA Title VIII Section 805).

As there was substantial evidence on the record to support a factual finding by the Board that the presence and practices of non-Federally qualified users were hampering the continuation of subsistence uses by local Federally qualified subsistence users.

Conclusion: There does not appear to be merit to this claim.

Claim 3.3

One of the State's contentions is that "[e]ven if there had been a supportable reason for placing restrictions on non-Federally qualified users, the Board did not consider less restrictive options, including the potential effectiveness of the new State-approved hunter education class in minimizing the real and perceived conflicts with subsistence" (Petition at 8.). Another less restrictive option mentioned by the State would have been to restrict the time of the closures to only the first few days of the season (Id.). This other less restrictive option to restrict the time of closure was considered in 2012 and is not considered in this analysis.

Preliminary assessment of Claim 3.3

At its 2014 public meeting, the Board was presented with limited available information about the State-approved hunter education course. The staff analysis of the State's proposal, as read into the record, noted the following:

While the efforts of the proponents [of WP14-51] to require hunter education and ethics orientation are recognized as good faith efforts, such efforts do not go far enough to assure [sic] that Arctic Village residents have continued opportunity to harvest sheep in the Red Sheep and Cane Creek drainages and receive the benefits of a subsistence priority.

In addition, adopting this proposal would require Federal[ly] qualified users to take a State approved hunter ethics and orientation course which to-date has not been developed. However, the State intends to work with the affected users to develop this course (FSB 2014:491-92).

Jennifer Yuhas, representing the Alaska Department of Fish and Game, provided the State's perspective on the hunter ethics and orientation course (FSB 2014:499-501). Ms. Yuhas noted that "We want to make a difference here on Red Sheep Creek..." She goes on to say:

We're hearing about trespass, we're hearing about vandalism, we're hearing about things that aren't okay but what can we do as a Department. Well, the only thing we can manage are the hunters going up there so we came back and said, well, what about an ethics and orientation class... The State adopted this [class]. You've heard some Staff discussion, well, we can vote to oppose this and just keep it close[d] because the State doesn't have a class in place; that's a fairly contrived answer. There's no incentive for the local people to work with us when this is what they want, they want people out, so why would you work with us to reopen an area if the—if the condition is, once the class is in place then it can be reopened, then where's the incentive for that. No agency is going to expend the Staff time or the finances to put a class in place the locals don't want (FSB 2014:500).⁴

Having heard information about a proposed State-approved hunter education course, but no specific details of that course, the Board then had the opportunity to discuss this issue. It chose not to, suggesting that the Board members considered the proposed alternative solutions were inadequate to resolve the problem of limited subsistence opportunity.

The Board heard about various alternatives and then declined to adopt them, thereby inferring that the Board members considered those alternatives to be inadequate and consequently acted within their purview. However, a continued attempt to work with local communities on hunter education and orientation programs should be encouraged to foster positive relationships between all users to protect resources. The conceptual idea of a hunter's education and orientation course by itself was not sufficient to resolve the issue.

Conclusion: There does not appear to be merit to this claim.

SUMMARY

As discussed at some length, the State's various claims appear to be without merit. No new relevant information was presented for the Board's consideration. No information the Board relied on was shown to be factually incorrect. There was no demonstration that the Board's interpretation of information, applicable law, or regulation was in error or contrary to existing law.

⁴ At the Eastern Interior Regional Advisory Council meeting, Ms. Yuhas similarly provide the State's perspective: "The details of the full course have not been developed because we're not going to put efforts into the course for an area that's not open" (EIRAC 2013: 256).

OSM PRELIMINARY CONCLUSION

Oppose the request to reconsider WP14-51.

Justification

The State's claims individually and collectively fail to reach the level to trigger a request for reconsideration, as required by the Board's policy.

LITERATURE CITED

Caulfield, R. 1983. Subsistence land use in upper Yukon Porcupine communities, Alaska. Dinjii Nats'aa Nan Kak Adagwaandaii. ADF&G, Div. of Subsistence Tech. Paper No. 16. Fairbanks, AK. 252 pages.

Chaplin 2014 (from Page 8 of analysis)

Bryant, J. 2011. RIT Technician, ANWR, former resident Arctic Village. Personal communication: phone. July 2011.

Dinero, S. 2003. Analysis of a "Mixed Economy" in an Alaskan Native Settlement: The Case of Arctic Village. *The Canadian Journal of Native Studies* XXII, 1:135–164.

Dinero, S. 2007. Globalization and development in a post-nomadic hunter/gatherer Alaskan village: a follow-up assessment. *Polar Record* 43(226): 225–269.

Dinero, S. 2011. PhD. Anthropologist conducting research in Arctic Village. Personal communication: phone. July/August 2011. Philadelphia University, PA.

EIRAC. 2006. Transcripts of the Eastern Interior Regional Advisory Council Meeting. March 21, 2006. Fairbanks, AK. Pages 110–137.

EIRAC. 2007. Transcripts of the Eastern Interior Regional Advisory Council Meeting. March 20, 2007. Arctic Village, AK. Pages 95 ff.

EIRAC. 2011. Transcripts of the Eastern Interior Regional Advisory Council Meeting. March 3, 2011. Fairbanks, AK.

- EIRAC. 2013. Transcripts of the Eastern Interior Regional Advisory Council Meeting. February 20-21, 2013. Fairbanks, AK.
- Frid, A. 2003. Dall's sheep responses to overflights by helicopter and fixed-wing aircraft. *Biological Conservation* 110: 387–399.
- FSB. 1991. Transcripts of the Federal Subsistence Board. June 5, 1991. Anchorage, AK.
- FSB. 1995. Transcripts of the Federal Subsistence Board. Volume V. April 14, 1995. Anchorage, AK.
- FSB. 2006. Transcripts of the Federal Subsistence Board. September 5, 2006. Anchorage, AK.
- FSB. 2007 (see Pages 2, 8, and 12 of analysis)
- FSB. 2012. Transcripts of the Federal Subsistence Board. January 19, 2012, Anchorage, AK.
- FSB. 2014. Transcripts of Federal Subsistence Board. April 18, 2014. Anchorage, AK.
- Gilbert, T. 2011. Elder, resident Arctic Village. Personal communication: phone. August 2011.
- Gustafson, J. 2004. Traditional Ecological Knowledge of Subsistence Harvests and Fishes, Old John Lake, Alaska. Final Report No. FIS01-003. USFWS. Anchorage, AK.
- Jakimchuk, R.D. 1974. Distribution of Moose, Sheep, Muskox, and Furbearing Mammals in Northeastern Alaska. *In* Arctic Gas Biological Report Series 6. Canadian Arctic Gas Study, Limited, and Alaskan Arctic Gas Company.
- John, J. 2011. Arctic Village Council, First Chief, Elder, resident. Personal communication: phone. August 2011.
- Peter, K. 1981. Neets' aii Gwiindaff: Living in the Chandalar Country. Fairbanks Alaska Native Language Center, University of Alaska.
- Reed, J., C. Villa, and T. Underwood. 2008. Red Sheep Creek airstrip public use monitoring, Arctic National Wildlife Refuge, Alaska, 2006-2007. Report for USFWS Arctic National Wildlife Refuge. Fairbanks, AK.
- Schmidt, J.I., Chapin F.S., 2014. Relationship of Community Characteristics to Harvest Reporting: Comparative Study of Household Surveys and Harvest Tickets in Alaska. *Human Dimensions of Wildlife: An International Journal* 19:334-346.
- Swaney, C. 2011. Subsistence user, resident Arctic Village. Personal communication: phone. July 2011.
- Tritt, A. n.d. The Albert Tritt Collection. Fairbanks: University of Alaska Archives.

USFWS. 1993. Staff Analysis P93-58. Pages 1-9 *in* Federal Subsistence Board Meeting Materials. April 5-8, 1993. Office of Subsistence Management, FWS. Anchorage, AK.

USWS. 1994 (see Page 12 of analysis).

USFWS. 1996. Staff Analysis. P96-55. Pages 'Eastern Interior 2-12' *in* Federal Subsistence Board Meeting Materials. April 14, 1995. Office of Subsistence Management, FWS. Anchorage, AK.

USFWS. 2006. Staff Analysis. Special Action WSA06-03. Pages 1-5 *in* Federal Subsistence Board Meeting Materials. July 18, 2006.

USFWS. 2007. Staff Analysis WP07-56. Pages 529-538 *in* Federal Subsistence Board Meeting Materials April 30-May 2, 2007. Office of Subsistence Management, USFWS. Anchorage, AK. 622 pages.

USFWS. 2010. Federal Closure Review WCR-10-21. Office of Subsistence Management, USFWS. Anchorage, AK.

USFWS. 2011. Harvest database. Microcomputer database. Office of Subsistence Management, USFWS. Anchorage, AK.

Wald, E. 2015. Wildlife Biologist, Arctic National Wildlife Refuge. Personal communication: phone. January 2015.

Appendix A

§100.20 Request for reconsideration.

(a) Regulations in subparts C and D of this part published in the FEDERAL REGISTER are subject to requests for reconsideration.

(b) Any aggrieved person may file a request for reconsideration with the Board.

(c) To file a request for reconsideration, you must notify the Board in writing within sixty (60) days of the effective date or date of publication of the notice, whichever is earlier, for which reconsideration is requested.

(d) It is your responsibility to provide the Board with sufficient narrative evidence and argument to show why the action by the Board should be reconsidered. The Board will accept a request for reconsideration only if it is

based upon information not previously considered by the Board, demonstrates that the existing information used by the Board is incorrect, or demonstrates that the Board's interpretation of information, applicable law, or regulation is in error or contrary to existing law. You must include the following information in your request for reconsideration:

(1) Your name, and mailing address;

(2) The action which you request be reconsidered and the date of FEDERAL REGISTER publication of that action;

(3) A detailed statement of how you are adversely affected by the action;

(4) A detailed statement of the facts of the dispute, the issues raised by the request, and specific references to any law, regulation, or policy that you believe to be violated and your reason for such allegation;

(5) A statement of how you would like the action changed.

(e) Upon receipt of a request for reconsideration, the Board shall transmit a copy of such request to any appropriate Regional Council and the Alaska Department of Fish and Game (ADFG) for review and recommendation. The Board shall consider any Regional Council and ADFG recommendations in making a final decision.

(f) If the request is justified, the Board shall implement a final decision on a request for reconsideration after compliance with 5 U.S.C. 551-559 (APA).

(g) If the request is denied, the decision of the Board represents the final administrative action.

INTERAGENCY STAFF COMMITTEE RECOMMENDATION

Do not support reconsideration of any of the claims in the request for reconsideration RFR14-01.

Justification

The Interagency Staff Committee (ISC) found the threshold analysis for request for reconsideration RFR14-01 to be a thorough evaluation of the request and that it provides sufficient information for Federal Subsistence Board action on the request.

According to regulations under Subpart B §____.20 The Board will accept a request for reconsideration only if it is based upon information not previously considered by the Board, demonstrates that the existing information used by the Board is incorrect, or demonstrates that the Board's interpretation of information, applicable law, or regulation is in error or contrary to existing law. Conclusions from the threshold analysis are restated below.

Criterion 1. Offering neither new nor contradictory information, there does not appear to be merit to this claim.

Criterion 2. Contrary to what the State has alleged, the substantial public record, developed over more than twenty years, indicates the importance and use of the area for local peoples. This public record was referenced in WP14-51. The Board relied on relevant and factual information, there does not appear to be merit to this claim.

Criterion 3. The key consideration in regard to this claim is whether or not the Board properly relied on the closure authority set forth in ANILCA Section 815(3). A careful review of the record demonstrates that the Board did not rely on incorrect closure standards. The record shows that the Board found that credible public testimony, in conjunction with a number of other sources of information, demonstrated that restrictions on non-Federally qualified users were necessary to continue subsistence uses of those sheep. Moreover, it does not appear from the record, that the Council's recommendation was contrary to any of the three criteria set forth in section 805(c) of ANILCA that would have then allowed the Board to decline to follow that recommendation. For these reasons, there does not appear to be merit to the claim that the Board applied incorrect legal standards in this action. Additionally, the Board heard about various alternatives and declined to adopt them, thereby inferring that the Board members considered those alternative to be inadequate and consequently acted within their purview.

None of the claims in the RFR meet the threshold for reconsideration.

U.S. Fish & Wildlife Service

July 2015

Alaska Refuges

Possible Statewide Regulatory Changes



Lisa Hopp/USFWS

Kodiak brown bear sow with cub.

National Wildlife Refuges (refuges) in Alaska are mandated to conserve species and habitats in their natural diversity and ensure that the biological integrity, diversity, and environmental health of the National Wildlife Refuge System are maintained for the continuing benefit of present and future generations of Americans. The U.S. Fish and Wildlife Service (USFWS) is proposing changes to the regulations governing Alaska refuges (under 50 CFR 36) to ensure that we are managing those refuges in accordance with our mandates and to increase consistency with other Federal laws, regulations, and policies. In addition, we aim to more effectively engage the public by updating our Public Participation and Closure Procedures to broaden notification and outreach methods, ensure consultation with Tribes and the State, provide for increased transparency in our decision-making, and to allow for additional opportunities for the public to provide input.

We recognize the importance of the fish, wildlife and other natural resources in the lives and cultures of Alaska Native peoples and in the lives of all Alaskans. These proposed regulatory changes would not change Federal subsistence regulations (36 CFR 242 and 50 CFR 100) or restrict taking of fish or wildlife under Federal subsistence regulations. The Alaska National Interest Lands Conservation Act (ANILCA) provides a priority to rural Alaskans for the nonwasteful taking of fish and wildlife for subsistence uses on refuges in Alaska. Under ANILCA all refuges in Alaska (except the Kenai Refuge) also have a purpose to provide the opportunity for continued subsistence use by rural residents, as long as this use is not in conflict with refuge purposes to conserve fish and wildlife populations and habitats in their natural diversity or fulfill international treaty obligations of the United States.

The changes we are considering would:

- Codify existing Federal mandates for conserving the natural diversity, biological integrity, and environmental health on refuges in Alaska in relation to predator harvest.

Predator control is not allowed on refuges in Alaska unless it is determined to be necessary to meet refuge purposes, federal laws, or policy and is consistent with our mandates to manage for natural and biological diversity and environmental health. The need for predator control must be based on sound science in response to a significant conservation concern. Demands for more wildlife to harvest cannot be the sole or primary basis for predator control on refuge in Alaska.

- Prohibit the following particularly efficient methods and means for non-subsistence (Federal) take of predators on refuges in Alaska due to the potential for cumulative effects to predator populations and the environment that are inconsistent with our mandates to conserve the natural and biological diversity, biological integrity, and environmental health on refuges in Alaska:
 - take of bear cubs or sows with cubs (exception allowed for resident hunters to take black bear cubs or sows with cubs under customary and traditional use activities at a den site October 15 – April 30 in specific game management units in accordance with State law)
 - take of brown bears over bait;
 - take of bears using traps or snares;
 - take of wolves and coyotes during the spring and summer denning season (May 1– August 9); and
 - take of bears from an aircraft or on the same day as air travel has occurred (take of wolves or wolverines from an aircraft or on the same day as air travel is already prohibited under current refuge regulations).
- Update the Public Participation and Closure Procedures. The following table summarizes the current regulations for the Public Participation and Closure Procedures and updates we are considering.

Public Participation and Closure Procedures

Current	Proposed Updates
Authority	
Refuge Manager may close an area or restrict an activity on an emergency, temporary, or permanent basis.	No updates
Criteria (50 CFR 36.42(b))	
Criteria includes: public health and safety, resource protection, protection of cultural or scientific values, subsistence uses, endangered or threatened species conservation, and other management considerations necessary to ensure that the activity or area is being managed in a manner compatible with refuge purposes.	Add conservation of natural and biological diversity, biological integrity, and environmental health to the current list of criteria.
Emergency closures or restrictions (50 CFR 36.42(c))	
Emergency closure may not exceed 30 days. Closure effective upon notice as prescribed in 50 CFR 36.42 (f) (see below for details). Closures related to the taking of fish and wildlife shall be accompanied by notice with a subsequent hearing.	Increase the period from 30 to 60 days, with extensions beyond 60 days being subject to nonemergency closure procedures (i.e. temporary or permanent). Closure effective upon notice as prescribed in 50 CFR 36.42 (f) (see below for details).
Temporary closures or restrictions (50 CFR 36.42(d))	
May extend only for as long as necessary to achieve the purpose of the closure or restriction, not to exceed or be extended beyond 12 months. Closure effective upon notice as prescribed in 50 CFR 36.42 (f) (see below for details). Closures related to the taking of fish and wildlife effective upon notice and hearing in the vicinity of the area(s) affected by such closures or restriction, and other locations as appropriate	Temporary closures or restrictions related to the taking of fish and wildlife may still only extend for so long as necessary to achieve the purpose of the closure or restriction. These closures or restrictions must be re-evaluated as necessary, at a minimum of every 3 years, to determine whether the circumstances necessitating the closure still exist and warrant its continuation. A formal finding will be made in writing that explains the reasoning for the decision. When a closure is no longer needed, action to remove it will be initiated as soon as practicable. The USFWS will maintain a list of refuge closures and publish this list annually for public review and input. Closure will be subject to notice procedures as prescribed in 50 CFR 36.42 (f) (see below for details). For closures related to the taking of fish and wildlife, consultation with the State and affected Tribes and Native Corporations, as well as the opportunity for public comment and a public hearing in the vicinity of the area(s) affected will be required.
Permanent closures or restrictions (50 CFR 36.42(e))	
No time limit. Closure effective after notice and public hearings in the affected vicinity and other locations as appropriate, and after publication in the Federal Register.	No time limit. For closures related to the taking of fish and wildlife, consultation with the State and affected Tribes and Native Corporations, as well as the opportunity for public comment and a public hearing in the vicinity of the area(s) affected will be required. Closures would continue to be published in the Federal Register.
Notice (50 CFR 36.42(f))	
Notice is to be provided through newspapers, signs, and radio.	Add the use of the Internet or other available methods, in addition to continuing to use the more traditional methods of newspapers, signs, and radio.

For more information, please visit:
http://www.fws.gov/alaska/nwr/ak_nwr_pr.htm



Questions and Answers on Regulatory Changes Being Proposed by the U.S. Fish & Wildlife Service for National Wildlife Refuges in Alaska

1. What are the proposed regulatory changes?

National Wildlife Refuges (refuges) in Alaska are mandated to conserve species and habitats in their natural diversity and ensure that the biological integrity, diversity, and environmental health of the National Wildlife Refuge System (Refuge System) are maintained for the continuing benefit of present and future generations of Americans. The U.S. Fish and Wildlife Service (USFWS) is proposing changes to the regulations governing Alaska refuges (under 50 CFR 36) to ensure that we are managing those refuges in accordance with our mandates and to increase consistency with other Federal laws, regulations, and policies. In addition, we aim to more effectively engage the public by updating our Public Participation and Closure Procedures to broaden notification and outreach methods, ensure consultation with Tribes and the State of Alaska (State), provide for increased transparency in our decision-making, and allow for additional opportunities for the public to provide input.

The changes we are proposing would:

- Codify existing Federal mandates for conserving the natural diversity, biological integrity, and environmental health on refuges in Alaska in relation to predator harvest. Predator control is defined as the intention to reduce the populations of predators for the benefit of prey species. Predator control is not allowed on refuges in Alaska, unless it is determined necessary to meet refuge purposes, Federal laws, or policy and is consistent with our mandates to manage for natural and biological diversity, biological integrity, and environmental health. The need for predator control must be based on sound science in response to a significant conservation concern. Demands for more wildlife for human harvest cannot be the sole or primary basis for predator control on refuges in Alaska.
- Prohibit the following particularly efficient methods and means for non-subsistence take of predators on refuges in Alaska due to the potential impacts to predator populations and the environment that are inconsistent with our mandates to conserve the natural and biological diversity, biological integrity, and environmental health on refuges in Alaska:
 - take of bear cubs or sows with cubs (*exception allowed for resident hunters to take black bear cubs or sows with cubs under customary and traditional use activities at a den site October 15 – April 30 in specific game management units in accordance with State regulations*);
 - take of brown bears over bait;
 - take of bears using traps or snares;
 - take of wolves or coyotes from May 1 – August 9; and
 - take of bears from an aircraft or on the same day as air travel has occurred (*same day airborne take of wolves or wolverines is already prohibited under current refuge regulations*).
- Update the Public Participation and Closure Procedures to make them more consistent with other Federal regulations and more effectively engage the public.

Important notes:

- These proposed changes would not apply to the take of fish or wildlife under Federal subsistence regulations or to defense of life and property as defined in State of Alaska (State) regulations (see 5 AAC 92.410).
- Hunting and trapping is considered a priority use of refuges in Alaska and most State of Alaska hunting and trapping regulations, including harvest limits, would still apply.

2. Why is the U.S. Fish & Wildlife Service proposing making these changes?

We are considering these regulatory changes to ensure that the taking of fish and wildlife on National Wildlife Refuges in Alaska is managed consistent with Federal laws, regulations, and USFWS policies. The proposed regulatory changes we are considering would clarify allowable practices for the non-subsistence take of wildlife on refuges in Alaska, as well as update existing Alaska refuge regulations for closures and restrictions.

The mission of the Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. As such, refuges are required to work to conserve species and habitats for the long-term, benefiting not only the present, but also future generations of Americans and in Alaska, this includes the continuation of the subsistence way of life.

The USFWS is required by law to manage refuges “to ensure that . . . biological integrity, biological diversity, and environmental health are maintained” (National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997). The Alaska National Interest Lands Conservation Act (ANILCA) states that the primary purpose of the Act is “to preserve for the benefit, use, education, and inspiration of present and future generations certain lands and waters in the State of Alaska that contain nationally significant natural, scenic, historic, archeological, geological, scientific, wilderness, cultural, recreational, and wildlife values...” The first purpose for all refuges in Alaska under ANILCA is to “conserve fish and wildlife populations and habitats in their natural diversity.”

In managing for natural diversity, the USFWS conserves, protects and manages all fish and wildlife populations within a particular wildlife refuge system unit in the natural ‘mix,’ not to emphasize management activities favoring one species to the detriment of another. The USFWS assures that habitat diversity is maintained through natural means on refuges in Alaska, avoiding artificial developments and habitat manipulation programs, whenever possible. The USFWS fully recognizes and considers that rural residents utilize and are often dependent on refuge resources for subsistence purposes and manages for this use consistent with the conservation of species and habitats in their natural diversity. The terms biological integrity, diversity, and environmental health are defined in the biological integrity policy, which directs the USFWS to maintain the variety of life and its processes; biotic and abiotic compositions, structure, and functioning; and to manage populations for natural densities and levels of variation throughout the Refuge System.

The overarching goal of the USFWS’s wildlife-dependent recreation policy is to enhance opportunities and access to quality visitor experiences on refuges and to manage the refuge to conserve fish, wildlife, plants, and their habitats (605 FW 1.6). We consider hunting to be one of many priority uses of the Refuge System (when and where compatible with refuge purposes) that is a healthy, traditional outdoor pastime, deeply rooted in the American heritage (605 FW 2).

These proposed regulatory changes are aimed at ensuring that natural ecological processes and functions are maintained and wildlife populations and habitats are conserved and managed to function in their natural diversity on Alaska refuges.

3. Will the proposed regulatory changes apply to subsistence hunting and trapping on National Wildlife Refuges?

We recognize the importance of fish and wildlife and other natural resources in the lives of all Alaskans and in the lives and cultures of Alaska Native peoples. We take seriously our responsibility to provide the opportunity for continued subsistence use by rural Alaskans on refuges under ANILCA. These proposed regulatory changes will not change Federal subsistence regulations (36 CFR 242 and 50 CFR 100) or restrict taking of fish or wildlife under Federal subsistence regulations.

We recognize there may be some impacts to local communities that result from these changes. We have worked to address concerns that were raised during Tribal consultations and early public scoping in rural communities, and are open to discussing others that arise through the public comment process.

4. What authority does the U. S. Fish & Wildlife Service have to establish hunting and trapping regulations? Isn't it the State's job to manage wildlife in Alaska?

We recognize that the State has obligations to manage wildlife in Alaska according to the directives in the State constitution. The USFWS similarly must ensure that activities on refuges are consistent with Federal laws and USFWS policy and has final authority for managing plants, fish, and wildlife on refuges in Alaska. We prefer to defer to the State on regulation of hunting and trapping on refuges in Alaska; unless, in doing so, we are out of compliance with Federal laws and USFWS policy.

**5. What is the process and timeline for making these regulatory changes?
Can I participate?**

We have been consulting with Alaska Tribes and Alaska Native Claims Settlement Act (ANCSA) Corporations, as well as having discussions with the State and Federal Subsistence Regional Advisory Councils on the changes we are considering. We anticipate publishing a proposed rule (draft regulations) in the Federal Register around mid to late July of 2015, at which time a 90 day public comment period will begin. We have prepared an Environmental Assessment (EA) in accordance with the requirements of the National Environmental Policy Act (NEPA) for these proposed regulatory changes, which will be made available for comment at the same time. Public input is very important to us and in order to allow additional time for folks to provide input, we will be offering a 90 day comment period, as opposed to the traditional duration of 30 days. During the public comment period, we plan to hold meetings and hearings around the state in locations near Alaska refuges and other locations as appropriate. Comments and input we receive will inform the revision and finalization of the proposed rule. Our goal is to have a final rule published sometime in the beginning of 2016.

Local engagement is very important to us and we are committed to providing meaningful opportunities for consultation with the Tribal Governments and ANCSA Corporations in Alaska. We greatly value local knowledge in our work and are committed to strengthening our Tribal-Federal government relations by working closely with the Tribes on conservation issues in Alaska.

We would like to hear from you, whether at a community meeting or via written comment. We welcome public comment during the comment period, and will continue to offer Tribal Consultation to Federally recognized Tribes and ANCSA Corporations through the end of the comment period.

For the most current information, visit http://www.fws.gov/alaska/nwr/ak_nwr_pr.htm.



FISH and WILDLIFE SERVICE
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Federal Subsistence Board

1011 East Tudor Road, MS121
Anchorage, Alaska 99503



FOREST SERVICE

AUG 31 2015

FWS/OSM 15048.CJ

Sue Entsminger, Chair
Eastern Interior Alaska
Subsistence Regional Advisory Council
c/o U.S. Fish and Wildlife Service
Office of Subsistence Management
1011 East Tudor Road, MS 121
Anchorage, Alaska 99503

Dear Chairwoman Entsminger:

This letter responds to the Eastern Interior Alaska Subsistence Regional Advisory Council's (Council) fiscal year 2014 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. Tribal Consultation with the Federal Subsistence Board and engagement in the Regional Advisory Council process

The Council has enquired on several occasions over the years how tribal consultation and participation will work with the Regional Advisory Council process. As Council member Larry Williams noted at the fall 2014 meeting "We've been talking about tribal participation for years and years, and I was just wondering how that's going, and how it's being handled, and how are the villages going to be represented here at these meetings to speak for the people if they so desire."

The Council is very interested in hearing from the Federal Subsistence Board on how the Federal Subsistence Management Program will engage with tribes in the process and how tribes will be represented at the Council and Board meetings. The Council notes that it is very difficult for many communities or tribes to participate in the process via teleconference and highlight the

Chairwoman Entsminger

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importance of the Council being able to meet in rural communities, especially if there are critical subsistence issues that the community and tribe would like to address. The Council is interested in hearing from the Office of Subsistence Management (OSM) on what the plan is for engaging with tribes and would like to meet with the new OSM Native Liaison as soon as possible.

Response:

To fully respond to this issue, it will be important to briefly review the history of the development of the tribal consultation process, both within the Department of Interior and the Federal Subsistence Management Program.

Following the issuance of Executive Order 13175 (“Consultation and Coordination with Indian Tribal Governments”) and Presidential Memorandum of November 5, 2009 (“Tribal Consultation”), the Departments of the Interior and Agriculture adopted their implementing tribal consultation policies. The Board adopted its own “Government-to-Government Tribal Consultation Policy” on May 9, 2012 to apply those Departmental principles to Federal Subsistence Management. But that consultation policy merely set forth the goals of consultation; the Board needed to develop a way to implement that policy.

The Board formed a working group consisting of tribal and Alaska Native Claims Settlement Act (ANCSA) corporation representatives, Regional Advisory Council members, each of the Federal agency Native Liaisons, and members of the Interagency Staff Committee to develop a protocol for implementation of the tribal consultation policy. This group worked very diligently for nearly three years to develop the *Implementation Guidelines for the Federal Subsistence Board Government-to-Government Tribal Consultation Policy* (enclosed). These guidelines were adopted by the Board at a public meeting on January 23, 2015. In essence, the guidelines provide instructions to Federal staff on how and when outreach should be conducted, as well as when and how consultations should be conducted. It also states who should attend the consultations on behalf of the Federal Subsistence Board. It is considered to be a living document that can be changed, and is subject to an annual review.

The Office of Subsistence Management (OSM) Native Liaison is the primary contact for tribes and ANCSA corporations with the Federal Subsistence Management Program, providing them a central contact to share issues and concerns regarding Federal subsistence issues. As you may be aware, OSM recently hired a new Native Liaison, Orville Lind, who has been busy building relationships with Alaska’s tribes, ANCSA corporations and native organizations.

Since August 2014, OSM staff, in cooperation with the Native Liaison, have conducted 12 in-person and teleconference tribal and ANCSA Corporation consultation sessions on special action requests, the rural determination process proposed rule, and Federal regulatory proposals.

Chairwoman Entsminger

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The Native Liaison has also encouraged tribes to work with their Regional Advisory Councils to develop recommendations and proposals for their regions.

The Board encourages the Council to carefully examine the Implementation Guidelines and offer any feedback on how the consultation process is working with this new guidance in place.

2. *Dwindling moose population, increased hunting pressure, and greater importance for Yukon communities with closed subsistence Chinook harvest*

The Council is concerned about increasing hunting pressure, dwindling moose populations, and the increase in people from outside the region harvesting subsistence resource. Several Council members have relayed stories about increasing hunting pressure off the road system and hunters traveling farther in bigger boats accessing areas that are prime hunting areas typically used by local communities. The Council would like to explore options for Federal proposals that help ensure subsistence priority for moose. This is more important now that Chinook returns are so low and harvest of subsistence Chinook has been limited or closed, with additional summer chum harvest limitations to prevent Chinook bycatch. The combination of dwindling moose populations and decreased salmon harvest together will produce disastrous results for the ability of people to meet subsistence needs.

Response:

The Board is aware of the impact of limited Chinook Salmon harvest on subsistence users and understands the resulting reliance on other subsistence resources like moose. The Council might consider submitting proposals to the Alaska Board of Game to reduce hunting pressure from non-local residents and nonresidents, both of whom are managed under State regulations. The Board of Game is currently transitioning to a three-year cycle and is not currently accepting any region-specific proposals. However, there is a statewide meeting scheduled for March 18-28, 2016 at Pike's Waterfront Lodge in Fairbanks. While the deadline for statewide proposals was May 1, 2015, the Board of Game will accept Agenda Change Requests until January 18, 2016. Fishing restrictions are likely to continue in the future and the need for alternative food resources will remain important to Federally qualified subsistence users. Your Council Coordinator and other OSM staff can assist you with potential proposals if you so desire.

3. *Recommended fisheries management actions to protect subsistence coho from bycatch in the chum commercial fisheries*

The Council commends Yukon fisheries staff on the Yukon salmon management this past summer and feels it was managed very well given the challenges. However, there is concern about management of the commercial chum fisheries that may impact subsistence priority at times. Under the current circumstances, when subsistence harvest of Chinook salmon is restricted or

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closed entirely, communities have to shift to larger harvest of Chum and Coho salmon to meet their subsistence needs.

The Council is concerned about the potential impacts of commercial fisheries management in the lower Yukon River on subsistence. For example, the Council notes that regulations stipulate that bycatch should not exceed 20% of the targeted commercial fishery catch. However, a review of the commercial catch data this year showed that there were more Coho Salmon caught as by-catch in the Chum Salmon fishery than were Chum Salmon. This violation of the regulations is of great concern given the current and foreseeable closure of subsistence Chinook Salmon harvest and greater reliance on other subsistence salmon species, especially fall Chum Salmon and Coho Salmon. For another example, the opening of a commercial fall Chum Salmon harvest when total passage at Pilot Station was only about 650,000 Chum Salmon this year, especially when it was anticipated that there would be a larger subsistence chum harvest. In prior years, no commercial fall Chum Salmon fishery was authorized until there was a projected run of 670,000.

The Council requests a greater conservation approach to the commercial fishery management in these times of low Chinook Salmon returns and would like to engage in discussion with Yukon fisheries managers about ensuring subsistence needs being met. Chum and Coho Salmon are important for subsistence and are now the only salmon available for communities to harvest. It is imperative that upriver communities also have the opportunity to meet their needs and are considered in the overall commercial fisheries management strategies.

Response:

The Board understands the concerns of Federally qualified subsistence users regarding their fall Chum and Coho Salmon subsistence fisheries in the upper Yukon River drainage. For several years subsistence fishers have had no opportunity to harvest Chinook Salmon in the Yukon River drainage. In the fall season, fall Chum and Coho Salmon enter the upper drainage and are available for harvest. Historically, these salmon, especially fall Chum Salmon, have been harvested in large numbers and are critical to the way of life of local residents.

It is important to note that commercial fishery management is under the State's authority. The Board and Federal in-season manager can only affect State-managed fisheries by closing or re-opening harvest on Federal public waters. The last closure on Federal public waters to non-Federally qualified users on the Yukon was in 2009, and Federal and State users generally disapproved of the results. The reasons for disapproval included (1) restricting family members from helping with the harvest and (2) many Federal users also commercially fish on the lower Yukon River. Both of these concerns were also raised at public hearings conducted in April 2015 on the numerous special action requests that were submitted to close the harvest of salmon on the Yukon to non-Federally qualified users.

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Federal and State fishery managers make every effort to attend the fall and winter meetings of the Council each year and have heard the concerns that commercial salmon fisheries in the lower river might be, and may in the future, over-exploit fall Chum or Coho Salmon runs so that upper river subsistence fisheries are heavily impacted. Another opportunity for Council members to confer with fishery managers was the Yukon River fisheries pre-season planning meeting held in Anchorage on April 29, 2015. The Yukon River Drainage Fisheries Association (YRDFA) supported the travel of one community representative from each village within the Yukon River drainage to attend. Several Council members serve on the Yukon Panel and/or YRDFA Board of Directors and were provided travel by YRDFA to attend the meeting and discussed strategy and planning with inseason managers. Fishery managers will continue to make every effort to attend your Council meetings prepared to respond to Council members' concerns.

4. Protection of caribou front runners: "let the leaders pass"

The Council is concerned about disturbance to caribou and migration patterns being altered by sport hunters. The overall concern is that caribou are being scattered or dispersed when hunters get in front of the herd and shoot the frontrunners. Based on the experience of Council members and local observations throughout the state, if lead caribou that know the way are shot, it may cause the rest of the herd to stray from their normal migration path. The concern is for the health of the herd and also the hardship on local communities if the herd is scattered or pushed farther from their usual migration routes, requiring local hunters to travel much farther to find the herd.

The Council is aware that this issue is a common concern for other regions and herds across the state as well as on the Canadian migration portion of the Porcupine Caribou Herd. Protecting the lead caribou would benefit the caribou as well as support local hunters and communities.

Response:

The Board recognizes the importance of caribou to subsistence users and the difficulties caused by changing migration patterns and competition from other hunters. The Board has heard similar reports from Council members from other regions. Additionally, an Alaska Department of Fish and Game subsistence harvest report on the North Slope documented the traditional practice of allowing leaders to pass before starting to hunt caribou along with observations of migrating caribou being deflected from their usual routes if the lead caribou were disturbed. Other reports have described a traditional law against killing the first pulse of caribou in order to ensure that greater numbers of the herd followed the lead animals.

Though many rural hunters understand the benefit of letting the lead caribou groups pass, many other hunters are not aware of this practice or may not understand the benefit to herd migration. There may be an opportunity for a cooperative effort among interested parties to develop an

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educational outreach to inform hunters of this concern and the effect of shooting the leaders during caribou migration. Caribou Working Groups, State Advisory Committees, land managers, village and tribal entities and the Councils may be appropriate cooperators for this effort.

It is worth adding that the National Park Service utilizes Commercial Use Authorizations (CUAs) in connection with commercial transport activities that can address some of these concerns about caribou migration patterns. For example, stipulations in the Noatak National Preserve CUAs only allow transport of non-Federally qualified hunters into the western part of the Preserve after September 15 or earlier once the caribou migration has been well established throughout the area. The purpose of the delayed entry is to allow time for a sufficient number of caribou to cross the river thus securely establishing the migration route while at the same time providing local hunters with a first opportunity to harvest those animals. The NPS maintains regular communications with the CUA holders during the caribou hunting season; and the Commercial Transporter Visitor Services providers have been very cooperative in helping the NPS to implement the delayed entry stipulation.

In closing, I want to thank you and your Council for their continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I would like to specifically thank Donald Woodruff for his 5 years of service to the Federal Subsistence Management Program as a member of this Council. I speak for the entire Board in expressing our appreciation for your efforts and our confidence that the subsistence users of the Eastern Interior Region are well represented through your work.

Sincerely,



Tim Towarak
Chair

Enclosure

cc: Eastern Interior Alaska Subsistence Regional Advisory Council
Federal Subsistence Board
Eugene R. Peltola, Jr., Assistant Regional Director, OSM
Chuck Ardizzone, Deputy Assistant Regional Director, OSM
Carl Johnson, Council Coordination Division Chief, OSM
Eva Patton, Subsistence Council Coordinator, OSM
Interagency Staff Committee
Administrative Record

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IMPLEMENTATION GUIDELINES

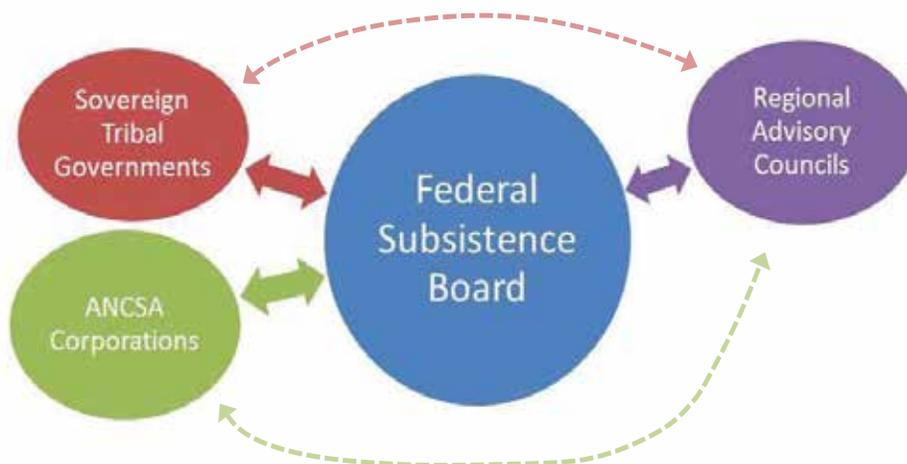
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Federal Subsistence Board Government-to-Government Tribal Consultation Policy

INTRODUCTION

This document is intended to provide additional guidance to Federal staff on the Federal Subsistence Management Program’s Tribal Consultation Policy. Refer to the *Federal Subsistence Board Government-to-Government Tribal Consultation Policy* (Policy) for a broad scope including goals of the policy; consultation communication, roles and responsibilities, topics, timing, and methods; accountability and reporting; and training.

This a “living” set of guidelines that can be modified per the Policy under Accountability and Reporting.



The Board consults directly with tribal governments and with ANCSA corporations. Consultation results are shared with the RACs, which informs their recommendations to the Board. Tribal governments and ANCSA corporations are also encouraged to attend RAC meetings to discuss proposals and influence RAC recommendations, in addition to consultation with the Board.

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CONSULTATION MEETING PROTOCOLS

The items below provide general protocols about consultation meetings. Notice of the availability of these Protocols will be distributed to the Tribes at the beginning of each regulatory cycle and a copy will be sent to any Tribe requesting a consultation meeting with the Board.

1. Participants in Consultation Meeting:

If the consultation meeting is not being held immediately before a FSB regulatory meeting, at least two Board members (generally representing the most-relevant land managing agency and the nearest public member) will participate in the consultation meeting. Other Board members may join the meeting. Participating tribal officials are only those elected or appointed Tribal leaders or individuals designated in writing by a federally-recognized Tribe. The Board and Tribe(s) may invite appropriate staff to attend the consultation. The Chair of the most-relevant RAC(s) or their designee(s) will also be invited to attend.

2. When to Hold Consultations:

- a. Before RAC regulatory meetings: hold one or more teleconferences (depending on number of proposals) at least two weeks before RAC meetings begin.
- b. At regulatory Board Meetings: consultation should begin prior to the start of the regular Board meeting. The regular Board meeting then begins after the consultation meeting is complete.
- c. At additional times as initiated by the Board or tribal governments on regulatory or non-regulatory topics.

3. Location and Room Setup:

- a. The consultation may be closed to public observation [including media], and documentation of the dialog will be made available to the public (see 7[e]). Transcription services may be utilized to capture the meeting notes.
- b. Consultation meetings should be held in easily accessible locations.
- c. At in-person meetings, room should be configured in such a way that Board members and Tribal Government representatives (and RAC representatives, if present) are seated dispersed, as equals. Consider chairs placed in a circle with or without tables. This will differentiate between the room configurations during consultation and the public process. If possible, avoid the appearance of a testimony table.

4. Topics:

- a. Topics to be consulted on can be determined by either Tribes or Board members (see also section 3. of the Policy for more information), and do not need to be determined nor agreed upon in advance, unless it is regulatory in nature. If the request for consultation is regulatory in nature, advance notice to agencies for Administrative Procedures Act (APA) compliance is required (see 7.a).
- b. For topics not within the purview of the Board, Tribes will be referred to a Federal liaison who can assist in determining how that topic can be addressed.

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- c. For topics that need further consultation, the OSM Native Liaison will arrange follow-up consultation.

5. Information Availability:

- a. Materials and information relevant to the consultation meeting (i.e.: teleconference information, meeting topics, transcripts, meeting summary, etc.) will be made available on the Federal Subsistence Management Program's website.
- b. OSM will prepare a written summary of consultations (reviewed by the consulting participants) that will be sent to affected RACs and participating Tribes.

6. Follow-up to Participating Tribes:

Correspondence will be sent to participating Tribes expressing appreciation for their participation, providing a summary of the consultation, and, if applicable, relaying the decision that was made.

7. Consultation Meetings Requested by Tribes:

Staff will endeavor, to the extent authorized by law, to reduce procedural impediments to working directly and effectively with federally recognized Tribal governments.

- a. Government to Government Tribal Consultation will be held in accordance with the requirements of the Administrative Procedure Act (Act), 5 U.S.C. § 555 (2006).
- b. The consultation may be closed to public observation [including media], and documentation of the dialog will be made available to the public (see [e]).
- c. If a consultation with the Board is requested by Tribe(s), at least two Board members (generally representing the most-relevant land managing agency and the nearest public member) will participate in person unless the Tribe(s) and Board agree to a telephonic consultation (see [d]). Other Board members may join the meeting in person or telephonically. The Board and Tribe(s) may invite appropriate staff to attend the consultation. The Chair of the most-relevant RAC(s) or their designee(s) will also be invited to attend.
- d. Consultation will take place in a mutually agreeable location, or telephonically.
- e. Draft meeting notes will be made available for review by all participants in the consultation. Official meeting notes, or transcripts if prepared, will be made available to the RAC(s) and the public if the content of the meeting included discussion on regulatory matters.

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REGULATORY CYCLE TIMELINE AND ROLES AND RESPONSIBILITIES

The Board is committed to providing federally recognized Tribes in Alaska with opportunities to be meaningfully involved in the wildlife and fisheries regulatory process. On an annual basis, the Board accepts proposals to change wildlife or fisheries regulations on seasons, harvest limits, methods and means of harvest and customary and traditional use determinations. In some instances, regulations are modified in-season, and that is typically accomplished through in-season or special actions taken by either the Board or the relevant land manager who has been delegated authority by the Board to take that action. The Board will provide Tribes with the opportunity to consult on the regulatory process, which includes proposal development and review, proposal analysis and review, and decision making by the Board.

Tribes must be given the opportunity to consult throughout the Federal Subsistence Management process when a “departmental action with tribal implications¹” is taken. A regulatory proposal is potentially a departmental action with substantial direct effect on an Indian Tribe. If an OSM recommendation on a regulatory proposal changes, then affected Tribes will be notified as that change becomes publicly available.

WHO SHOULD PARTICIPATE IN GOVERNMENT-TO-GOVERNMENT CONSULTATION

Tribal officials are elected or appointed Tribal leaders or individuals designated in writing by a federally recognized Tribe may participate in government-to-government consultations. Federal officials are those individuals who are knowledgeable about the matters at hand, are authorized to speak for the agency and/or Board, and exercise delegated authority in the disposition and implementation of a Federal action.

REGULATORY PROCESS

Steps 1-5 outlined below correspond to Appendix B of the Board’s Tribal Consultation Policy *Appendix B: Federal Subsistence Management Program Annual Regulatory Process at a Glance*.

Step 1.A.: Call for Proposals (January – March): Proposals recommending changes to fish or wildlife harvesting regulations may be submitted regarding seasons, harvest limits, methods and means and/or customary and traditional use determinations. The Office of Subsistence Management (OSM) staff or land managers can assist Tribes in developing proposals.

RESPONSIBLE LEAD	ACTION
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| Federal Agencies | <ul style="list-style-type: none"> • Any Federal agency preparing regulatory proposal should contact representatives of Tribes potentially affected by a Federal agency regulatory proposal prior to submittal. |
| OSM | <ul style="list-style-type: none"> • Announces the call for proposals and describes what this means; |

¹ Department of the Interior Policy on Tribal Consultation definition of “Departmental Action with Tribal Implications” is: Any Departmental regulation, rulemaking, policy, guidance, legislative proposal, grant funding formula changes, or operational activity that may have a substantial direct effect on an Indian Tribe on matters including, but not limited to:

1. Tribal cultural practices, lands, resources, or access to traditional areas of cultural or religious importance on federally managed lands;
2. The ability of an Indian Tribe to govern or provide services to its members;
3. An Indian Tribe’s formal relationship with the Department; or
4. The consideration of the Department’s trust responsibilities to Indian Tribes.

This, however, does not include matters that are in litigation or in settlement negotiations, or matters for which a court order limits the Department’s discretion to engage in consultation.

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- Provide an overview and timeline of the annual Federal Subsistence Regulatory process; and
- Provides name and contact information for OSM staff who can provide assistance in reviewing and developing proposals.
- Notifies Tribes at the beginning of the period and a reminder two weeks before the end of the proposal period.

Step 1.B.: Federal Subsistence Regional Advisory Council (RAC) Meetings: (Winter Meetings February-March): During these meetings, the RACs can develop proposals to change subsistence regulations. The Tribes have the opportunity to work with the RACs to draft proposals.

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| OSM | <ul style="list-style-type: none"> • Sends notice to all Tribes announcing all RAC meetings, including teleconference information if available. • Contacts local media (newspaper, radio, TV) to provide meeting announcement and agendas. • Arranges teleconference line for RAC meeting(s) so Tribes can participate in the RAC meetings. Tribes may discuss proposals with the RACs and relevant Federal staff. This should be included in the RAC’s agenda. • Posts RAC meeting materials on the Federal Subsistence Management Program’s website so Tribes can review the materials prior to the meetings. • OSM Native Liaison coordinates with Interagency Staff Committee (ISC) and Tribal representatives to draft summary reports on Tribal Consultations (if any have taken place since the fall RAC meetings). These written summaries are provided to the RACs. Tribal representatives are encouraged to share in the delivery of this report. |
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Step 2-3: Review of Regulatory Proposals (April-May) Once the Proposals are received by OSM, they are compiled into a book that includes all proposals from throughout Alaska. Tribes will have the opportunity to review the proposals and provide comments. Consultation can be requested.

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| OSM | <ul style="list-style-type: none"> • Sends Tribes the proposal book with a link to the Federal Subsistence Management Program website, and a description of the process schedule. The name and contact information for OSM staff will be included in the proposal book. • Coordinates with appropriate Federal staff to notify Tribes if a particular proposal might impact them. • Meetings will be held for Federal analysts and affected Tribes to discuss proposals. These meetings can be with one or multiple Tribes. • Includes information in Proposal Books about the availability of Tribal consultation. |
| Tribes | <ul style="list-style-type: none"> • Provides comments or participates in meetings. This can help with analysis of the proposal. • If interested in consulting at this step, Tribes may contact OSM or an agency official and discuss course of action. |

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STEP 3: Proposal Analysis (April – August): Each of these proposals will be analyzed by OSM or other agency staff to determine its effect on the resource, other resources, rural subsistence users, other users, etc. OSM develops a preliminary recommendation on the proposal.

- OSM
- Draft analyses should be made available to Tribes for consultation at least two weeks prior to Tribal consultation.
 - Draft analyses should be posted on the OSM website and provided directly to Tribes affected by proposals.
 - Summary bullets of the analysis, written in plain language, will be provided to affected Tribes.

- Tribes / Board
- **TRIBAL CONSULTATION OCCURS:** One or more teleconference(s) will be scheduled to provide consultation opportunities open to all Tribes to discuss proposals with the Board. Consultation occurs approximately 2 weeks before the RAC meeting (see consultation meeting protocols on page 2 of this Guideline).
 - Results of consultation are written, and distributed to the appropriate RACs, Tribes and the Board as provided in the Consultation Meeting Protocols.

Step 4: Federal Subsistence Regional Advisory Council (RAC) Meetings (Fall meetings August - October): During these meetings, RACs develop recommendations to the Board on proposal(s) based on their review of the staff analyses, their knowledge of the resources and subsistence practices in the area, testimony received during the meeting, and Tribal input.

- OSM
- Sends e-mail notification and or fax to all Tribes announcing all RAC meetings, including teleconference information if available.
 - Contacts local media (newspaper, radio, TV) to provide meeting announcement and agendas.
 - Arranges teleconference line for RAC meeting(s) so that Tribes that cannot participate in-person may do so by teleconference. Tribes may discuss proposals with the RACs, and appropriate Federal staff.
 - Materials and information relevant to the consultation meeting (i.e.: teleconference information, meeting topics, transcripts, meeting summary, etc.) will be made available on the Federal Subsistence Management Program's website (<http://www.doi.gov//subsistence/index.cfm>).
 - Coordinates reporting on prior Tribal consultations during the regulatory cycle to the RACs, and encourages Tribal representatives to share in delivery of this report.

- RACs
Tribes
- Includes time on the RAC agenda for Tribes to give additional comments and recommendations (in addition to the consultation with the Board) on proposals and other matters.
 - Tribes may choose to attend RAC meetings to provide input directly into the

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regulatory process, assisting the RACs make better informed recommendations to the Board.

Step 5: Federal Subsistence Board Regulatory Meeting (Winter or Spring): The Board reviews the staff analyses, considers recommendations provided by OSM and the RACs, considers comments provided by the State, consults with Tribes, and makes a decision as to whether to adopt, reject, defer, or take no action on each proposed change to the Federal subsistence regulations. **Tribal consultation occurs before the Board meeting following the protocols outlined in the first section of this Guideline (Consultation Meeting Protocols).**

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| OSM | <ul style="list-style-type: none"> • Sends a meeting announcement to Tribes, with the teleconference call-in information. Contacts Tribes (with assistance of agencies, when needed) to verify that Tribes significantly affected by proposals are aware of the Board meeting. • Posts meeting materials on the Federal Subsistence Management Program’s website so that Tribes can review the materials before the meeting. |
| Tribes & Board | <ul style="list-style-type: none"> • Consults on regulatory proposals following the “Consultation Meeting Protocols.” Time should be available to consult on other items of interest. RAC Chairs are invited to participate in the consultation. • During the meeting, OSM staff and/or Tribal representatives will report on the results of prior Tribal consultations. |
| OSM | <ul style="list-style-type: none"> • Following the Board meeting, OSM sends notification of meeting results to the affected Tribes. Tribes who consulted on proposals will be notified of the outcome. |

OTHER REGULATORY ACTIONS NOT COVERED AS PART OF ANNUAL REGULATORY CYCLE

If regulatory actions occur outside of the regulatory cycle, Tribes will be offered the opportunity to consult on them.

SPECIAL ACTIONS

Special actions include emergency and temporary special actions. Because the regulatory process occurs on a biennial basis (fish one year, wildlife the next), sometimes issues arise that require immediate action; these actions may be taken as needed to address harvest regulations outside of the normal regulatory cycle.

Special Action requests usually require a quick turnaround time and consultation may not be possible; however, in-season and land managers will make every effort to consult with Tribes that are directly affected by a potential action prior to taking action. Public hearing requirements are followed for temporary special actions that would be in effect for 60 days or longer. Affected Tribes

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will be notified of actions taken. Federal field staff will work with Tribes in the affected area and distribute Tribal consultation information.

NON-REGULATORY ISSUES

For non-regulatory issues, the Board's Consultation Meeting Protocols will be followed when needed.

TRAINING

The Board's Policy directs that the Federal Subsistence Management Program follow the Department of the Interior and the Department of Agriculture's policies for training of Federal staff:

1. OSM staff will work with the ISC (Interagency Staff Committee) and others to develop training modules on the subsistence regulatory process, customary and traditional use determinations, proposal development, Tribal consultation, Alaska Native cultures and the Federal budget process. Additionally, OSM staff will work with the ISC, agency Tribal liaisons, and others such as tribal elders to develop a training module that Federal staff can deliver at regional Tribal meetings (see Appendix C of the FSB's Tribal Consultation Policy) and to interested Tribal councils.
2. These trainings will be open to other entities responsible for management of subsistence resources, such as marine mammals, migratory birds, halibut, etc.
3. Board members should make every opportunity to directly participate in or observe subsistence activities.
4. It is recommended that Board members, OSM, ISC, & Federal land management staff directly involved in Tribal consultation as part of their work responsibilities attend cross-cultural training and cultural events in Alaska Native communities to learn the unique communication and cultural protocols of the Tribes with which they interact.
5. Recommended Training Topics for Federal Staff and Tribal Citizens
 - a. Alaska Native identity, language, cultures, traditions, history, and regional differences
 - b. Alaska Native perspectives on natural resource management
 - c. Customary and traditional relationship to land, water, and wildlife
 - d. Effects of historical trauma and acculturation stress on Alaska Native peoples
 - e. Alaska National Interest Lands Conservation Act subsistence provisions
 - f. Natural resource law, especially pertaining to fisheries and wildlife management and conservation
 - g. Federal subsistence regulations
 - h. Federal subsistence regulatory process
 - 1) Special actions
 - 2) Customary and traditional use determinations

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- i. Rural determination process and implications
- j. Jurisdiction (Tribal /Federal Government/ State of Alaska)
- k. Relevant information about Tribe(s), including sovereignty, history of Tribal interactions with the United States government, Tribal constitutions, and traditional knowledge
- l. Foundations of the government-to-government relationship and trust responsibility within Federal Indian law as expressed through the U.S. Constitution, U.S. Code, Supreme Court decisions, and executive actions
- m. International Covenant on Civil and Political Rights, Article 1.2
- n. Tribal and Federal consultation policies
- o. Wildlife and fisheries monitoring, including the Fisheries Resource Monitoring Program
- p. Opportunities for co-management or shared stewardship
- q. Communication etiquette and protocols

ACCOUNTABILITY, REPORTING, AND INFORMATION MANAGEMENT

1. **Tribal Contact Information:**
 - a. Department of the Interior (DOI) employees will utilize the DOI Tribal Consultation SharePoint site contact list.
 - b. U.S. Department of Agriculture (USDA) employees will utilize the Forest Service Alaska Region’s contact list on the region’s Tribal Relations webpage.
2. **Tracking Consultations:**
 - a. The Alaska Region of the Forest Service will utilize the USDA consultation database to track Forest Service and tribal consultations.
 - b. The Office of Subsistence Management and DOI employees will utilize the DOI Tribal Consultation SharePoint site database to track and record consultations.
3. **Report on Consultations:**
 - a. Report annually as required by DOI and USDA consultation policies.
 - b. The OSM Native Liaison provides a summary report annually to the Board on Federal Subsistence Management Program consultations noting any feedback received from Tribes regarding the policies and their implementation and any other follow-up actions or accomplishments. The report shall be posted on the OSM web site.
4. **Review of the Tribal Consultation Policy:**
 - a. Annually, the Consultation Workgroup, OSM Native Liaison, land managers, and ISC should assess the effectiveness of the Tribal Consultation Policy and the implementation guidelines. The Workgroup will report to the Board at its annual winter/spring meeting.
5. **Follow-up to Consultations at the Federal Subsistence Board Meeting:**
 - a. OSM is responsible to follow up on action items from Tribal Consultations at Federal Subsistence Board meetings.
 - b. Post-Board meeting follow-up includes notification to Tribes of Board actions.

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.

WP16-55 Executive Summary	
General Description	Proposal WP16-55 requests that the coyote trapping season in Unit 25 be expanded from the current season of Nov. 1 – Mar. 31 to Oct. 1 – Apr. 30. <i>Submitted by: Eastern Interior Alaska Subsistence Regional Advisory Council</i>
Proposed Regulation	<p style="text-align: center;">Unit 25 — Coyote (Trapping)</p> <p style="text-align: center;"><i>Coyote: No limit.</i></p> <p style="text-align: right;">Nov. 1 – Mar. 31. Oct. 1- Apr. 30.</p>
OSM Preliminary Conclusion	Support
Eastern Interior Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	None

**DRAFT STAFF ANALYSIS
WP16-55**

ISSUE

Proposal WP16-55, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council (Council), requests that the coyote trapping season dates in Unit 25 be expanded from the current season of Nov. 1 – Mar. 31 to Oct. 1 – Apr. 30.

DISCUSSION

The proponent states that expanding the coyote trapping season will provide more harvest opportunity for Federally qualified subsistence users. The proponent also states that this change would simplify regulations in two ways: 1) align the coyote and wolf trapping seasons and 2) align the closing dates of the coyote hunting and trapping seasons. The Council states that the coyote population is abundant in the region and thought to be increasing.

Existing Federal Regulation

Unit 25 — Coyote (Trapping)

Coyote: No limit.

Nov. 1- Mar. 31.

Proposed Federal Regulation

Unit 25 — Coyote (Trapping)

Coyote: No limit.

~~*Nov. 1- Mar. 31.*~~

Oct. 1- Apr. 30.

Existing State Regulation

Unit 25 — Coyote

Coyote: No limit.

Nov. 1- Mar. 31.

Extent of Federal Public Lands

Federal public lands comprise approximately 70% of Unit 25 and consists of 56% U.S. Fish and Wildlife Service (FWS) managed lands, 12% Bureau of Land Management (BLM) managed lands, and 2% National Park Service (NPS) managed lands.

Customary and Traditional Use Determinations

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for coyote in Unit 25. Therefore, all Federally qualified users may harvest this species in this unit.

Regulatory History

The Federal subsistence harvest regulations for trapping coyote in Unit 25 have not changed since the Federal subsistence program was started in 1990. There have been no proposals to change the coyote trapping regulations in Unit 25. Current trapping regulations set no limit for harvest of coyotes between Nov. 1 and Mar. 31.

Biological Background

The coyote is believed to have migrated into Alaska around the turn of the 20th century (ADF&G 2015). Agricultural expansion and urban sprawl, in combination with the elimination of wolves in the contiguous United States provided coyotes with the opportunity to expand their range (ADF&G 2015; Boisjoly et al 2010:3; Berger & Gese 2007). Coyotes occur throughout most of Alaska, with the highest densities occurring in southcentral portion of the State (ADF&G 2015). Competition for resources between wolves and coyotes directly influences coyote distribution and abundance. The two species share an ecological niche and often come into contact while coyotes are scavenging (ADF&G 2012b:159-165; Berger & Gese 2007; Merkle et al 2009: 57). Coyotes generally breed between January and March, giving birth to 5-7 pups between March and May (ADF&G 2015).

Since regulatory year 1996/97, ADF&G trapper questionnaires have provided furbearer abundance and population trends based on responses from area trappers. While qualitative, this information is useful for tracking population changes over time and is the best available for many furbearer populations, including coyote in Unit 25.

The coyote population in the Lower Tanana Basin (Units 20ABCDF, 25C) has mostly been reported as common with a stable to increasing trend (**Table 1**). The coyote population in the Upper Yukon Basin (Units 25ABD, 26BC) has mostly been reported as scarce with a stable to decreasing trend (**Table 1**) (ADF&G, 2013a, 2013b, 2012a, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002).

Table 1. Coyote relative abundance and population trends (ADF&G 2013a, 2013b, 2012a, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002, 2001, 2000, 1998, 1997).

Regulatory Year	Lower Tanana Basin (20ABCDF, 25C)		Upper Yukon Basin (25ABD, 26BC)	
	Abundance	Trend	Abundance	Trend
1996	Common	Same	x	x
1997	Common	More	Scarce	Fewer
1998	Common	Same	Scarce	Fewer
1999	Common	Same	Scarce	Same
2000	Common	More	Scarce	Same
2001	Common	More	Scarce	More
2002	No Report			
2003	Common	More	Same	Fewer
2004	Common	Same	Scarce	
2005	Common	Same	Scarce	Same
2006	Common	Same	Scarce	Same
2007	Common	More	Scarce	Same
2008	Scarce	Same	Scarce	Same
2009	No Report			
2010	Scarce	Same	Scarce	Same
2011	Common	Same	Common	Same
2012	Common	Same	Scarce	Fewer

Harvest History

Coyote harvest in Unit 25 has historically been very low. Trappers are asked to voluntarily report harvested furbearers via the annual trapper questionnaires administered by ADF&G. Since 2004/05, ADF&G has reported this information by unit. From 2004/05 to 2012/13, there were 16 coyotes reported harvested within Unit 25 (ADF&G 2013a, 2013b, 2012a, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002). Most of the coyotes reported in Unit 25 were harvested from Unit 25D (9 coyotes total). Half of the coyotes harvested were reported in 2004/05 with 0-3 coyotes being reported harvested in Unit 25 from 2005/06 to 2012/13.

There is no other estimate for total annual harvest. There is no sealing requirement for coyotes, reporting harvest is optional, and many trappers do not return questionnaires. Therefore, the reported harvest number should be considered the minimum (ADF&G 2010d:195). Low harvest numbers may also be a reflection of the difficulty in capturing the species, low fur values, and an infestation of louse in some coyote populations (ADF&G 2010d:140, 155).

Between regulatory year 2005/06 and 2013/14, an average of 122 coyotes/year were reported harvested within the Alaska State Region 3 - Interior (encompassing Units 12, 19-21, 24, 25, 26B, and 26C). (ADF&G, 2013a, 2013b, 2012a, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002).

Other Alternative(s) Considered

One alternative considered was to modify the season opening date from Nov. 1 to Oct. 1, with no extension of the season closing date. This would have resulted in a coyote trapping season from Oct. 1 – Mar. 31. As coyote pupping season is March–May, extending the trapping season to Apr. 30 may increase the loss of litters. However, based upon the low long term reported harvest levels of coyote and the low price of pelts, coyotes do not seem to be highly sought after by trappers. With the differing season closing dates between wolves and coyotes, any pelts from coyotes that are incidentally trapped between Apr. 1 and Apr. 30 must be submitted to ADF&G. Adjusting the season closing date, from Mar. 31 to Apr. 30, is not expected to increase the number of coyotes trapped. Rather, it will allow trappers to keep pelts from coyotes incidentally taken while trapping for wolves.

Effects of the Proposal

If adopted, this proposal would add an additional 60 days to the coyote trapping season in Unit 25. Extension of this season would allow more trapping opportunities for Federally qualified subsistence users.

Aligning Federal subsistence trapping season dates for wolves and coyotes and for hunting and trapping season of coyote would simplify Federal subsistence trapping regulations. Although not specified by the proponent, aligning the wolf and coyote season would also allow trappers to keep the pelts of coyotes incidentally trapped during the wolf season, eliminating the collateral, and illegal, take of coyote during the wolf trapping season.

Adoption of this proposal would result in divergent State and Federal trapping seasons and may result in enforcement concerns. Additionally, user conflicts between recreationists and trappers may occur in the White Mountains National Recreation Area of Unit 25C as recreationists would have to avoid traps for longer periods.

Adoption of this proposal is not expected to adversely affect the coyote population in Unit 25. Information obtained from the annual trapping questionnaire by the ADF&G indicates that coyote populations within Unit 25 are generally stable and harvest is very low.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-55.

Justification

Adoption of this proposal would allow for more harvest opportunities for Federally qualified subsistence users. Extension of the coyote trapping season will align the Federal subsistence coyote and wolf trapping seasons, simplifying Federal subsistence trapping regulations for Federally qualified subsistence users. Aligning the wolf and coyote season would also allow trappers to keep the pelts of coyotes incidentally trapped during the wolf season. The best available information indicates that coyote populations in Unit

25 are generally stable at low to moderate levels and that harvest pressure is low. The population would not be adversely affected by an extended season.

LITERATURE CITED

ADF&G. 2015. Coyote Species Profile. Internet: <http://www.adfg.alaska.gov/index.cfm?adfg=coyote.main>. Retrieved: April 9, 2015.

ADF&G. 2013a. Trapper questionnaire; Statewide annual report: 1 July 2012 – 30 June 2013. Wildlife Management Report, ADF&G/DWC/WMR-2013-5. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2013.pdf>. 66 pp. Retrieved: April 9, 2015.

ADF&G. 2013b. Trapper questionnaire; Statewide annual report: 1 July 2011 – 30 June 2012. Wildlife Management Report, ADF&G/DWC/WMR-2013-4. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2012.pdf>. 62 pp. Retrieved: April 9, 2015.

ADF&G. 2012a. Trapper questionnaire; Statewide annual report: 1 July 2010 – 30 June 2011. Wildlife Management Report, ADF&G/DWC/WMR-2012-2. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2011.pdf>. 64 pp. Retrieved: April 9, 2015.

ADF&G. 2012b. Wolf management report of survey-inventory activities, 1 July 2008 – 30 June 2011. Species Management Report, ADF&G/DWC/SMR-2012-4. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2011.pdf>. 64 pp. Retrieved: April 9, 2015.

ADF&G. 2010a. Trapper questionnaire; Statewide annual report: 1 July 2008 – 30 June 2009. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2009.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010b. Trapper questionnaire; Statewide annual report: 1 July 2007 – 30 June 2008. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2008.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010c. Trapper questionnaire; Statewide annual report: 1 July 2006 – 30 June 2007. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2007.pdf>. 82 pp. Retrieved: April 9, 2015.

ADF&G. 2010d. Furbearer management report of survey-inventory activities, 1 July 2006 – 30 June 2009. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: http://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/mgt_rpts/10_fur.pdf. 366 pp. Retrieved: April 9, 2015.

ADF&G. 2007. Trapper questionnaire; Statewide annual report: 1 July 2005 – 30 June 2006. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2006.pdf>. 76 pp. Retrieved: April 9, 2015.

ADF&G. 2006. Trapper questionnaire; Statewide annual report: 1 July 2004 – 30 June 2005. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2005.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2005. Trapper questionnaire; Statewide annual report: 1 July 2003 – 30 June 2004. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2004.pdf>. 69 pp. Retrieved: April 9, 2015.

ADF&G. 2002. Trapper questionnaire; Statewide annual report: 1 July 2001 – 30 June 2002. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2002.pdf>. 70 pp. Retrieved: April 9, 2015.

ADF&G. 2001. Trapper questionnaire; Statewide annual report: 1 July 1999 – 30 June 2000. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 2000. Trapper questionnaire; Statewide annual report: 1 July 1998 – 30 June 1999. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 1998. Trapper questionnaire; Statewide annual report: 1 July 1997 – 30 June 1998. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 1997. Trapper questionnaire; Statewide annual report: 1 July 1996 – 30 June 1997. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

Berger, K.M., and E. M. Gese. 2007. Does interference competition with wolves limit the distribution and abundance of coyotes? *Journal of Animal Ecology*. 76(6):1075-1085. DOI: 10.1111/j.1365-2656.2007.01287.x.

Boisjoly, D., Ouellet, J.P., and R. Courtois. 2010. Coyote habitat selection and management implications for Gaspésie caribou. *Journal of Wildlife Management*. 74(1):3-11. DOI: DOI: 10.2193/2008-149.

Merkle, J.A., Stahler, D.R., and D.W. Smith. 2009. Interference competition between gray wolves and coyotes in Yellowstone National Park. *Canadian Journal of Zoology*. 87: 56-63. DOI: 10.1139/Z08-136.

WP16-56 Executive Summary	
General Description	Proposal WP16-56 requests the beaver hunting season and harvest limits be modified in Units 25A, 25B, and 25D. The season would be lengthened and divided into two separate seasons with different harvest limits. The current Apr. 16 – Oct. 31 season would be changed to Jun. 11 – Aug. 31 and the harvest limit would remain 1 beaver per day; 1 in possession. The second portion of the season would be Sept. 1 – Jun. 10 with no limit on beaver harvest. <i>Submitted by: Eastern Interior Alaska Subsistence Regional Advisory Council</i>
Proposed Regulation	<p>Unit 25 — Beaver (Hunting)</p> <p><i>Unit 25A, 25B, and 25D — 1 beaver per day; 1 in possession</i> <i>Apr. 16 – Oct. 31</i> <i>June 11- Aug. 31</i></p> <p><i>Unit 25A, 25B, and 25D — no limit</i> <i>Sep. 1 – June 10</i></p> <p><i>Unit 25C</i> <i>No open season.</i></p>
OSM Preliminary Conclusion	Support
Eastern Interior Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	None

**DRAFT STAFF ANALYSIS
WP16-56**

ISSUES

Proposal WP16-56, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council (Council), requests the beaver hunting season and harvest limits be modified in Units 25A, 25B, and 25D. The season would be lengthened and divided into two separate seasons with different harvest limits. The current Apr. 16 – Oct. 31 season would be changed to Jun. 11 – Aug. 31 and the harvest limit would remain 1 beaver per day; 1 in possession. The second portion of the season would be Sept. 1 – Jun. 10 with no limit on beaver harvest.

DISCUSSION

The proponent states that lengthening the hunting season will provide more opportunity for Federally qualified subsistence users. Additionally, the proponent claims that changing the beaver hunting season would simplify regulations by aligning Federal hunting regulations with State trapping regulations.

Note: This proposal was originally submitted requesting a modification to the beaver hunting season and limits as follows: no harvest limit from Apr. 16 to June 10 and then revert back to 1 beaver per day; 1 in possession from Jun. 11 to Oct. 31; the proponent stated the intent of the proposal was to align Federal and State regulations. The original intent of the proponent is now reflected in this analysis.

Existing Federal Regulations

Hunting

Unit 25 — Beaver

Unit 25A, 25B, and 25D — 1 beaver per day; 1 in possession *Apr. 16 – Oct. 31*

Unit 25C *No open season.*

Trapping

Unit 25 — Beaver

Unit 25A, 25B, and 25D — 50 beaver *Nov. 1 – Apr. 15*

Unit 25C — No limit

Nov. 1 – Apr. 15

Proposed Federal Regulations

Hunting

Unit 25 — Beaver

Unit 25A, 25B, and 25D — 1 beaver per day; 1 in possession

~~*Apr. 16 – Oct. 31*~~
June 11- Aug. 31

Unit 25A, 25B, and 25D — no limit

Sep. 1 – June 10

Unit 25C

No open season.

Trapping

Unit 25 — Beaver

Unit 25A, 25B, and 25D — 50 beaver

Nov. 1 – Apr. 15

Unit 25C — No limit

Nov. 1 – Apr. 15

Existing State Regulations

Hunting

Unit 25 — Beaver

Beaver

No open season.

Trapping

Unit 25 — Beaver

Beaver: No limit.

Sep. 1 – Jun.10

5AAC 92.095(a) The following methods and means of taking furbearers under a trapping license are prohibited, in addition to the prohibitions in 5 AAC 92.080:

* * * *

(2) by disturbing or destroying any beaver house;

(3) taking beaver by any means other than a steel trap or snare, except that a firearm may be used to take two beaver per day in Units 9 and 17 from April 15 through May 31 if the meat is salvaged for human consumption; a firearm may be used to take beaver in Units 8, 18, 22, and 23 throughout the seasons and with the bag limits established in 5 AAC 84; a firearm or bow and arrow may be used to take beaver in Units 12, 19, 20(A), 20(C), 20(E), 20(F), 21, 24, and 25 throughout the seasons and with the bag limits established in 5 AAC 84;

Extent of Federal Public Lands

Federal public lands comprise approximately 70% of Unit 25 and consists of 56% U.S. Fish and Wildlife Service (FWS) managed lands, 12% Bureau of Land Management (BLM) managed lands, and 2% National Park Service (NPS) managed lands.

Customary and Traditional Use Determinations

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for beaver in Unit 25. Therefore, all Federally qualified users may harvest this species in this unit.

Regulatory History

Federal regulations for beaver trapping in Unit 25 were adopted from State regulations in 1990. The season ran from Nov. 1-Apr. 15 with harvest limits of 50 beaver in Unit 25A, 25B, and 25D, and 25 beaver in Unit 25C.

Prior to 1995, there were no Federal subsistence hunting regulations for beaver in Unit 25.

In 1993, Proposal P93-62 was submitted requesting a hunting season for beaver in Unit 25 from Oct. 1 – May 15, with a harvest limit of 50 beaver. The intent of the proposal was to reduce the number of beaver and the associated dams that were thought to be impacting whitefish. Federal subsistence management regulations do not apply to habitat manipulation and, as a result, the proposal was rejected as outside the authority of the Federal Subsistence Board (Board).

In 1995, the Alaska Board of Game modified State trapping regulations to allow for the use of firearms to harvest beaver in Units 25A, 25B, and 25D from Apr. 16-June 1 with a harvest limit of 1 beaver/day. No firearm season was created for Unit 25C.

In 1995, the Board adopted Proposal P95-61 with modification. The original proposal submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council (Council) included a year round season

(July 1-June 30) with a 50 beaver harvest limit. The high harvest limit raised conservation concerns due to the potential for high kit loss if parents were harvested.

The modified proposal established a Federal subsistence beaver hunting season of Apr. 16-Oct. 31 in Units 25A, 25B, and 25D with a harvest limit of 1 beaver/day; 1 in possession. The modified proposal also required that the meat from beavers taken by firearm must be salvaged for human consumption. This was done to provide additional subsistence opportunity for local residents and because there were no conservation concerns over beaver populations provided the modified season dates and harvest limits (FSB 1995). No Federal subsistence hunting season was opened in Unit 25C.

In 2002, the Alaska Board of Game adopted Proposal 120, eliminating sealing requirements for beaver in Unit 25 due to an absence of any population concerns, low trapping pressure, and low fur prices (Crawford 2002).

In 2008, the Alaska Board of Game adopted Proposal 82, which liberalized beaver trapping seasons and bag limits across the Interior region. The season in Unit 25 was set at Sept. 1-June 10 with no bag limit. Proposal 82 also allowed for the take of beaver by a firearm or bow and arrow throughout the open trapping season under a trapping license in Interior Alaska, including Unit 25. This was done to simplify and liberalize regulations across Interior Alaska due to abundant beaver populations and low, declining harvest pressure (ADF&G 2008).

In 2010, the Yukon Flats Advisory Committee submitted Proposal 95 to the Alaska Board of Game, requesting the bag limit for beavers in Unit 25 be reduced from unlimited to 50 beaver/season because of overharvesting concerns (ADF&G 2010d). The Alaska Board of Game rejected this proposal due to no conservation concerns and the desire to maintain consistency in bag limits across units in the Interior Region (ADF&G 2010e).

Biological Background

Beavers in Unit 25C are managed separately from beavers in the rest of Unit 25. As this proposed regulatory change affects only Units 25A, 25B, and 25D, only those data and reports concerning these units will be discussed.

Beavers are common throughout Interior Alaska (Caikoski 2010). Beavers are often called ecosystem engineers as they substantially modify their environment through foraging, selective timber harvest, and dam construction. As such, beavers have had large-scale hydrogeological and environmental impacts that have provoked animosity from local communities (Havens et al. 2013; Milligan & Humphries 2010; Raffel et al. 2009).

Beavers are generally monogamous and only the dominant male and female will breed. Breeding season is in January or February, with two-to-four kits being born between late April and June (Haven et al. 2013, FSB 1995). Kits stay in the natal den until reaching two years of age before leaving to secure their own home range (Havens et al. 2013). Kit survival within the first year is estimated to be <50% due to a variety of factors including disease, predation, and human harvest (Haven et al. 2013).

Aerial surveys of beaver lodges and food caches conducted prior to 2002 indicated that beaver activity fluctuated from year to year. Current beaver population estimates for Unit 25 are unavailable as population monitoring was discontinued by ADF&G in 2002 (Caikoski 2010).

Since regulatory year 1996/97, ADF&G trapper questionnaires have provided furbearer abundance and population trends based on responses from area trappers. While qualitative, this information is useful for tracking population changes over time and is the best available for many furbearer populations, including beavers in Unit 25.

Prior to 2008, trappers reported beavers as relatively abundant in Units 25A, 25B, and 25D. Between 2008 and 2012, trappers reported beavers as relatively common in these units, indicating a perceived decline in the relative abundance of beaver. However, the perceived population trend for the same time period was reported as stable or “no change” (ADF&G 2013a, 2013b, 2012, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002a, 2002b, 2001).

Harvest History

Beaver harvest in Units 25A, 25B, and 25D during the late 1990s and early 2000’s was relatively low compared to the late 1980s and was probably related to lower pelt values and a resulting reduction in trapper effort. Prior to 2002, beavers in the Interior were most commonly taken in and near major drainages such as Black, Little Black, Colleen, Hodzana, Chandalar, and Christian Rivers, and Birch and Beaver Creeks (Caikoski 2010).

Since the Alaska Department of Fish and Game (ADF&G) terminated beaver sealing requirements for Unit 25 in 2002, current harvest data is limited (ADF&G 2008, Caikoski 2010). The number of beavers sealed in the Interior region prior to 2002 averaged 1,500 beavers/year. The annual average post 2002 is 67 beavers sealed/year (ADF&G 2013a, 2010a, 2001).

Reported harvest within Units 25A, 25B, and 25D by trappers has been low, but consistent, ranging from 9-24 beavers between 2004 and 2012. The majority of reported beaver harvests have occurred in Unit 25D. No beaver harvests have been reported for Unit 25A (**Figure 1**). Harvest reporting for beaver in these units is optional and less than 10 trappers respond annually for Units 25A, 25B, and 25D. Therefore, the reported harvest greatly underestimates actual harvest (ADF&G 2013a, 2013b, 2012, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002).

Despite the liberalization of the beaver trapping season, bag limits and use of firearms across the Interior Region in 2008, the percent of beaver harvested by firearm has not increased appreciably since that time. This indicates that the ability to use firearms throughout the entire season did not result in a subsequent increase in the number of beavers taken by this method (**Figure 2**).

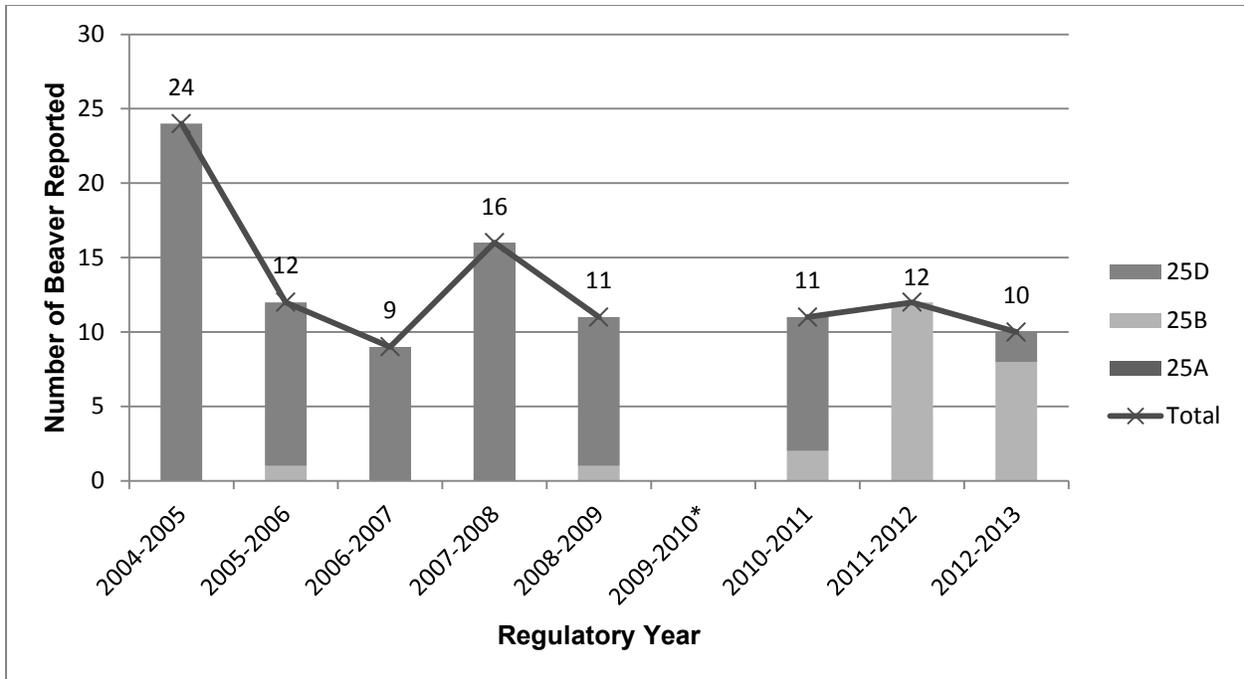


Figure 1. Number of reported beavers harvested in Units 25A, 25B, and 25D (ADF&G 2013a, 2013b, 2012, 2010a, 2010b, 2010c, 2007, 2006, 2005). *No report was written for 2009/10.

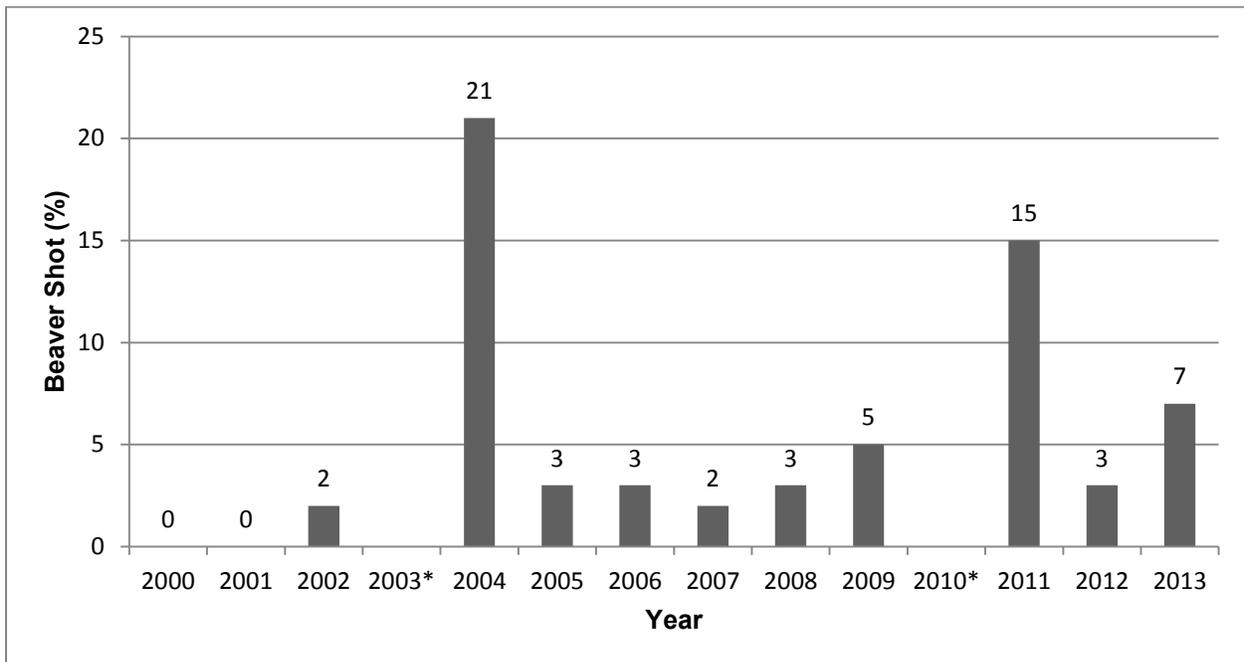


Figure 2. Percent of harvested beavers in the Interior Alaska region taken by firearm (ADF&G 2013a, 2013b, 2012, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002a, 2002b, 2001). The number of respondents/year ranged from 303-455. *No data is available for 2003 and 2010.

Other Alternatives Considered

One alternative considered was an unlimited harvest limit from Nov. 1-Apr. 15 and a harvest limit of 1 beaver/day, 1 in possession from Apr. 16-Oct. 31. This alternative would protect kits during denning. Kits are born between mid-April to May and may starve if parents are taken during this critical denning time. This alternative was rejected due to reasons outlined below.

While current and accurate population data and harvest information for beaver in Unit 25 is lacking, trapper questionnaires suggest beavers are relatively common with stable population trends.

As users are already able to harvest an unlimited number of beaver from Sep. 1-June 10 on most (non-NPS) Federal public lands in Units 25A, 25B, and 25D under State regulations, adoption of this modification would not have its desired effect.

The intent of this proposal is to simplify regulations and to provide more opportunity to Federal subsistence users. Adoption of this alternative would provide State users more harvest opportunity than Federally qualified subsistence users and would fail to align State and Federal regulations, defeating the intent of this proposal.

Effects of the Proposal

If adopted, this proposal would establish a new Federal subsistence beaver hunting season from Sep. 1-June 10 with no harvest limit in Units 25A, 25B, and 25D. The existing harvest and possession limits would remain in effect for the remainder of the season (June 11-Aug. 31).

These modifications would allow more hunting opportunities for Federally qualified subsistence users and reduce regulatory complexity by aligning the Federal subsistence hunting season and harvest limit with the State trapping season and bag limit.

Users are already able to harvest an unlimited number of beaver in Units 25A, 25B, and 25D on most (non-NPS) Federal public lands under State regulations. Additionally, the proportion of beavers taken by firearm has not increased since 2008 when the State allowed the use of firearms throughout the beaver trapping season. Therefore, adoption of this proposal is not expected to affect beaver populations or harvest.

There are concerns about unlimited beaver harvest during the denning period and its potential impact on kit survival, leading to decreasing population trends over time. These concerns are augmented by the lack of current, accurate population and harvest information. However, the best data available, provided by trappers on the annual ADF&G trapper questionnaires, suggest that beavers in Unit 25 are relatively common with stable populations.

Additionally, as fur quality is low in late spring, beavers harvested during this time period are primarily for food. As most trappers target beaver for fur rather than meat, the harvest during the denning period is likely low.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-56.

Justification

This proposal provides more harvest opportunity for Federally qualified subsistence users and reduces regulatory complexity for users by aligning Federal subsistence hunting and State trapping regulations for beaver in Units 25A, 25B, and 25D. While current beaver population and harvest information is lacking, trappers report beavers in Unit 25 to be relatively common with a stable population.

Reported harvest of beaver by firearm did not increase after 2008, indicating that the more liberal use of firearms allowed under State regulations did not affect the number of beavers harvested by this method. As users can already harvest beaver under the more liberal State regulations in Units 25A, 25B, and 25D, adoption of this proposal is not expected to have any biological impacts on beaver populations.

LITERATURE CITED

ADF&G. 2015. Beaver (*castor Canadensis*): Species profile.

Internet: <http://www.adfg.alaska.gov/index.cfm?adfg=beaver.printerfriendly>. Retrieved: April 11, 2015.

ADF&G. 2013a. Trapper questionnaire; Statewide annual report: 1 July 2012 – 30 June 2013. Wildlife Management Report, ADF&G/DWC/WMR-2013-5. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2013.pdf>. 66 pp. Retrieved: April 9, 2015.

ADF&G. 2013b. Trapper questionnaire; Statewide annual report: 1 July 2011 – 30 June 2012. Wildlife Management Report, ADF&G/DWC/WMR-2013-4. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2012.pdf>. 62 pp. Retrieved: April 9, 2015.

ADF&G. 2012. Trapper questionnaire; Statewide annual report: 1 July 2010 – 30 June 2011. Wildlife Management Report, ADF&G/DWC/WMR-2012-2. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2011.pdf>. 64 pp. Retrieved: April 9, 2015.

ADF&G. 2010a. Trapper questionnaire; Statewide annual report: 1 July 2008 – 30 June 2009. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2009.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010b. Trapper questionnaire; Statewide annual report: 1 July 2007 – 30 June 2008. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2008.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010c. Trapper questionnaire; Statewide annual report: 1 July 2006 – 30 June 2007. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2007.pdf>. 82 pp. Retrieved: April 9, 2015.

ADF&G. 2010d. Alaska Board of Game meeting information. Interior Region proposals. February 26-March 7, 2010. Fairbanks, AK. Pp. 163. file:///C:/Users/Imaas/Downloads/bog-interior2010%20(1).pdf. Retrieved: June 2, 2015.

ADF&G. 2010e. Preliminary recommendations. Board of Game Interior Region Proposals. February 2010. Alaska Department of Fish and Game, Division of Wildlife Conservation. Pp. 36. file:///C:/Users/Imaas/Downloads/PrelimARMar10%20(1).pdf. Retrieved June 2, 2015.

ADF&G. 2008. Alaska Board of Game meeting information. Interior Region proposals. February 29-March 10, 2008. Fairbanks, AK. pp. 111-115. file:///C:/Users/Imaas/Downloads/10-proposals%20(1).pdf. Retrieved: June 2, 2015.

ADF&G. 2007. Trapper questionnaire; Statewide annual report: 1 July 2005 – 30 June 2006. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2006.pdf>. 76 pp. Retrieved: April 9, 2015.

ADF&G. 2006. Trapper questionnaire; Statewide annual report: 1 July 2004 – 30 June 2005. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2005.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2005. Trapper questionnaire; Statewide annual report: 1 July 2003 – 30 June 2004. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2004.pdf>. 69 pp. Retrieved: April 9, 2015.

ADF&G. 2002a. Trapper questionnaire; Statewide annual report: 1 July 2001 – 30 June 2002. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2002.pdf>. 70 pp. Retrieved: April 9, 2015.

ADF&G. 2002b. Trapper questionnaire; Statewide annual report: 1 July 2000 – 30 June 2001. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 3, 2015.

ADF&G. 2001. Trapper questionnaire; Statewide annual report: 1 July 1999 – 30 June 2000. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 3, 2015.

Blejwas, K. 2009. 1 July 2006-30 June 2007 Trapper questionnaire statewide annual report. Alaska Department of Fish and Game, Division of Wildlife Conservation. Juneau, Alaska, USA.

Caikoski, J.R. 2010. Units 25A, 25B, 25D, 26B, and 26C furbearer management report. Pages 329-347 in P. Harper, editor. Furbearer management report of survey and inventory activities 1 July 2006 – 30 June 2009. Alaska Department of Fish and Game. Project 7.0. Juneau, Alaska, USA.

Crawford, J. 2002. Board of Game Summary of Actions. March 8-18, 2002. Fairbanks, Alaska. Pp: 24.

FSB. 1995. Federal Subsistence Board public meeting book. April 10-14, 1995. Office of Subsistence Management, USFWS. Anchorage, AK. Pp: 435-439.

Havens, P. H., Crawford, J. C., and T. A. Nelson. 2013. Riverine beaver ecology: Survival, home range, and colony reproduction of beavers in east-central Illinois, an agricultural landscape. *The American Midland Naturalist*. 169:17-29.

Milligan, H. E., and M. M. Humphries. 2010. The importance of aquatic vegetation in beaver diets and the seasonal and habitat specificity of aquatic-terrestrial ecosystem linkages to the subarctic environment. *Oikos*. 119:1877-1886. DOI: 10.1111/j.1600-0706.2010.18160.x

Raffel, T. R., Smith, N., Cortright, C., and A. J. Gatz. 2009. Beaver foraging: Central place foraging by beavers (*Castor Canadensis*) in a complex lake habitat. *The American Midland Naturalist*. 162:62-73.

WP16-57 Executive Summary	
General Description	Proposal WP16-57 requests that the lynx trapping season in Unit 25 be lengthened from Nov. 1 – Feb. 28 to Nov. 1 – Mar. 31. <i>Submitted by: Eastern Interior Alaska Subsistence Regional Advisory Council</i>
Proposed Regulation	Unit 25 — Lynx (Trapping) <i>Lynx—No limit. Nov. 1 – Feb. 28 Mar. 31</i>
OSM Preliminary Conclusion	Support
Eastern Interior Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	1 Neutral

**DRAFT STAFF ANALYSIS
WP16-57**

ISSUES

Proposal WP16-57, submitted by the Eastern Interior Alaska Federal Subsistence Regional Advisory Council (Council), requests that the Federal subsistence lynx trapping season in Unit 25 be lengthened from Nov. 1 – Feb. 28 to Nov. 1 – Mar. 31.

DISCUSSION

The proponent states that expanding the Federal subsistence lynx trapping season will provide more opportunity for Federally qualified subsistence users. Specifically, the Council states that local trappers do not usually begin to trap lynx until the last week of November or the beginning of December and that prime fur conditions extend beyond the current Feb. 28 season closure.

Additionally, the proponent claims that changing the lynx trapping season to Nov. 1 – Mar. 31 would simplify regulations by aligning the lynx trapping season with the wolverine trapping season in Units 25ABD, avoiding incidental take of lynx while targeting wolverine.

Related proposals: WP16-58 requests that the wolverine trapping season in Unit 25C be extended from Nov. 1-Feb. 28 to Nov. 1-Mar. 31.

Existing Federal Regulation

Trapping

Unit 25 — Lynx

Lynx—No limit.

Nov. 1 – Feb. 28

Proposed Federal Regulation

Trapping

Unit 25 — Lynx

Lynx—No limit.

*Nov. 1 – ~~Feb. 28~~ Mar.
31*

Existing State Regulation

Trapping

Unit 25 — Lynx

Units 25A, 25B, and 25D—No limit.

Nov. 1 – Feb. 28

Extent of Federal Public Lands

Federal public lands comprise approximately 70% of Unit 25 and consists of 56% U.S. Fish and Wildlife Service managed lands, 12% Bureau of Land Management managed lands, and 2% National Park Service managed lands.

Customary and Traditional Use Determinations

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for lynx in Unit 25. Therefore, all Federally qualified users may harvest this species in this unit.

Regulatory History

In 1987, the Alaska Board of Game (BOG) adopted a “tracking harvest strategy” to manage lynx trapping seasons in the road-connected game management units of Interior and Southcentral Alaska, including Unit 25C. Under this strategy, lynx seasons were reduced and liberalized in response to cyclical fluctuations in lynx populations via emergency orders (Hollis 2010).

Federal trapping regulations for lynx in Unit 25, including the “tracking harvest strategy” were adopted from State regulations in 1990. The season in Units 25A, B, and D ran from Nov. 1-Feb. 28 with no harvest limit. This season has not changed. The season in Unit 25C ran from Dec. 1-Jan. 31 with no harvest limit.

In 1998, the Federal lynx trapping season dates for Unit 25C were changed from Dec. 1-Jan. 31 to Nov. 1-Feb. 28, aligning seasons across Unit 25. Note: While these changes are reflected in the 1998 Federal register, no proposal requesting this change could be found in the OSM database or the Federal Subsistence Board (FSB) 1998 meeting book.

In 2008, the BOG adopted Proposal 17, eliminating the “tracking harvest strategy”. This was done to provide additional harvest opportunity to State users and because the “tracking harvest strategy” had limited efficacy (ADF&G 2008).

Current Events

WP16-58 requests that the wolverine trapping season in Unit 25C be extended from Nov. 1-Feb. 28 to Nov. 1-Mar. 31. Currently, the lynx and wolverine trapping seasons are aligned in Unit 25C. In Units 25ABD, the wolverine trapping season currently runs a month longer than the lynx trapping season.

If both WP16-57 and WP16-58 are adopted, the lynx and wolverine Federal subsistence trapping seasons in all of Unit 25 would be aligned. If one proposal is adopted and not the other or if both proposals are opposed, the season closing dates for these species will continue to be misaligned in portions of Unit 25.

Biological Background

State management goals and objectives for lynx in Units 25A, B, and D are as follows (Caikoski 2010):

- Protect, maintain, and enhance furbearer populations in concert with other components of the ecosystem to assure their capability of providing sustained opportunities for trapping of furbearers.
- Provide people with sustained opportunities to participate in hunting, subsistence use, viewing, and photographing of furbearers.
- Maintain populations of furbearers at levels sufficient to provide for sustained consumptive and nonconsumptive uses.

State management goals and objectives for lynx in Unit 25C are as follows (Hollis 2010):

- Provide the greatest sustained opportunity for harvesting furbearers.
- Maintain populations of lynx that will support a minimum level of consumptive and nonconsumptive use.

Lynx are common in Alaska (Yom-Tov et al. 2007). Snowshoe hare are the predominant prey of lynx and are believed to comprise up to 83% of the species' diet (Yom-Tov et al. 2007 O'Donoghue et al. 1997). As a result, lynx populations fluctuate in direct response to changes in hare abundance (Yom-Tov et al. 2007). Snowshoe hare have a cyclical population trend that lasts from 8-11 years and lynx population numbers fluctuate in tandem with this trend with a lag of 1-2 years (USFWS 2013).

Lynx typically breed in March and April. Gestation is estimated to last 63-70 days and litter size ranges from 1 to 5 kittens. Typically, females carry one litter per year, but may breed a second time if the litter is lost shortly after birth. Both male and female lynx are reproductively capable in their first year, though they rarely breed. If yearling females do breed, they consistently produce smaller litters than older females. Reproductive output slows during the low phase of the hare cycle and there is some evidence that females may not produce a litter every year when hares are scarce (Anderson and Lovallo 2003).

In Alaska, all lynx pelts are required to be sealed. Sealing records can act as a proxy for lynx population trends (Yom-Tov et al. 2007). Between regulatory years 1990/91 and 2012/13, Statewide, Interior Alaska, and Unit 25 lynx populations demonstrate 3 periods of population highs (1991/92, 2000/01, and 2008/09), followed by periods of population lows (1995/96, 2002/03, and 2011/12, **Figures 1, 2**).

Since regulatory year 1996/97, ADF&G trapper questionnaires have provided furbearer abundance and population trends based on responses from area trappers. While qualitative, this information is useful for tracking population changes over time. Between 1996/97 and 2012/13, reported lynx abundance and population trends in the Lower Tanana and Upper Yukon Basins, which include Unit 25, have fluctuated in very rough alignment with the harvest sealing data (**Table 1, Figures 2**).

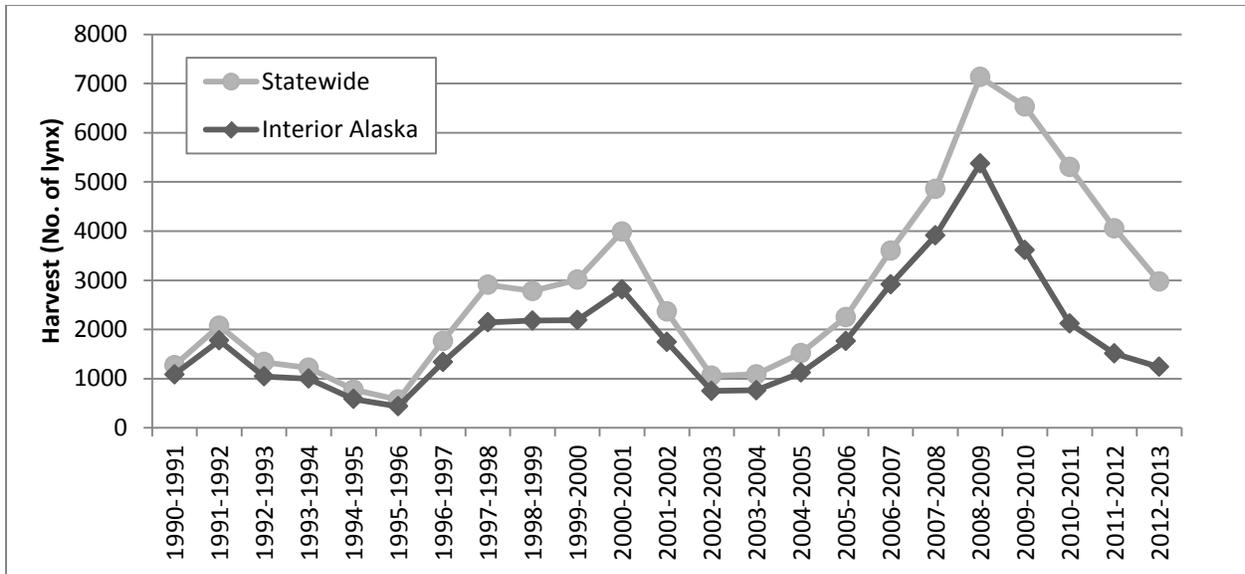


Figure 1. Lynx harvest (number of lynx sealed) in Interior Alaska and Statewide. Interior Alaska includes Units 12, 19A-D, 20A-F, 21A-E, 24A-C, 25A-D. (ADF&G 2002, 2005, 2006, 2007, 2010a, 2010b, 2010c, 2012, 2013a, 2013b).

Table 1. Lynx relative abundance and population trends for Units 20ABCDF, 25, and 26BC (ADF&G 2013a, 2013b, 2012, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002, 2001, 2000, 1998, 1997).

Regulatory Year	Lower Tanana Basin (Units 20ABCDF, 25C)		Upper Yukon Basin (Units 25ABD, 26BC)	
	Relative Abundance	Trend	Relative Abundance	Trend
1996	Common	More	Common	Fewer
1997	Common	Same	Common	Same
1998	Common	More	Common	Same
1999	Abundant	More	Abundant	More
2000	Abundant	More	Common	More
2001	Abundant	Same	Abundant	More
2002	No Data			
2003	Scarce	Same	Common	Same
2004	Scarce	Same	Common	More
2005	Common	Same	Common	More
2006	Common	Same	Common	Same
2007	Scarce	Same	Scarce	Same
2008	Common	More	Abundant	More
2009	No Data			
2010	Common	Same	Common	Fewer
2011	Scarce	Fewer	Scarce	Same
2012	Common	Fewer	Scarce	Same

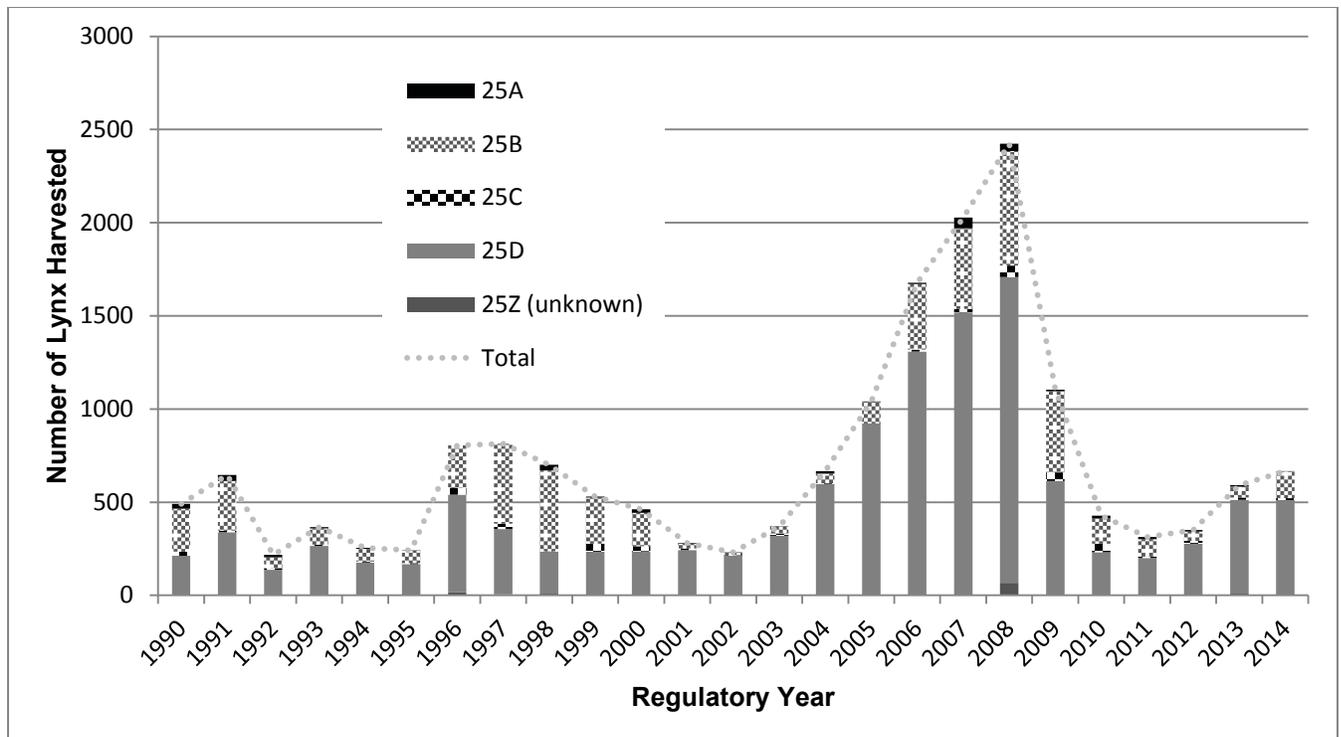


Figure 2. Lynx harvest (number of lynx sealed) in Unit 25 (Kephart 2015, pers. comm.).

Harvest History

Unit 25 has generally supported a high long-term lynx harvest rate that varies with the 8-11 year population cycles (**Figures 1-2**). Between 1990/91 and 2014/15, total lynx harvest in Unit 25 ranged from 217-2424 lynx/year, with an average of 708 lynx/year. While abundance is the primary factor influencing harvest, changes in season lengths, pelt value, and annual weather and environmental conditions also affect harvest (Hollis 2010).

Within Unit 25, the vast majority of lynx have historically been harvested in subunit 25D. Between 1990/91 and 2014/15, Unit 25D accounted for 32%-92% of the annual lynx harvest in Unit 25, averaging 67%/year during this time period (**Figure 2**, Kephart 2015).

Trappers are also asked to voluntarily report harvested furbearers via the annual trapper questionnaires administered by ADF&G. Since 2004/05, ADF&G has reported this information by unit. Between 2004/05 and 2012/13, 34-783 lynx were voluntarily reported per year for Unit 25, with an average of 244 reported lynx/year (**Table 2**).

Table 2. Trapper Reported Lynx Harvest in Unit 25 (ADF&G 2013a, 2013b, 2012a, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002).

Regulatory Year	Reported Harvested
2004-2005	117
2005-2006	137
2006-2007	161
2007-2008	462
2008-2009	783
2009-2010	<i>No Data</i>
2010-2011	171
2011-2012	88
2012-2013	34

Effects of the Proposal

If adopted, this proposal would add an additional 31 days to the Federal subsistence lynx trapping season in Unit 25, providing Federally qualified subsistence users with additional harvest opportunities.

Adoption of this proposal is not expected to adversely affect the lynx population in Unit 25. The lynx population in Unit 25 appears cyclically abundant and stable. Overall harvest is expected to increase, but will fluctuate in tandem with the lynx population.

Lynx and wolverine are often trapped in the same types of sets. If this proposal is adopted, the lynx and wolverine trapping seasons in Units 25ABD would be aligned. Proposal WP16-58, has requested that the closing date of the wolverine trapping season in 25C be extended to March 31. If Proposal WP16-58 is adopted, along with this proposal, the lynx trapping season would align with the Federal subsistence wolverine trapping season in all of Unit 25, which would simplify Federal subsistence regulations and reduce the potential of trapping a lynx out of season while targeting wolverine.

Adoption of this proposal will result in different State and Federal lynx trapping seasons, potentially leading to increased user violations and law enforcement concerns.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-57.

Justification

If adopted, this proposal would provide additional trapping opportunities for Federally qualified subsistence users. Extending the trapping season would simplify Federal regulations and reduce incidental take by aligning the lynx trapping season with the wolverine trapping season in Units 25ABD.

There are no biological concerns for lynx in Unit 25. Long-term harvest information, abundance and population trends as provided by trappers indicate that the lynx population in Unit 25 is cyclically abundant.

LITERATURE CITED

- ADF&G. 2015. Following a tracking harvest strategy for lynx management in southcentral Alaska. Internet: http://www.adfg.alaska.gov/static-f/regulations/regprocess/gameboard/pdfs/2014-2015/Southcentral_03_13_15/rc2/03kenailynx.pdf. Retrieved: April 27, 2015.
- ADF&G. 2013a. Trapper questionnaire; Statewide annual report: 1 July 2012 – 30 June 2013. Wildlife Management Report, ADF&G/DWC/WMR-2013-5. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2013.pdf>. 66 pp. Retrieved: April 9, 2015.
- ADF&G. 2013b. Trapper questionnaire; Statewide annual report: 1 July 2011 – 30 June 2012. Wildlife Management Report, ADF&G/DWC/WMR-2013-4. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2012.pdf>. 62 pp. Retrieved: April 9, 2015.
- ADF&G. 2012a. Trapper questionnaire; Statewide annual report: 1 July 2010 – 30 June 2011. Wildlife Management Report, ADF&G/DWC/WMR-2012-2. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2011.pdf>. 64 pp. Retrieved: April 9, 2015.
- ADF&G. 2010a. Trapper questionnaire; Statewide annual report: 1 July 2008 – 30 June 2009. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2009.pdf>. 72 pp. Retrieved: April 9, 2015.
- ADF&G. 2010b. Trapper questionnaire; Statewide annual report: 1 July 2007 – 30 June 2008. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2008.pdf>. 72 pp. Retrieved: April 9, 2015.
- ADF&G. 2010c. Trapper questionnaire; Statewide annual report: 1 July 2006 – 30 June 2007. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2007.pdf>. 82 pp. Retrieved: April 9, 2015.
- ADF&G. 2008. Proposals. Alaska Board of Game meeting information. Interior Region. Feb. 29-Mar. 10, 2008. Fairbanks, AK. <http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=02-29-2008&meeting=fairbanks>. Retrieved: June 18, 2015.
- ADF&G. 2007. Trapper questionnaire; Statewide annual report: 1 July 2005 – 30 June 2006. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2006.pdf>. 76 pp. Retrieved: April 9, 2015.
- ADF&G. 2006. Trapper questionnaire; Statewide annual report: 1 July 2004 – 30 June 2005. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2005.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2005. Trapper questionnaire; Statewide annual report: 1 July 2003 – 30 June 2004. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2004.pdf>. 69 pp. Retrieved: April 9, 2015.

ADF&G. 2002. Trapper questionnaire; Statewide annual report: 1 July 2001 – 30 June 2002. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2002.pdf>. 70 pp. Retrieved: April 9, 2015.

ADF&G. 2002a. Trapper questionnaire; Statewide annual report: 1 July 2000 – 30 June 2001. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 2001. Trapper questionnaire; Statewide annual report: 1 July 1999 – 30 June 2000. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 2000. Trapper questionnaire; Statewide annual report: 1 July 1998 – 30 June 1999. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 1998. Trapper questionnaire; Statewide annual report: 1 July 1997 – 30 June 1998. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 1997. Trapper questionnaire; Statewide annual report: 1 July 1996 – 30 June 1997. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

Anderson, E.M. and M.J. Lovallo. 2003. Bobcat and lynx. *Lynx rufus* and *L. canadensis*, p. 758-786. In: G. A. Feldhamer, J. A. Chapman and B. C. Thompson (eds.). *Wild mammals of North America: biology, management, and conservation*, 2nd ed. Johns Hopkins Univ. press, Baltimore, Maryland.

Caikoski, J.R. 2010. Units 25A, 25B, 25D, 26B, and 26C furbearer. Pages 329-347 in P. Harper, editor. *Furbearer management report of survey and inventory activities 1 July 2006 – 30 June 2009*. Alaska Department of Fish and Game. Project 7.0. Juneau, Alaska, USA.

Hollis, A.L. 2010. Units 20A, 20B, 20C, 20F, and 25C furbearer. Pages 255-273 in P. Harper, editor. *Furbearer management report of survey and inventory activities 1 July 2006 – 30 June 2009*. Alaska Department of Fish and Game. Project 7.0. Juneau, Alaska, USA.

Kephart, J. 2015. Assistant Management Coordinator. Personal communication: e-mail. June 18, 2015. Alaska Department of Fish and Game. Fairbanks, AK.

O'Donoghue, M., Boutin, S., Krebs, C. J. and Hofer, E. J. 1997. Numerical responses of coyotes and lynx to the snowshoe hare cycle. *Oikos* 80: 150-162.

U. S. Fish and Wildlife Service. 2013. Canada lynx: *Lynx Canadensis*. Mountain Prairie Region. Internet: http://www.fws.gov/mountain-prairie/species/mammals/lynx/CandaLynxFactSheet_091613.pdf. Retrieved: April 28, 2015.

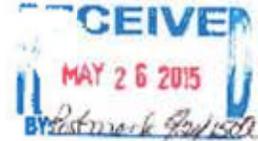
Yom-Tov, Y., Yom-Tov, S., MacDonald, D. and E. Yom-Tov. 2007. Population cycles and changes in body size of the lynx in Alaska. *Oecologia: Population Ecology*. 152:239-244. DOI: 10.1007/s00442-006-0653-3.

WRITTEN PUBLIC COMMENTS



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May 14, 2015

Hi,

My comments on the 2016-2018 Wildlife Proposals:

Quite a few of the proposals align State and Federal regulations. Unless contradicted for sound biological reasons, I support all of these. It is incredibly onerous to keep track of what-is-allowed-where-and-how-and-when, and everything you can do to help ease this burden would be appreciated by all of us. I feel very strongly about this. Reg's have become *much* too complicated. I support WP 16-41 for a similar reason; it does not much sense to pay hundreds of dollars in air fare to fly to Fairbanks to get your horns scaled. In some cases (e.g. WP 16-57) I only support it if fur remains prime that late in the year.

Just in general I support simplified reg's and more liberal seasons when populations are strong, and also support limiting the take (e.g. WP16-63) when populations are low or stressed in that area. I also in most situations support allowing traditional hunting methods. I am however pretty ambivalent about bear baiting because of the danger it can pose to other hunters bumbling blithely through the area, and the possibility of habituating bears.

Most of the proposals were not specific to my area so I hope you get some input from folks more familiar. Please keep in mind that usually local hunters and trappers know more about the critters and conditions in their areas than you-all do.

Thanks,

Miki Collins

WP16-58 Executive Summary	
General Description	Proposal WP16-58 requests that the wolverine trapping season in Unit 25C be extended from Nov. 1 – Feb. 28 to Nov. 1 – Mar. 31. <i>Submitted by: Eastern Interior Alaska Subsistence Regional Advisory Council</i>
Proposed Regulation	Unit 25 — Wolverine (Trapping) <i>Unit 25C – No limit. Nov. 1 – Feb. 28 Mar. 31</i> <i>Unit 25, remainder – No limit. Nov. 1 – Mar. 31</i>
OSM Preliminary Conclusion	Oppose
Eastern Interior Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	None

**DRAFT STAFF ANALYSIS
WP16-58**

ISSUES

Proposal WP16-58, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council (Council), requests that the wolverine trapping season in Unit 25C be extended from Nov. 1 – Feb. 28 to Nov. 1 – Mar. 31.

DISCUSSION

The proponent states that expanding the wolverine trapping season in Unit 25C will align Unit 25C regulations with the remainder of Unit 25 regulations and would therefore reduce confusion and increase trapping opportunity for Federally qualified subsistence users.

Related Proposals: WP16-57 requests the lynx trapping season in Unit 25 be lengthened from Nov. 1 – Feb. 28 to Nov. 1 – Mar. 31.

Existing Federal Regulation

Hunting

Unit 25 — Wolverine

1 wolverine

Sept. 1 – Mar. 31

Trapping

Unit 25 — Wolverine

Unit 25C – No limit.

Nov. 1 – Feb. 28

Unit 25, remainder – No limit.

Nov. 1 – Mar. 31

Proposed Federal Regulation

Hunting

Unit 25 — Wolverine

1 wolverine

Sept. 1 – Mar. 31

Trapping

Unit 25 — Wolverine

Unit 25C – No limit.

Nov. 1 – ~~Feb. 28~~ Mar. 31

Unit 25, remainder – No limit.

Nov. 1 – Mar. 31

Existing State Regulation

Hunting

Unit 25 — Wolverine

Residents and Non-residents—1 wolverine

Sept. 1 – Mar. 31

Trapping

Unit 25 — Wolverine

Unit 25C – No limit.

Nov. 1 – Feb. 28

Unit 25A, 25B, and 25D – No limit.

Nov. 1 – Mar. 31

Extent of Federal Public Lands

Federal public lands comprise approximately 74% of Unit 25C and consists of 63% Bureau of Land Management (BLM) managed lands, 9% National Park Service (NPS) managed lands, and 2% U.S. Fish and Wildlife Service (USFWS) managed lands.

Customary and Traditional Use Determinations

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for wolverine in Unit 25. Therefore, all Federally qualified users may harvest this species in this unit.

Regulatory History

The Federal subsistence trapping regulations for wolverine in Unit 25 were adopted from State regulations in 1990 and have remained unchanged. The wolverine trapping season in Unit 25C has been a month shorter than the remainder of Unit 25 (see regulations listed above) due to greater access, including road access and higher trapper density in Unit 25C (Young 2015a, pers. comm.). There have been no proposals to change the wolverine trapping regulations in Unit 25C until the current proposal.

Current Events

WP16-57 requests that the lynx trapping season in Unit 25 be extended from Nov. 1-Feb. 28 to Nov. 1-Mar. 31. Currently, the lynx and wolverine trapping seasons are aligned in Unit 25C. In Units 25A, 25B, and 25D, the wolverine trapping season currently runs a month longer than the lynx trapping season.

If both WP16-57 and WP16-58 are adopted, the lynx and wolverine Federal subsistence trapping seasons in all of Unit 25 would be aligned. If one proposal is adopted and not the other or if both proposals are opposed, the season closing dates for these species will continue to be misaligned in portions of Unit 25.

Biological Background

State management goals and objectives for wolverines in Unit 25C are as follows (Hollis 2010):

- Provide the greatest opportunity for harvesting furbearers
- Manage for a 3-year mean annual harvest >50% males by subunit for the Fairbanks area (Units 20ABCDF, 25C).

Wolverines are distributed across Alaska. Male wolverines have exceptionally large home ranges of 1,000 km² (386 mi²); resident female home ranges average 100-400 km² (39-154 mi²), and the home range of transient and subordinate individuals is between the two (Gardner et al. 2010).

Wolverines are generally solitary outside of the breeding season (May et al. 2006). Breeding season occurs between May and August; however, the species exhibits delayed implantation, occurring between December and February, followed by a gestation of 30-50 days (Inman et al. 2012; Rausch & Pearson 1972). Female wolverines usually give birth to 1-2 young between February and April (Inman et al. 2012). Females utilize two different dens prior to weaning their young: a natal den (birth location) and a maternal den (used after birthing but before weaning). Females vacate dens in late April to mid-May, moving to rendezvous sites where mothers leave their young while acquiring food (Inman et al. 2012).

Wolverines have low reproductive rates, averaging <1 weaned kit/adult female annually (Krebs et al 2004). Female wolverines are capable of aborting or reabsorbing fetuses if food availability is too low to support pregnancy and lactation. The size of winter food caches likely influences the outcome of wolverine pregnancies (Inman et al 2012).

Wolverine population estimates are difficult to determine as the species' large home ranges cause them to naturally occur in low densities. Gardner et al. (2010) conducted a coarse (large)-scale aerial survey of Interior Alaska in 2006 to estimate wolverine occurrence and distribution. The survey covered an estimated 180,000 km² which included all of the Eastern Interior region as well as portions of Units 24 and 21. Gardner et al (2010) observed wolverine tracks in 66% of the units sampled and occupancy modelling indicated 83% of the study area as core wolverine habitat, illustrating that wolverines are widely distributed throughout Interior Alaska (Gardner et al. 2010).

Krebs et al. (2004) found trapped wolverine populations to likely be maintained by immigration of wolverines from untrapped areas, termed refugia. Krebs et al (2004) asserted the establishment and/or preservation of refugia twice the size of trapped areas may be necessary to ensure long-term viability of trapped wolverine populations.

Hollis (2010) states there are adequate refugia surrounding areas in the Interior with low wolverine numbers, citing Gardner et al (2010). However, Gardner et al (2010) does not address the adequacy of refugia in Interior Alaska in their results, discussion, or conclusion. Additionally, as all lands in the Fairbanks area are open to the take of wolverine, there are essentially no refugia. However, as most of this area is difficult to access, some areas may not be trapped, essentially acting as refugia.

Since regulatory year 1996/97, ADF&G trapper questionnaires have provided furbearer abundance and population trends based on responses from area trappers. While qualitative, this information is useful for tracking population changes over time and is the best available for many furbearer populations, including wolverines in Unit 25C.

From 1996/97 to 2012/13, wolverine abundance in the lower Tanana Basin (Units 20ABCDF and 25C) has been reported as scarce, except in 1999/00 and 2007/08 when wolverines were reported as common. Wolverine population trends in the lower Tanana Basin have consistently been reported as “no change” (ADF&G 2013a, 2013b, 2012, 2010a, 2010b, 2010c, 2007, 2006, 2005, 2002, 2001, 2000, 1998, 1997).

Habitat

Wolverines utilize subalpine, high-elevation habitats (Gardener et al. 2010, Copeland et al. 2007). Copeland et al (2010) found a positive correlation between wolverine distribution and persistent spring snow cover. This association can be explained by several factors: wolverines den beneath the snow; large feet give wolverines a morphological advantage over ungulates in deep snow, improving food availability; food caches are more secure from competitors and less prone to spoilage; and human influences are generally absent (Inman et al 2012, Gardener et al. 2010, Copeland et al 2010).

Wolverine presence is also positively correlated with elevation and negatively associated with human infrastructure and disturbance (Gardner et al 2010, May et al 2006). Gardner et al (2010) identified two areas that did not support resident wolverines: Fairbanks vicinity in Units 20AB and around Circle in Unit 25C. However, wolverines in Interior Alaska may occupy lowland habitats where harvest pressure and human influences are limited (Gardner et al 2010).

Other than the Circle vicinity, Unit 25C contains primarily high elevation areas, indicating suitable wolverine habitat occurs in the unit.

Harvest History

Low reproductive rates, inherently low population densities, and susceptibility to harvest pressure indicate that conservative harvest strategies are warranted for wolverines (Krebs et al 2004).

All harvested wolverines are required to be sealed by the State. Wolverine harvest in Unit 25C has historically been low. Between 1990/91 and 2014/15, 0-8 wolverines were sealed/year in Unit 25C with an average of 3 sealed/year (**Figure 1**, Young 2015b, pers. comm.).

Trappers are also asked to voluntarily report harvested furbearers via the annual trapper questionnaires administered by ADF&G. Since 2004/05, ADF&G has reported this information by unit. Between 2004/05 and 2012/13, reported wolverine harvest ranged from 0-5/year (**Figure 1**). An interesting note is that while sealing records typically reflect more harvested animals than voluntary reporting, more harvested wolverines were voluntarily reported than were sealed in 2007/08 and 2008/09 (**Figure 1**).

Unit 25C has historically yielded a small percentage of the total wolverines harvested in the Fairbanks Area. Between 1990/91 and 2008/09, wolverine harvest from Unit 25C comprised 0-29% of the annual wolverine harvest from the Fairbanks Area, averaging 9% of the harvest/year (Units 20ABCDF, 25C, Young 2015b, pers. comm., Hollis 2010).

As male wolverines range widely over greater distances than females, males are more susceptible to trapping. Therefore, if the percent of males harvested consistently falls below 50%, overharvesting may be occurring (Hollis 2010). The 3-year average of the percent of males harvested in the Fairbanks area between regulatory years 1991/92 and 2008/09 exceeded management objectives in all years (**Figure 2**, Hollis 2010). The 3 year average of the percent of males harvested in Unit 25C only met or exceeded management objectives in 16 of 23 years between 1992/93 and 2014/15 (**Figure 2**, Young 2015b, pers. comm.). The percentage of males harvested suggests the wolverine harvest in Unit 25C may be unsustainable over the long-term. However, due to the very low sample size and annual fluctuation in harvest, it is difficult to make any definitive conclusions concerning overharvesting in this unit.

Regional populations of some wildlife species are characterized by areas of varying productivity and population densities due to local differences in habitat, harvest pressure, and/or other factors. Areas of high productivity may act as a “source” for new individuals in low productivity areas, which can act as a population “sink” (Pulliam 1988). Unit 25C may be acting as a sink for the regional wolverine population. That is, as wolverines are removed from Unit 25C through harvest, wolverines from surrounding areas immigrate into the unit and then are harvested. As this cycle repeats through time, the regional wolverine population could decline.

Unit 25C is much more accessible than the rest of Unit 25. A road connects Circle, which is roughly in the center of Unit 25C with Fairbanks whereas the remainder of Unit 25 is roadless. The greater accessibility and proximity to Fairbanks results in higher trapper density in Unit 25C than in Unit 25 remainder and is the reason the trapping season in Unit 25C has been a month shorter (Young 2015a, pers. comm.).

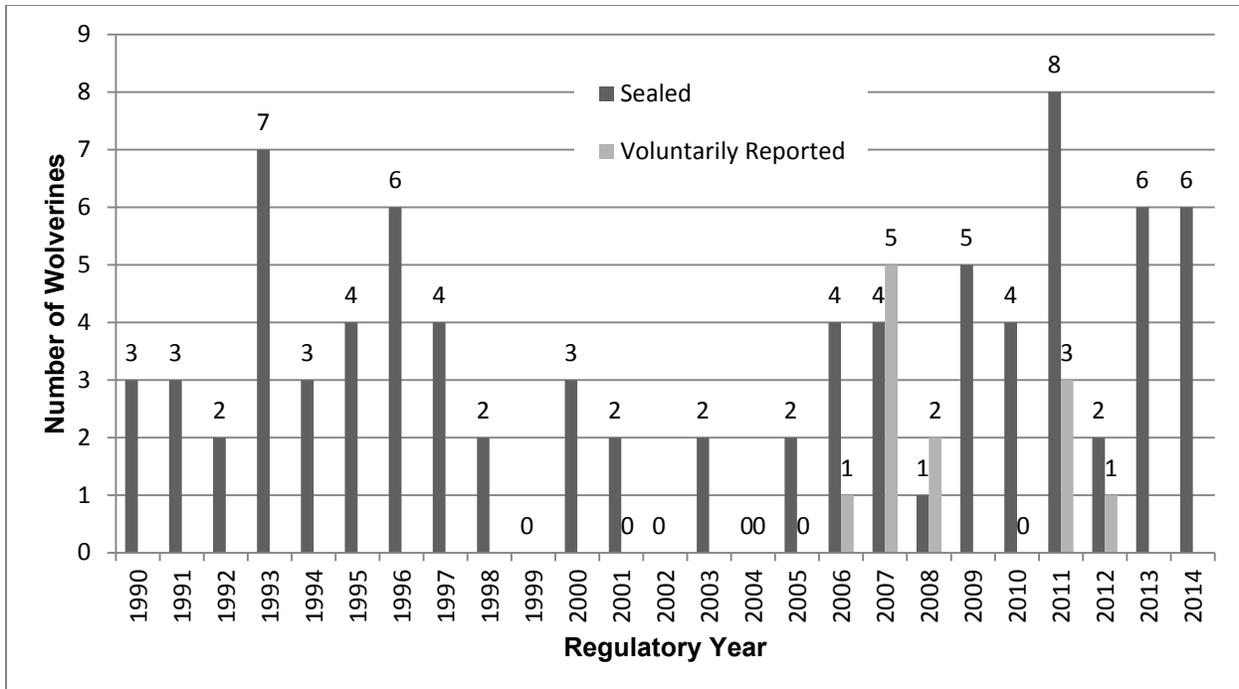


Figure 1. Number of wolverines sealed (1990/91 to 2014/15) and voluntarily reported (2004/05 to 2012/13) in Unit 25C (Young 2015b, pers. comm., ADF&G 2006, 2007, 2010a, 2010b, 2010c, 2012, 2013a, 2013b). No reported harvest data available for 2009/10.

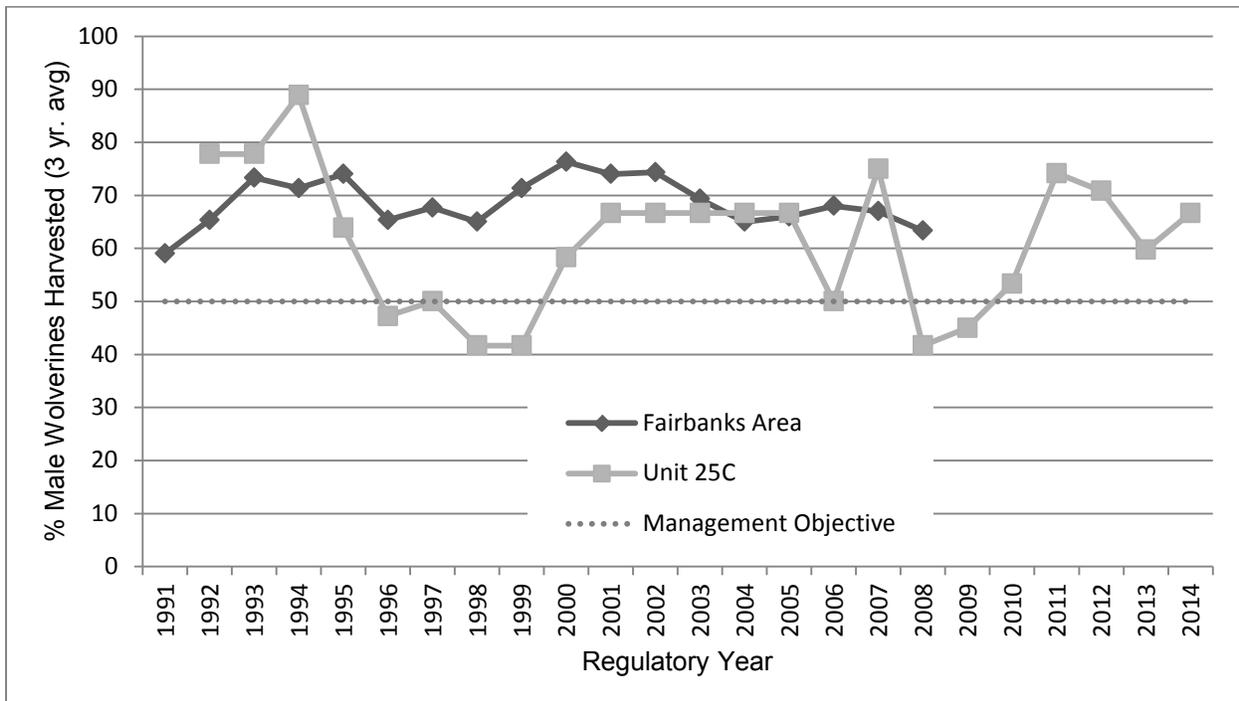


Figure 2. 3-year average of the percent of male wolverines harvested in the Fairbanks area and Unit 25C (Hollis 2010, Young 2015b, pers. comm.).

Effects of the Proposal

If adopted, this proposal would add an additional 31 days to the wolverine trapping season in Unit 25C. Extension of this season would allow more trapping opportunities for Federally qualified subsistence users.

The biological impact of adopting this proposal to the wolverine population is uncertain. The best available information (trapper questionnaires) indicates wolverine abundance across the Lower Tanana Basin has been consistently scarce, although stable.

If this proposal is adopted, the total annual harvest of wolverines in Unit 25C is expected to slightly increase. While harvest pressure fluctuates annually with fur prices and environmental conditions, it is relatively high in Unit 25C due to road accessibility and proximity to Fairbanks (Young 2015a, pers. comm.). However, as only Federally qualified subsistence users (does not include Fairbanks residents) would be able to trap during the extended season in March, trapping pressure may be much less during that time period. However, as harvest data indicates that the wolverine population in Unit 25C may already be overharvested, coupled with low reproductive rates and population densities, even a slight increase in harvest may result in (or exacerbate an already existing) population decline.

Adoption of this proposal would extend harvest into the denning period. While females likely only leave dens for short periods of time to access food caches or for other feeding opportunities, the risk of litter loss is slightly increased.

Lynx and wolverine are often trapped in the same types of sets. Proposal WP16-57 requests that the closing date for the lynx trapping season be extended to Mar. 31. If both WP16-57 and this proposal are adopted, the Federal subsistence lynx and wolverine trapping seasons in all of Unit 25 would be aligned, which would reduce incidental take issues (i.e. trapping a lynx out of season when targeting wolverine or vice versa). However, incidental take is rarely reported, so it is difficult to determine how much incidental take actually occurs (Young 2015a, pers. comm.).

Extending the wolverine trapping season in Unit 25C would align Federal subsistence wolverine trapping season dates throughout Unit 25, simplifying Federal regulations. If this proposal is adopted, the closing date of the Federal subsistence hunt, State hunt, and Federal subsistence trapping season for wolverine in all of Unit 25 would also be aligned (Mar. 31st). However, this proposed change would result in misalignment between the Federal subsistence and State wolverine trapping seasons for Unit 25C, potentially resulting in law enforcement concerns.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP16-58.

Justification

There are conservation concerns about the wolverine population in Unit 25C. Overharvesting may already be occurring. If adopted, this proposal is expected to increase harvest of wolverines by providing additional opportunity (31 days) to Federally qualified subsistence users. Even a modest increase in harvest may result in or exacerbate population decline. Wolverines have low reproductive rates and naturally occur in low densities, warranting conservative harvest regulations. Unit 25C is relatively accessible with high trapper density.

LITERATURE CITED

ADF&G. 2013a. Trapper questionnaire; Statewide annual report: 1 July 2012 – 30 June 2013. Wildlife Management Report, ADF&G/DWC/WMR-2013-5. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2013.pdf>. 66 pp. Retrieved: April 9, 2015.

ADF&G. 2013b. Trapper questionnaire; Statewide annual report: 1 July 2011 – 30 June 2012. Wildlife Management Report, ADF&G/DWC/WMR-2013-4. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2012.pdf>. 62 pp. Retrieved: April 9, 2015.

ADF&G. 2012. Trapper questionnaire; Statewide annual report: 1 July 2010 – 30 June 2011. Wildlife Management Report, ADF&G/DWC/WMR-2012-2. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2011.pdf>. 64 pp. Retrieved: April 9, 2015.

ADF&G. 2010a. Trapper questionnaire; Statewide annual report: 1 July 2008 – 30 June 2009. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2009.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010b. Trapper questionnaire; Statewide annual report: 1 July 2007 – 30 June 2008. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2008.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010c. Trapper questionnaire; Statewide annual report: 1 July 2006 – 30 June 2007. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2007.pdf>. 82 pp. Retrieved: April 9, 2015.

ADF&G. 2007. Trapper questionnaire; Statewide annual report: 1 July 2005 – 30 June 2006. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2006.pdf>. 76 pp. Retrieved: April 9, 2015.

ADF&G. 2006. Trapper questionnaire; Statewide annual report: 1 July 2004 – 30 June 2005. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2005.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2005. Trapper questionnaire; Statewide annual report: 1 July 2003 – 30 June 2004. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2004.pdf>. 69 pp. Retrieved: April 9, 2015.

ADF&G. 2002. Trapper questionnaire; Statewide annual report: 1 July 2001 – 30 June 2002. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2002.pdf>. 70 pp. Retrieved: April 9, 2015.

ADF&G. 2002a. Trapper questionnaire; Statewide annual report: 1 July 2000 – 30 June 2001. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 2001. Trapper questionnaire; Statewide annual report: 1 July 1999 – 30 June 2000. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 2000. Trapper questionnaire; Statewide annual report: 1 July 1998 – 30 June 1999. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 1998. Trapper questionnaire; Statewide annual report: 1 July 1997 – 30 June 1998. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

ADF&G. 1997. Trapper questionnaire; Statewide annual report: 1 July 1996 – 30 June 1997. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet:

<http://www.adfg.alaska.gov/index.cfm?adfg=trapping.reports>. Retrieved: June 16, 2015.

Copeland, J. P. et al. 2007. Seasonal associations of the wolverine in central Idaho. *Journal of Wildlife Management*. 71(7):2201-2212. DOI: 10.2193/2006-559.

Copeland, J.P. K.S. McKelvey, K.B. Aubry, A. Landa, J. Persson, R.M. Inman, J. Krebs, E. Lofroth, H. Golden, J.R. Squires, A. Magoun, M.K. Schwartz, J. Wilmot, C.L. Copeland, R.E. Yates, I. Kojola, and R. May. 2010. The bioclimatic envelope of the wolverine (*Gulo gulo*): do climatic constraints limit its geographic distribution? *Canadian Journal of Zoology*. 88: 233-246.

Gardener, C. L., Lawler, J. P., Ver Hoef, J. M., Magoun, A. J., and Kalin A. Kellie. 2010. Coarse-scale distribution surveys and occurrence probability modeling for wolverine in interior Alaska. *Journal of Wildlife Management*. 74(8):1894-1903. DOI: 10.2193/2009-386

Hollis, A.L. 2010. Units 20A, 20B, 20C, 20F, and 25C furbearer. Pages 255-273 in P. Harper, editor. Furbearer management report of survey and inventory activities 1 July 2006-30 June 2009. Alaska Department of Fish and Game. Project 7.0. Juneau, Alaska, USA.

Inman, R. M., Magoun, A. J., Persson, J., and J. Mattisson. 2012. The wolverine niche: Linking reproductive chronology, caching, competition, and climate. *Journal of Mammalogy*. 93(3):364-644. DOI: 10.1644/11-MAMM-A-319.1

Krebs, J. et al. 2004. Synthesis of survival rates and causes of mortality in North American wolverines. *Journal of Wildlife Management*. 68(3):493-502.

Krebs, J., Lofroth, E.C., and Ian Parfitt. 2007. Multiscale habitat use by wolverines in British Columbia, Canada. *Journal of Wildlife Management*. 71(7):2180-2192. DOI: 10.2193/2007-099.

May, R., Landa, A., van Dijk, J., Linnell, J. D. C., Anderson, R. 2006. Impact on infrastructure on habitat selection of wolverines *Gulo gulo*. *Wildlife Biology*. 12(3):285-295.
DOI: [http://dx.doi.org/10.2981/0909-6396\(2006\)12\[285:IOIOHS\]2.0.CO;2](http://dx.doi.org/10.2981/0909-6396(2006)12[285:IOIOHS]2.0.CO;2)

Pulliam, H.R. 1988. Sources, Sinks, and Population regulation. *The American Naturalist*. 132(5): 652-661.

Rausch, R.A., and A. M. Pearson. 1972. Notes on wolverine in Alaska and Yukon territory. *Journal of Wildlife Management*. 36(2):249-268.

Young, D. 2015a. Fairbanks area wildlife biologist. Personal communication: e-mail. Alaska Department of Fish and Game. Fairbanks, AK.

Young, D. 2015b. Fairbanks area wildlife biologist. Personal communication: e-mail. Alaska Department of Fish and Game. Fairbanks, AK.

WP16-60 Executive Summary	
General Description	<p>Proposal WP16-60 requests the Chisana Caribou Herd (CCH) hunt be opened to all Federally qualified subsistence users with a customary and traditional use determination (C&T) for caribou in Unit 12 and that there be an unlimited number of Federal registration permits available.</p> <p><i>Submitted by: Upper Tanana-Fortymile Fish and Game Advisory Committee.</i></p>
Proposed Regulation	<p>Unit 12—Caribou</p> <p><i>Unit 12 — that portion east of the Nabesna River Aug. 10 – Sept. 30 and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border – 1 bull by Federal registration permit only.</i></p> <p><i>Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations. residents of Chisana, Chistochina, Mentasta, Northway, Tetlin, Tok, Unit 12 along the Nabesna Road (mileposts 25-46), and that portion of Unit 12 east of the Nabesna River and the Nabesna Glacier and south of the winter trail.</i></p>
OSM Preliminary Conclusion	<p>Support with modification to retain the delegated authority of the superintendent of Wrangell-St. Elias National Park and Preserve to set the number of permits.</p>
Southcentral Regional Advisory Council Recommendation	
Eastern Interior Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	

WP16-60 Executive Summary	
ADF&G Comments	
Written Public Comments	1 Support

**DRAFT STAFF ANALYSIS
WP16-60**

ISSUES

Proposal WP16-60, submitted by the Upper Tanana–Fortymile Fish and Game Advisory Committee, requests the Chisana Caribou Herd (CCH) hunt be opened to all Federally qualified subsistence users with a customary and traditional use determination (C&T) for caribou in Unit 12. The proponent also requests that there be an unlimited number of Federal registration permits available.

DISCUSSION

The proponent states that the intent of the proposal is to open the Chisana Caribou Herd hunt to all Federally qualified subsistence users with a C&T for caribou in Unit 12. Specifically, the proponent is requesting all Federally qualified subsistence users with a C&T for the CCH be allowed to participate in the hunt established in 2012. The proponent claims that the regulations resulting from the Section 804 analysis in 2014 are unnecessarily restrictive.

Based upon the low number of permits issued and caribou harvested over the past three hunting seasons, the proponent feels that the CCH would not be impacted by increasing the number of permits available or the number of communities approved for the CCH hunt.

The original proposal removed the Federal land closure completely, which would have opened Federal land to all users (including State residents and non-residents). Upon clarification, the proposed Federal regulation reflects the actual intent of this proposal, which is to open Federal public lands to all Federally qualified subsistence users only.

Existing Federal Regulation

Unit 12—Caribou

Unit 12 — that portion east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border – 1 bull by Federal registration permit only. Aug. 10 – Sept. 30

Federal public lands are closed to the harvest of caribou except by residents of Chisana, Chistochina, Mentasta, Northway, Tetlin, Tok, Unit 12 along the Nabesna Road (mileposts 25-46), and that portion of Unit 12 east of the Nabesna River and the Nabesna Glacier and south of the winter trail.

Proposed Federal Regulation

Unit 12—Caribou

Unit 12 — that portion east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border – 1 bull by Federal registration permit only. *Aug. 10 – Sept. 30*

*Federal public lands are closed to the harvest of caribou except by **Federally qualified subsistence users hunting under these regulations.** ~~residents of Chisana, Chistochina, Mentasta, Northway, Tetlin, Tok, Unit 12 along the Nabesna Road (mileposts 25–46), and that portion of Unit 12 east of the Nabesna River and the Nabesna Glacier and south of the winter trail.~~*

Existing State Regulation

Unit 12—Caribou

Unit 12 remainder

Residents and Nonresidents: No open season.

Extent of Federal Public Lands

Federal public lands comprise approximately 61% of Unit 12 and consists of 48% National Park Service (NPS) managed lands, 11% U.S. Fish and Wildlife Service managed lands (FWS), and 2% Bureau of Land Management (BLM) managed lands.

Customary and Traditional Use Determinations

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

ANILCA Section 804 Determination

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: Federal public lands are closed to the harvest of caribou except by residents of Chisana, Chistochina, Mentasta, Northway, Tetlin, Tok, Unit 12 along the Nabesna Road (mileposts 25-46), and that portion of Unit 12 east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail.

Regulatory History

Federal regulations were adopted from State regulations for the CCH in Unit 12 in 1990. The season ran from Sept. 1-Sept. 20 with a harvest limit of one bull. A to-be-announced winter season was also established for residents of Tetlin and Northway only with a harvest limit of one caribou by Federal registration permit.

In 1992, the Federal Subsistence Board (Board) adopted Proposal P92-107, limiting the take of caribou during the winter season to bulls only. This was done due to conservation concerns caused by the mixing of caribou herds (OSM 1992).

In 1993, the Alaska Board of Game (BOG) adopted Proposal 149, establishing a registration permit hunt for the CCH. This was done in an effort to avert the closure of the hunt on Federal public lands by the Federal Subsistence Board or the NPS (ADF&G 1993). ADF&G has not issued any permits since 1993/94.

In 1994, the Board adopted Proposal P94-71, closing that portion of Unit 12 east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border to caribou hunting. This was done due to conservation concerns over the declining Chisana Caribou herd (OSM 1994).

In 2010, the Alaska Board of Game approved a joint State-Federal drawing permit hunt for the CCH starting in 2011/12, for residents and nonresidents from Sept. 1-30 with a bag limit of one bull by drawing permit (ADF&G 2010). However, the entirety of the State authorized CCH hunt area is within Wrangell-St. Elias National Park and Preserve. As Federal public lands in this area are closed to non-Federally qualified subsistence users, there has been no CCH hunt under State regulations.

Also in 2010, the Board considered Proposal WP10-104, which requested establishment of a joint Federal/State draw permit for the CCH in Unit 12 with a harvest limit of one bull and a season of Sept. 1 – Sept. 30. The Board deferred action on WP10-104 to allow time for additional information (i.e. completion of a management plan and population surveys) to be gathered (FSB 2010).

In 2012, deferred Proposal WP10-104 along with new Proposals WP12-65 and WP12-66 were addressed by the Board. WP12-65 requested establishment of a Federal registration hunt for the CCH with a harvest limit of one bull and a season of Aug. 10 – Sept. 30, while WP12-66 requested establishment of a Federal registration hunt with a harvest limit of one bull and a season of Sept. 1 – Sept. 30, with the hunt restricted to Federal public lands in Unit 12 east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border.

The Board took no action on WP10-104 and WP12-65 and adopted WP12-66 with modification to identify the communities eligible to participate in the hunt consistent with Section 804 of the Alaska National Interest Lands Conservation Act (ANILCA): Northway, Mentasta, Tetlin, Tok, Chisana, and Chistochina. The authority to manage the Federal hunt was granted to the Wrangell-St. Elias National Park and Preserve Superintendent by letter of delegation from the Board.

Also in 2012, the Board adopted Proposal WP12-68, submitted by the Cheesh'na Tribal Council, adding the residents of Chistochina to the Unit 12 caribou customary and traditional use determination.

In 2014, Proposal WP14-15, submitted by the Wrangell-St. Elias National Park Subsistence Resource Commission, and Proposal WP14-45, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council, requested that the Board include residents of Nabesna (Nabesna Road from mileposts 25 to 46) and residents of the hunt area (Unit 12 east of the Nabesna River and the Nabesna Glacier and south of the Winter Trail) within the group of eligible users for the CCH. The Board took no action on Proposal WP14-45 and adopted WP14-15.

Proposal WP14-49, submitted by Gilliam Joe, requested a modification of the fall season dates for the Unit 12 caribou hunt that takes place east of the Nabesna River and Nabesna Glacier and south of the winter trail, and also requested the establishment of a winter hunt and a meat on the bone requirement. The proposal requested that the fall season be changed from Sept. 1 – Sept. 30 to Aug. 10 – Sept. 20 and that a Feb. 1 – Mar. 31 winter season be established. The Board adopted Proposal WP14-49 with modification to change the fall season dates to Aug. 10 – Sept. 30, but not establish a winter season or a meat on the bone requirement.

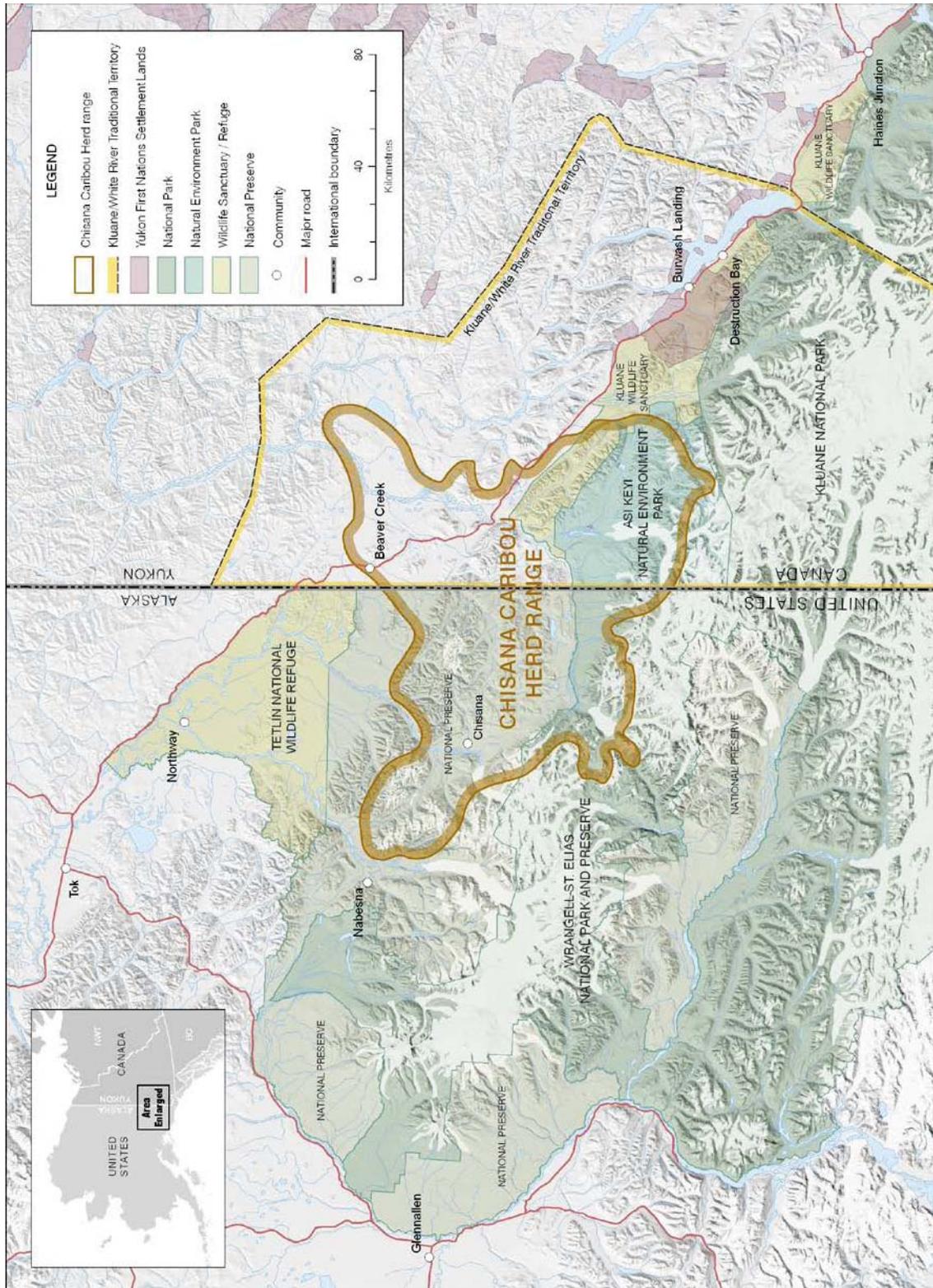
Biological Background

The CCH is a small, non-migratory herd inhabiting east-central Alaska (primarily Wrangell-St. Elias National Park and Preserve) and southwestern Yukon, Canada (**Map 1**). Genetic analysis suggests that this herd has been unique for thousands of years. The CCH are considered mountain caribou, characterized by cows calving alone at high elevations rather than aggregating in common calving grounds (Bentzen 2013, Bentzen 2011, CCHWG 2012).

The Chisana Caribou Herd Working Group (CCH Working Group) developed a 2010-2015 management plan for the Chisana Caribou Herd (Plan). The Plan guides harvest and management of the CCH, identifying specific goals, objectives, strategies, and activities. Population indicators identified in the Plan include:

- A stable or increasing population trend.
- An observed bull:cow ratio of 35 bulls:100 cows or greater.
- A three year calf:cow ratio above 15 calves:100 cows.

If any of these criteria are not met, no harvest is recommended. If all criteria are met, the plan recommends an annual bulls-only harvest not exceeding 2% of the estimated population. The Plan also recommends that the harvest be equally distributed between the Yukon (1%) and Alaska (1%). Harvest allocation within Alaska would be determined through the respective Federal and State regulatory process (CCHWG 2012). The CCH Working Group includes the Government of Yukon, Alaska Department of Fish and Game, White River First Nation, Kluane First Nation, National Park Service and U.S. Fish and Wildlife Service.



Map 1. Annual range of the Chisana caribou herd (CCHWG 2012).

Little is known about CCH population trends prior to the 1960s. In the mid to late 1970s, the CCH was estimated at 1,000 animals. Estimated herd size peaked in 1988 at 1900 caribou before declining 60% to an estimated low of 315 caribou in 2002 (**Figure 1**). Data indicated that calf recruitment was chronically low during the decline and that the age structure was skewed toward older animals (Bentzen 2013, CCHWG 2012).

Concern over the decline led to implementation of an intensive captive rearing program in Canada, conducted from 2003 to 2006 by the U.S. Geological Survey (USGS) and the Canadian Wildlife Service. The program captured pregnant cows, placing them in holding pens to guard against predators during calving and the neonatal period. The recovery effort is considered successful in enhancing calf survival and recruitment, which may have offset further population declines (CCHWG 2012).

In 2003, survey efforts intensified due to the captive rearing program and the greater number of radio-collared caribou. Therefore, data (i.e. herd size and composition estimates) are not comparable pre and post 2003 (CCHWG 2012). Since 2003, (2003-2014) the CCH population has appeared stable at approximately 700 caribou (**Figure 1**).

Between 1987 and 2002, the bull:cow ratio ranged from 16-40 bulls:100 cows, meeting management objectives in only 4 years. Since 2003, bull:cow ratios have exceeded management objectives, ranging from 37-50 bulls:100 cows between 2003-2014 (**Figure 2**, CCHWG 2012, Putera 2015).

Calf:cow ratios ranged from 0-31 calves:100 cows between 1987 and 2002. Calf:cow ratios ranged from 13-25 calves:100 cows between 2003 and 2014 (**Figure 3**). Between 1990 and 2003, the three year average calf:cow ratio did not meet management objectives. Since 2005, the three year average calf:cow ratio has exceeded management objectives.

Predation, particularly by wolves is considered a limiting factor for the CCH, although more research is recommended to better understand the impacts of predation on this herd (CCHWG 2012). Research conducted by the ADF&G, NPS, and the Yukon Department of the Environment (YDE) indicated predation accounted for 89% of documented mortality of radio-collared cows between 1991 and 2003 (Gross 2007). Disease is not considered a factor limiting the CCH population (CCHWG 2012).

Severe weather may also be a limiting factor. Heavy snow years increase energy expenditure by inhibiting movements and access to forage. Heavy snow could also decrease calving success by hampering cow movements to high elevations and increasing predation risks. Warmer, drier summers may increase harassment by insects (CCHWG 2012).

Habitat

The CCH range is considered very poor caribou habitat due in part to low lichen prevalence. Moss comprises a high proportion of the CCH's winter diet, which has extremely low nutritional value and digestibility compared to lichen. Volcanic ash in the soil may contribute to accelerated tooth wear, indirectly impacting health and longevity (CCHWG 2012).

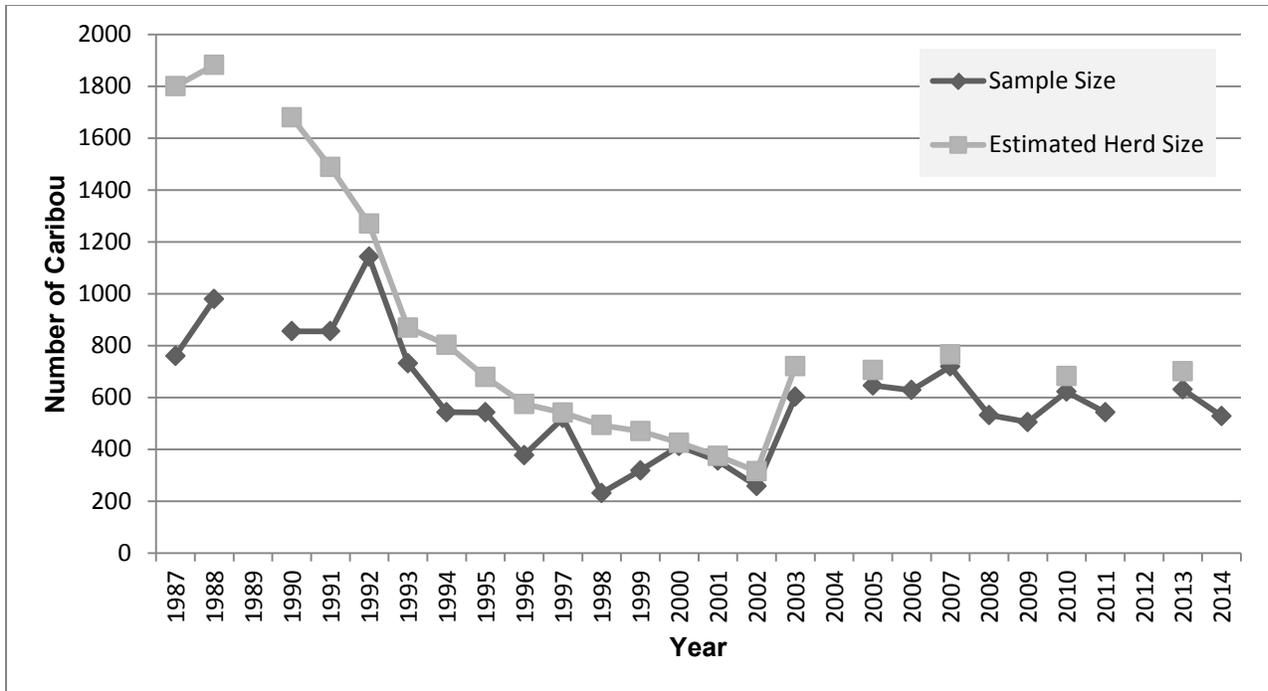


Figure 1. Chisana Caribou Herd population estimates. Estimates before 2003 are derived from ADF&G visual surveys. Estimates in 2003 and after are derived from USGS surveys using a sightability correction factor. No data available for years 1989, 2004, and 2012. In some years, no estimates were determined as no sightability correction factors were determined (CCHWG 2012, Putera 2015).

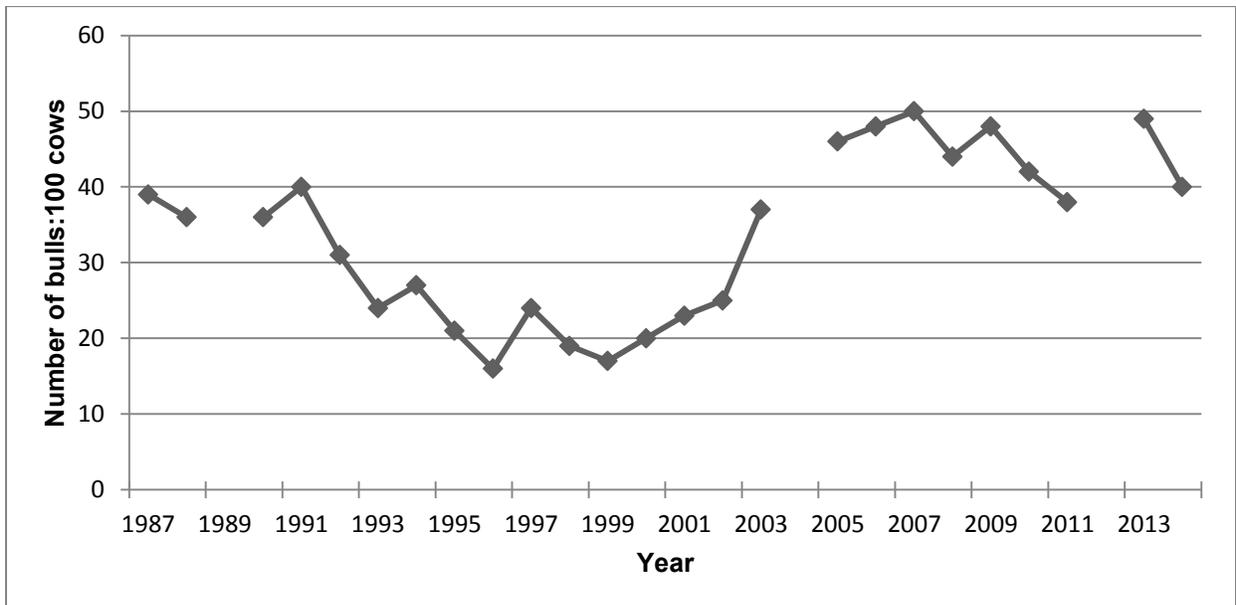


Figure 2. Bull:cow ratios of the Chisana Caribou Herd. Counts before 2003 were conducted by the ADF&G. Counts 2003 and after were conducted by the USGS. No data available for years 1989, 2004, and 2012 (CCHWG 2012, Putera 2015).

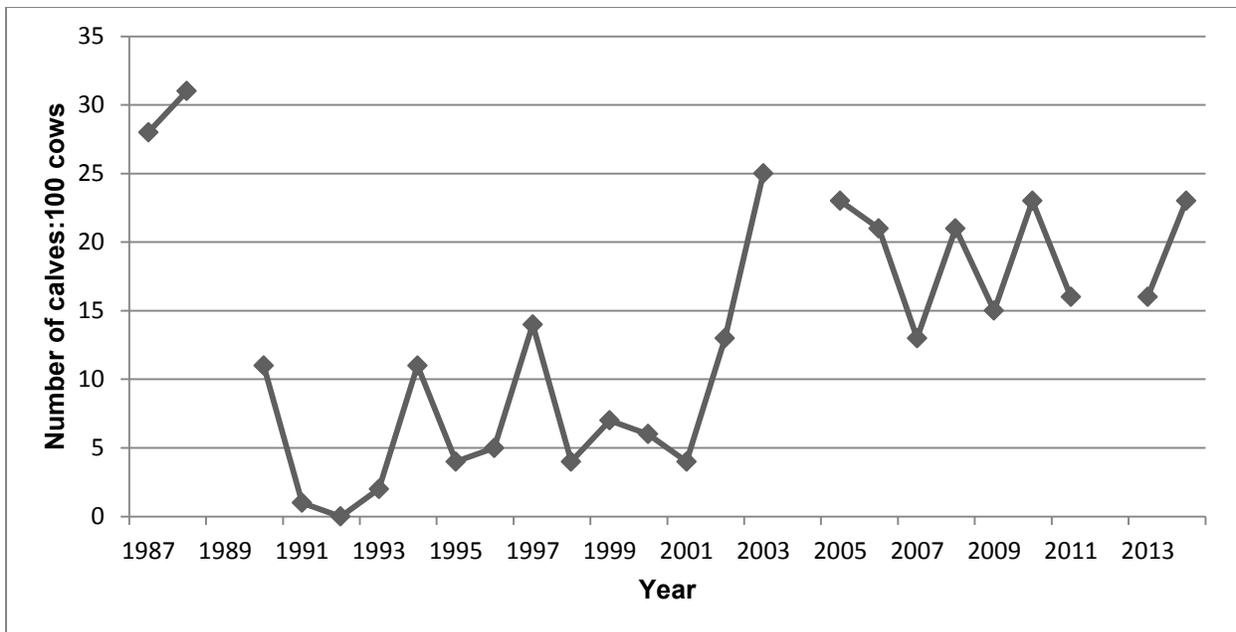


Figure 3. Calf:cow ratios of the Chisana Caribou Herd. Counts before 2003 were conducted by the ADF&G. Counts 2003 and after were conducted by the USGS. No data available for years 1989, 2004, and 2012 (CCHWG 2012, Putera 2015).

Harvest History

Because of its small population size and inaccessibility, the CCH has never supported large harvests across its range. During the early 1900s, residents of Athabascan villages and gold seekers harvested Chisana caribou. Subsistence use of the herd declined after the gold rush ended in 1929 and since Cooper Creek village burned in the mid-1950s, few people have depended on the CCH as their primary food source. However, the CCH continues to be an important aspect of Upper Tanana and Ahtna Athabascan culture (Gross 2007, Bentzen 2011, 2013).

Between the 1950s and 1994 when the CCH hunt closed, guided hunting was the primary use of the herd in Alaska (Gross 2007, Bentzen 2013). Local guides indicate that Chisana caribou are particularly large with large antlers, making them especially valued for guided hunts (OSM 2012).

Total (Yukon and Alaska) estimated caribou harvested from the CCH between regulatory years 1989/90 and 1993/94 ranged from 21-72 caribou/year (**Figure 4**). The unreported caribou harvest in the Yukon was estimated between 1-20 caribou/year during this time period (Gross 2007, Bentzen 2013).

Between 1990/91 and 1994/95, nonresidents took 58% of the harvested caribou while (State) subsistence users took 9% of the harvest (Bentzen 2013, CCHWG 2012). Because of the remoteness of the CCH, the closure in 1994 essentially affected only the 10 permanent residents in Chisana, half of which were registered guides (FSB 1994). Little illegal harvest has occurred (< 3 caribou/year) since the 1994 closure (**Figure 4**, Gross 2007, Bentzen 2013).

First Nations in the Yukon continued harvesting from the CCH throughout the 1990s. Between 1996 and 1999, First Nation members harvested 3-20 Chisana caribou annually. After 2001, First Nation members voluntarily ceased harvest (**Figure 4**, Gross 2007, Bentzen 2013).

In 2012, a CCH hunt was opened for residents of Northway, Mentasta, Tetlin, Tok, Chisana, and Chistochina by registration permits issued by Wrangell-St. Elias National Park and Preserve (NPP). Permits were allocated to each community according to a permit allocation plan developed by Wrangell-St. Elias NPP and various stakeholders. Under this plan, two permits each are allocated to the four eligible communities with Federally recognized tribal governments (Chistochina, Mentasta Lake, Northway, and Tetlin) with the understanding that all community residents, not just tribal members, would be considered for permit distribution, and the remaining permits are issued to Tok and Chisana residents on a first-come, first-served basis (Cellarius 2013).

In 2014, residents of Unit 12 along the Nabesna Road (mileposts 25-46) and residents of that portion of Unit 12 east of the Nabesna River and the Nabesna Glacier and south of the winter trail were added to the Federal subsistence users eligible to harvest Chisana caribou. Residents of these areas must contact the subsistence coordinator at Wrangell-St. Elias NPP for permit information (Keogh 2014).

The harvest quota for the Federal hunt has been set at 7 bulls per the CCH management plan guidelines (1% of the estimated population). Fourteen permits were available for 2012/13 and 2013/14. Eighteen permits were available for 2014/15.

In all years, the hunt was undersubscribed with Wrangell-St. Elias NPP issuing 9-11 permits/year (**Table 1**). Harvest was also below quota for all years, ranging from 2-3 caribou/year (**Figure 4**, **Table 1**).

Table 1. Chisana Caribou Hunt (FC1205) Summary 2012-2014 (OSM 2015).

	2012	2013	2014
Permits Available	14	14	18
Permits Issued	9	9	11
Individuals Hunting	8	7	8
Animals Harvested	2	3	2

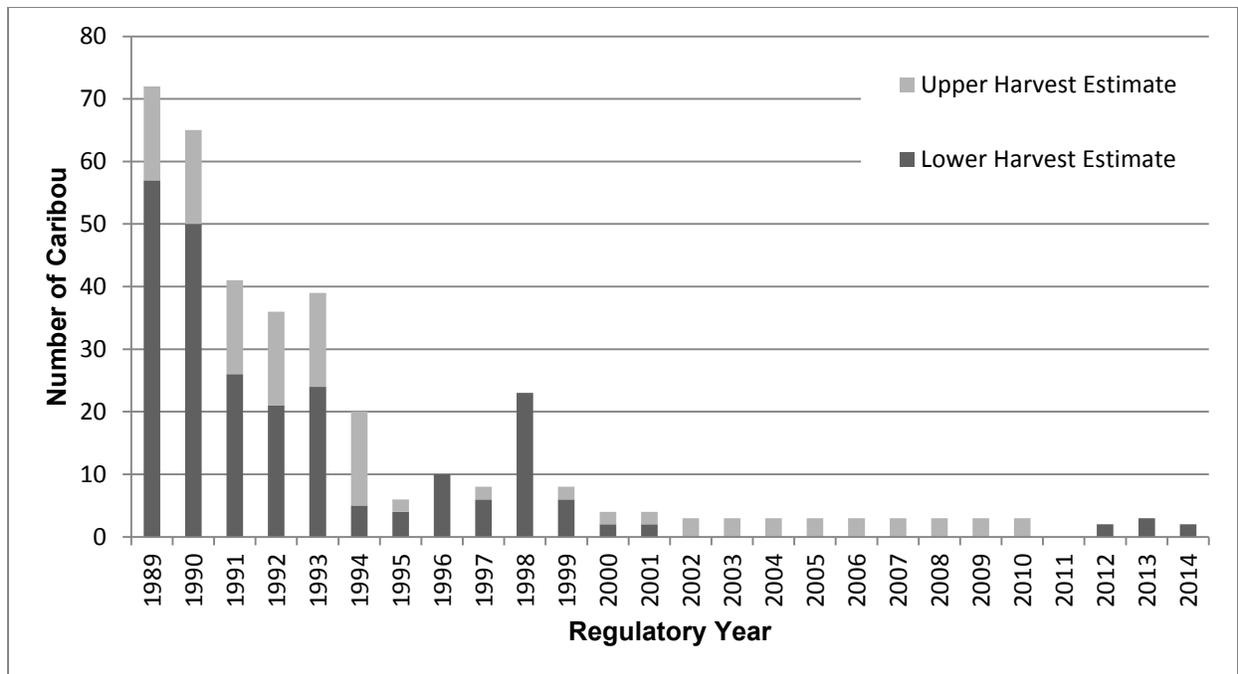


Figure 4. Total estimated caribou harvested from the Chisana Caribou Herd in Alaska and Yukon (Gross 2007, Bentzen 2013, OSM 2015). 1994—The CCH hunt closed in Alaska. 2001—First Nations voluntarily ceased harvest from the CCH in Yukon. 2012—A CCH hunt was opened for Federally qualified subsistence users.

Effects of the Proposal

If adopted, this proposal would open the Chisana Caribou hunt to all Federally qualified subsistence users with a customary and traditional use determination for caribou in Unit 12, increasing hunting opportunities. While overall caribou harvest may increase as a result of adopting this proposal, it is unlikely that the harvest quota (7 bulls) would be met.

Given the low number of permits issued and animals harvested since the Federal hunt began in 2012, as well as a bull:cow ratio that has exceeded management objectives for over 10 years, it is unlikely that adoption of this proposal will have any biological impact on the CCH.

Adopting this proposal would allow an unlimited number of permits to be issued for the CCH hunt, removing the delegated authority of the Wrangell St-Elias National Park and Preserve (NPP) superintendent to set the number of available permits. The Wrangell-St. Elias NPP superintendent would maintain the management authority and flexibility to open/close the season, and announce the harvest quota and reporting period.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-60 **with modification** to retain the delegated authority of the superintendent of Wrangell-St. Elias National Park and Preserve to set the number of permits.

Justification

Opening the CCH hunt to all Federally qualified subsistence users with a customary and traditional use determination for this region will provide several communities with additional hunting opportunities. The number of permits issued and animals harvested have been well below quotas from 2012-2014. No biological impacts to the CCH are expected due to a harvest quota and harvest reporting requirements designed to prevent overharvest.

Currently, Wrangell-St. Elias National Park and Preserve superintendent maintains delegated authority to set, open, and close the Federal season and to announce the harvest quota, the number of permits, and the reporting period. This delegated authority enables the in season Federal land manager to quickly respond to any conservation concerns that may arise, ensuring the conservation of the CCH.

LITERATURE CITED

ADF&G. 1993. Spring 1993 summary of actions. Pp. 25. Alaska Department of Fish and Game.

ADF&G. 2010. Proposals. Alaska Board of Game meeting information. Interior Region. February 26-March 7, 2010. <http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=02-26-2010&meeting=fairbanks>. Retrieved: June 10, 2015. Pp. 25-26.

Bentzen, T.W. 2011. Unit 12 caribou. Pages 60-73 in P. Harper, editor. Caribou management report of survey and inventory activities 1 July-30 June 2010. ADF&G. Project 3.0. Juneau, AK.

Bentzen, T.W. 2013. Unit 12 caribou. Pages 76-88 in P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2010-30 June 2012. Alaska Department of Fish and Game, Species management report ADF&G/DWC/SMR-2013-3. Juneau, AK.

Cellarius, B. 2013. Fall Subsistence Program Report. Wrangell-St. Elias National Park and Preserve. Copper Center, AK. 3pp.

Cellarius, B. 2015. Subsistence Coordinator. Personal Communication: Phone Call. Wrangell-St. Elias National Park and Preserve. Copper Center, AK.

Chisana Caribou Herd Working Group. 2012. Management Plan for the Chisana Caribou Herd; 2010-2015. Government of Yukon, Department of Environment, Whitehorse, YT. 48pp.

FSB. 1994. Transcripts of Federal Subsistence Board meeting proceedings. April 14, 1994. Pp. 716-724. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2010. Transcripts of Federal Subsistence Board meeting proceedings. May 20, 2010. Pp. 425-449. Office of Subsistence Management, USFWS. Anchorage, AK.

Gross, J.A. 2007. Unit 12 caribou. Pages 56-64 *in* Caribou management report of survey and inventory activities 1 July 2004-30 June 2006. ADF&G. Project 3.0. Juneau, AK.

Keogh, M. 2014. Plans for subsistence hunt of Chisana caribou herd announced. Wrangell-St. Elias National Park/Preserve news release. July 17, 2014. Copper Center, AK.

OSM. 1992. Staff analysis of P92-107. Office of Subsistence Management database, USFWS. Anchorage, AK. Accessed June 11, 2015.

OSM. 1994. Staff analysis of P94-71. Office of Subsistence Management database, USFWS. Anchorage, AK. Accessed June 11, 2015.

OSM. 2012. Staff analysis of WP10-104 and WP12-65/66. Office of Subsistence Management database, USFWS. Anchorage, AK. Accessed June 11, 2015.

OSM. 2015. Federal Subsistence Permit System. Office of Subsistence Management. USFWS. Anchorage, AK. Accessed May 20, 2015.

Putera, J.. 2015. January 2015 Wildlife Report. Wrangell-St. Elias National Park and Preserve. Copper Center, AK. 3pp.

Putera, J. 2013. Wildlife Biologist. Personal communication: phone call. Wrangell-St. Elias National Park and Preserve. Copper Center, AK.

WRITTEN PUBLIC COMMENTS



May 27, 2015

Federal Subsistence Board
ATTN: Theo Matuskowitz
Office of Subsistence Management
1011 E. Tudor Road, MS-121
Anchorage, Alaska 99503-6199

RE: 2016-2018 Wildlife Proposals

Dear Mr. Matuskowitz:

Enclosed is Ahtna Tene Nene' Customary & Traditional Use Committee's comments on the 2016-2018 wildlife proposals.

Sincerely,

*Shoria Stickwan
for Roy S. Ewan*

Roy S. Ewan,
Chair

WP16-60 Unit 12 C&T for Chisana Caribou

Comments:

We support WP16-60 with an amendment to allow only federally qualified subsistence users with a positive customary and traditional use for caribou in Unit 12. We oppose opening Unit 12 Chisana Caribou hunt to non-federally qualified subsistence hunters. Adding the communities of Dot Lake, Healy Lake and Tanacross will provide an opportunity for them to harvest Chisana caribou to sustain their livelihood and meet subsistence needs.

As the proposal states, harvesting a Chisana caribou is difficult due to the terrain and access to the hunting area. Most likely not too many more Chisana Caribou will be harvested by including C&T for these additional communities to the Unit 12 caribou hunt.

Additionally, Wrangell St. Elias National Park Superintendent has the discretion to close the hunt, if the hunters are reaching the harvest quota for this caribou herd.

WP16-67 Executive Summary	
General Description	<p>Proposal WP16-67 requests the beaver harvest limit be changed from 15 and 25 beaver/season in Units 12 and 20E, respectively, to no harvest limit in both units; trapping season dates be changed from Sept. 20-May 15 to Sept. 5-June 10; and bow and arrow be added as a legal means of take for beaver in Units 12 and 20E. <i>Submitted by: Upper Tanana-Fortymile Fish and Game Advisory Committee.</i></p>
Proposed Regulation	<p><i>___.26(d) The following methods and means of trapping furbearers for subsistence uses pursuant to the requirements of a trapping license are prohibited, in addition to the prohibitions listed at paragraph (b) of this section:</i></p> <p style="text-align: center;">* * * *</p> <p><i>(3) Taking beaver by any means other than a steel trap or snare, except that you may use firearms and bow and arrow in certain Units with established seasons as identified in Unit-specific regulations found in this subpart;</i></p> <p style="text-align: center;">Unit 12—Beaver Trapping</p> <p><i>15 beaver per season. Only firearms may be used during Sept. 20-Oct. 31 and Apr. 16-May 15, to take up to 6 beaver. Only traps or snares may be used Nov. 1-Apr. 15. The total annual harvest limit for beaver is 15, of which no more than 6 may be taken by firearm under trapping or hunting regulations. No limit. Hide or meat from beaver harvested by firearm must be salvaged for human consumption. Traps, snares, bow and arrow, or firearms may be used. Sept. 2015-May 15 June 10.</i></p> <p style="text-align: center;">Unit 20E—Beaver Trapping</p> <p><i>25 beaver per season. Only firearms may be used during Sept. 20-Oct. 31 and Apr. 16-May 15, to take up to 6 beaver. Only traps or snares may be used Nov. 1-Apr. 15. The total annual harvest limit for beaver is 25, of which no more than 6 may Sept. 2015-May 15 June 10.</i></p>

WP16–67 Executive Summary	
	<i>be taken by firearm under trapping or hunting regulations. —No limit. Hide or meat from beaver harvested by firearm must be salvaged for human consumption. Traps, snares, bow and arrow, or firearms may be used.</i>
OSM Preliminary Conclusion	Support
Southcentral Regional Advisory Council Recommendation	
Eastern Interior Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	1 Support

**DRAFT STAFF ANALYSIS
WP16-67**

ISSUES

Proposal WP16-67, submitted by the Upper Tanana-Fortymile Fish and Game Advisory Committee, requests the beaver harvest limit be changed from 15 and 25 beaver/season in Units 12 and 20E, respectively, to no harvest limit in both units; trapping season dates be changed from Sept. 20-May 15 to Sept. 5-June 10; and bow and arrow be added as a legal means of take for beaver in Units 12 and 20E.

DISCUSSION

The proponent states that the proposed changes would align Federal beaver trapping regulations with the more liberal State regulations as well as provide increased harvest opportunity for Federally qualified subsistence users. The proponent also claims that the proposed changes would have no impact on beaver populations or other users.

Upon personal communication with the proponent, it was clarified that the intention of the proposal was to align Federal and State regulations. Under current State regulations, bow and arrow is a legal means of take for beaver trapping in Units 12 and 20E. Omission of bow and arrow as legal gear in the submitted Federal proposal was an oversight of the proponent.

Existing Federal Regulations

___.26(d) The following methods and means of trapping furbearers for subsistence uses pursuant to the requirements of a trapping license are prohibited, in addition to the prohibitions listed at paragraph (b) of this section:

* * * *

(3) Taking beaver by any means other than a steel trap or snare, except that you may use firearms in certain Units with established seasons as identified in Unit-specific regulations found in this subpart;

Unit 12—Beaver Trapping

15 beaver per season. Only firearms may be used during Sept. 20-Oct. 31 and Apr. 16-May 15, to take up to 6 beaver. Only traps or snares may be used Nov. 1-Apr. 15. The total annual harvest limit for beaver is 15, of which no more than 6 may be taken by firearm under trapping or hunting regulations. Meat from beaver harvested by firearm must be salvaged for human consumption. Sept. 20-May 15.

Unit 20E—Beaver Trapping

25 beaver per season. Only firearms may be used during Sept. 20-Oct. 31 and Apr. 16-May 15, to take up to 6 beaver. Only traps or snares may be used Nov. 1-Apr. 15. The total annual harvest limit for beaver is 25, of which no more than 6 may be taken by firearm under trapping or hunting regulations. Meat from beaver harvested by firearm must be salvaged for human consumption. Sept. 20-May 15.

Proposed Federal Regulations

_.26(d) The following methods and means of trapping furbearers for subsistence uses pursuant to the requirements of a trapping license are prohibited, in addition to the prohibitions listed at paragraph (b) of this section:

* * * *

(3) Taking beaver by any means other than a steel trap or snare, except that you may use firearms **and bow and arrow** in certain Units with established seasons as identified in Unit-specific regulations found in this subpart;

Unit 12—Beaver Trapping

~~15 beaver per season. Only firearms may be used during Sept. 20-Oct. 31 and Apr. 16-May 15, to take up to 6 beaver. Only traps or snares may be used Nov. 1-Apr. 15. The total annual harvest limit for beaver is 15, of which no more than 6 may be taken by firearm under trapping or hunting regulations. No limit. Hide or meat from beaver harvested by firearm must be salvaged for human consumption. Traps, snares, bow and arrow, or firearms may be used.~~ Sept. 2015-May 15 June 10.

Unit 20E—Beaver Trapping

~~25 beaver per season. Only firearms may be used during Sept. 20-Oct. 31 and Apr. 16-May 15, to take up to 6 beaver. Only traps or snares may be used Nov. 1-Apr. 15. The total annual harvest limit for beaver is 25, of which no more than 6 may be taken by firearm under trapping or hunting regulations. No limit. Hide or meat from beaver harvested by firearm must be salvaged for human consumption. Traps, snares, bow and arrow, or firearms may be used.~~ Sept. 2015-May 15 June 10.

Existing State Regulations

5AAC 92.095(a) *The following methods and means of taking furbearers under a trapping license are prohibited, in addition to the prohibitions in 5 AAC 92.080:*

* * * *

(2) *by disturbing or destroying any beaver house;*

(3) *taking beaver by any means other than a steel trap or snare, except that a firearm may be used to take two beaver per day in Units 9 and 17 from April 15 through May 31 if the meat is salvaged for human consumption; a firearm may be used to take beaver in Units 8, 18, 22, and 23 throughout the seasons and with the bag limits established in 5 AAC 84; a firearm or bow and arrow may be used to take beaver in Units 12, 19, 20(A), 20(C), 20(E), 20(F), 21, 24, and 25 throughout the seasons and with the bag limits established in 5 AAC 84;*

Units 12, 20A, 20C, 20E, and 20F—Beaver Trapping

Residents and Nonresidents: No limit.

Sept. 15-Jun. 10

Extent of Federal Public Lands

Federal public lands comprise approximately 61% of Unit 12 and consist of 48.2% National Park Service (NPS) managed lands, 10.9% U.S. Fish and Wildlife Service (FWS) managed lands, and 1.8% Bureau of Land Management (BLM) managed lands.

Federal public lands comprise approximately 30% of Unit 20E and consist of 20.4% NPS managed lands and 9.1% BLM managed lands.

Customary and Traditional Use Determinations

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for beaver in Units 12 and 20E. Therefore, all Federally qualified users may harvest this species in these units.

Regulatory History

Federal regulations for beaver trapping in Units 12 and 20E were adopted from State regulations in 1990. The season for both units ran from Nov. 1-Apr. 15. The harvest limits for Units 12 and 20E were 15 and 25 beaver per season, respectively.

In 2002, the Alaska Board of Game (BOG) expanded the beaver trapping season in Units 12 and 20E from Nov. 1-Apr. 15 to Sept. 20-May 15. The new State regulations also specified that only firearms could be used during the expanded season (Sept. 20-Oct. 31 and Apr. 16-May 15) to take up to six beavers and that the meat must be salvaged for human consumption.

In 2002, the Alaska BOG also adopted Proposal 120, eliminating sealing requirements for beaver in both units in 2002 due to an absence of any population concerns, low trapping pressure, and low fur prices (Crawford 2002).

In 2003, the Federal Subsistence Board (Board) adopted Proposal WP03-49 with modification, which aligned Federal regulations with the State regulations stated above. As take by firearm was not permitted under a trapping license on National Park Service (NPS) lands, WP03-49 was modified to open a beaver hunting season on NPS lands in Units 12 and 20E. These changes were made to provide increased opportunity for Federally qualified subsistence users.

In 2006, the Alaska BOG expanded the beaver trapping season in Units 12 and 20E from Sept. 20-May 15 to Sept. 15-May 31 and increased the bag limit in Unit 12 from 15 to 25 beavers. The firearm restriction was also lifted under State regulations. Firearms could be used throughout the State trapping season to harvest beaver for either fur or meat.

In 2008, the Alaska BOG adopted Proposal 82, which extended the beaver trapping season in Units 12 and 20E from Sept. 15-May 31 to Sept. 15-June 10 and changed the bag limit from 25 to no limit for both units. This was done due to low harvest numbers and abundant beaver populations (Bentzen 2010). Adoption of Proposal 82 also allowed for the use of bow and arrow as a legal means of take under a trapping license.

Biological Background

State management goals and objectives for furbearers in Units 12 and 20E are as follows (Bentzen 2010):

- Provide the greatest opportunity to participate in hunting and trapping furbearers.
- Maintain viable populations of furbearers that will support annual hunting and trapping harvest.

Beaver populations fluctuate annually in Units 12 and 20E due to a variety of factors, including weather, amount and timing of snow pack runoff, habitat quality and successional stage, and predation (Bentzen 2010, Gross 2004).

Since regulatory year 1996/97, ADF&G trapper questionnaires have provided furbearer abundance and population trends based on responses from area trappers. While qualitative, this information is useful for tracking population changes over time and is the best available for many furbearer populations, including beavers in Units 12 and 20E. From 2003/04 to 2012/13, beaver populations have been reported as stable at low to moderate levels in both units (Bentzen 2010, **Table 1**).

Harvest History

Trapping pressure on beavers in Units 12 and 20E is low. As sealing requirements for beaver in Units 12 and 20E were eliminated in regulatory year 2002, available harvest data for these units in subsequent years is limited. Beaver are not generally targeted by area trappers, but do provide an important subsistence resource to Northway residents who primarily harvest beaver in Unit 12. Residents of Eagle harvest the majority of the beavers in Unit 20E along the Yukon River for food and handicrafts (Bentzen 2010).

Before 2002 when sealing was discontinued, beaver harvest averaged 47 beavers/year (**Figure 1**, Gross 2004). Since 2002, reported beaver harvest has averaged 14 beavers/year (**Figure 1**, ADF&G 2005, 2006, 2007, 2010a, 2010b, 2010c, 2012, 2013a, 2013b). Harvest has been consistently greater in Unit 12 than in Unit 20E (**Figure 1**).

The most recent State furbearer management report recommends no change to the beaver trapping season or bag limit in Units 12 and 20E based on observations by ADF&G personnel, interviews with area trappers, population status and trends (Bentzen 2010).

Table 1. Relative abundance and trend of beaver populations for Units 12 and 20E as reported by trappers (ADF&G 2005, 2006, 2007, 2010a, 2010b, 2010c, 2012, 2013a, 2013b).

Year	Relative Abundance	Trend
2012	common	same
2011	common	same
2010	scarce	same
2009*	-	-
2008	scarce	same
2007	common	fewer
2006	common	same
2005	common	same
2004	common	same
2003	common	same

*No report written

Effects of the Proposal

If this proposal is adopted, the beaver season would be extended from Sept. 20-May 15 to Sept. 15-June 10, the harvest limit would be changed from 15 and 25 beaver/season in Units 12 and 20E, respectively, to no harvest limit in both units, and bow and arrow would be added as a method and means of harvest.

No impacts to the beaver population or user groups is expected as Federally qualified subsistence users can already trap on most (non-National Park) Federal lands under the more liberal State regulations.

Additionally, adoption of this proposal would align Federal and State regulations, reducing the regulatory complexity for users.

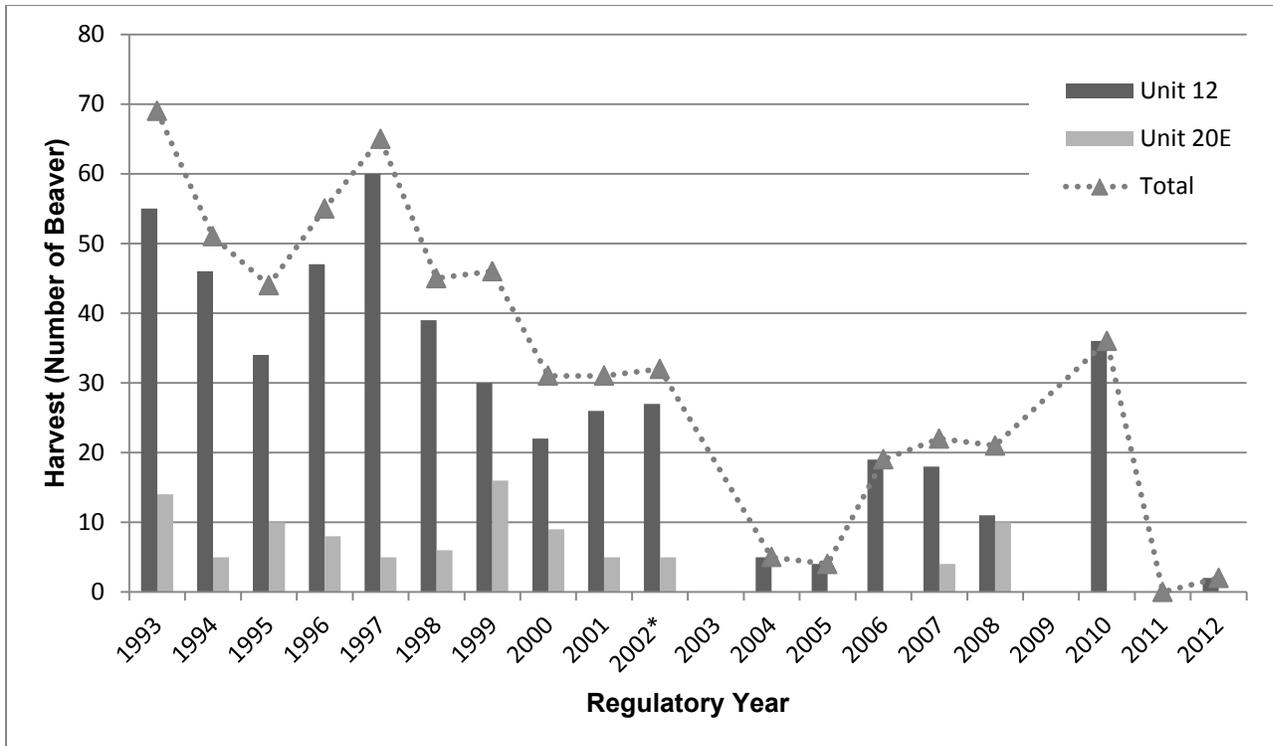


Figure 1. Beaver harvest in Units 12 and 20E (Gross 2004, ADF&G 2005, 2006, 2007, 2010a, 2010b, 2010c, 2012, 2013a, 2013b). Harvest before 2002 is from sealing data. Harvest after 2002 is optionally reported harvest from trapper questionnaires. *Sealing was discontinued in 2002. No data available for 2003 and 2009.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-67

Justification

Beaver populations appear stable at moderate levels in these units and harvest is low. Federally qualified subsistence users are already able to trap on most Federal public lands under the more liberal State regulations. Adopting this proposal would provide Federally qualified subsistence users with additional harvest opportunities and methods and means for beaver trapping under Federal regulations. Additionally, Federal and State regulations for beaver trapping in Units 12 and 20E would be aligned, reducing regulatory complexity.

LITERATURE CITED

ADF&G. 2013a. Trapper questionnaire; Statewide annual report: 1 July 2012 – 30 June 2013. Wildlife Management Report, ADF&G/DWC/WMR-2013-5. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2013.pdf>. 66 pp. Retrieved: April 9, 2015.

ADF&G. 2013b. Trapper questionnaire; Statewide annual report: 1 July 2011 – 30 June 2012. Wildlife Management Report, ADF&G/DWC/WMR-2013-4. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2012.pdf>. 62 pp. Retrieved: April 9, 2015.

ADF&G. 2012. Trapper questionnaire; Statewide annual report: 1 July 2010 – 30 June 2011. Wildlife Management Report, ADF&G/DWC/WMR-2012-2. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2011.pdf>. 64 pp. Retrieved: April 9, 2015.

ADF&G. 2010a. Trapper questionnaire; Statewide annual report: 1 July 2008 – 30 June 2009. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2009.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010b. Trapper questionnaire; Statewide annual report: 1 July 2007 – 30 June 2008. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2008.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010c. Trapper questionnaire; Statewide annual report: 1 July 2006 – 30 June 2007. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2007.pdf>. 82 pp. Retrieved: April 9, 2015.

ADF&G. 2007. Trapper questionnaire; Statewide annual report: 1 July 2005 – 30 June 2006. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2006.pdf>. 76 pp. Retrieved: April 9, 2015.

ADF&G. 2006. Trapper questionnaire; Statewide annual report: 1 July 2004 – 30 June 2005. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2005.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2005. Trapper questionnaire; Statewide annual report: 1 July 2003 – 30 June 2004. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2004.pdf>. 69 pp. Retrieved: April 9, 2015.

Bentzen, T.W. 2010. Units 12 and 20E furbearer. Pages 155-169 in P. Harper, editor. Furbearer management report of survey and inventory activities 1 July 2006-30 June 2009. Alaska Department of Fish and Game. Project 7.0. Juneau, Alaska, USA.

Crawford, J. 2002. Board of Game Summary of Actions. March 8-18, 2002. Fairbanks, Alaska. 36 pages.

Gross, J.A. 2004. Unit 12 and 20E furbearer management report. Pages 150–169 in C. Brown, editor. Furbearer management report of survey and inventory activities 1 July 2000–30 June 2003. Alaska Department of Fish and Game. Project 7.0. Juneau, Alaska.

WRITTEN PUBLIC COMMENTS



May 27, 2015

Federal Subsistence Board
ATTN: Theo Matuskowitz
Office of Subsistence Management
1011 E. Tudor Road, MS-121
Anchorage, Alaska 99503-6199

RE: 2016-2018 Wildlife Proposals

Dear Mr. Matuskowitz:

Enclosed is Ahtna Tene Nene' Customary & Traditional Use Committee's comments on the 2016-2018 wildlife proposals.

Sincerely,

*Dloria Stickwan
for Roy S. Ewan*

Roy S. Ewan,
Chair

WP16-67 Unit 12 Beaver Hunting/Trapping Season

We support WP16-67 to change Unit 12 Beaver to hunting and trapping season from September 15 to June 10 with no limit, meat or hide must be salvaged, traps, snares or firearms may be used. Aligning state and federal methods and means, hunting seasons, no limit, meat or hide must be salvaged will allow more hunting and trapping opportunities on federal public lands.

Beaver population data is collected through surveys given to trappers. The Department of Fish & Game relies on this survey to determine beaver population. Harvest data gathered through surveys that trappers fill out and return to ADF&G office indicates that there isn't a conservation concern. According ADF&G Overview given at Central/Southwest meeting in February 2015, beaver population is stable/high, and beaver harvest was 225.

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**DRAFT STAFF ANALYSIS
WP16-68**

ISSUES

Proposal WP16-68, submitted by the Upper Tanana – Fortymile Fish and Game Advisory Committee, requests that the lynx trapping season in Units 12 and 20E be extended from Nov. 1 – Dec. 31 to Nov. 1 – Mar. 15, and that the Nov. 1 – Nov. 30 harvest limit of 5 lynx be eliminated.

DISCUSSION

The proponent states that the proposed changes will provide additional trapping opportunities for Federally qualified subsistence users, while aligning Federal subsistence trapping regulations with current State trapping regulations.

Existing Federal Regulation

Units 12 and 20E—Lynx

*No limit, however no more than 5 lynx may be taken
between Nov. 1 and Nov. 30*

Nov. 1 – Dec. 31

Proposed Federal Regulation

Units 12 and 20E—Lynx

*No limit, ~~however no more than 5 lynx may be taken~~
~~between Nov. 1 and Nov. 30~~*

*Nov. 1 – ~~Dec. 31~~ Mar.
15*

Existing State Regulation

Units 12, 19, 20, 21, and 25C—Lynx

No limit

Nov. 1 – Mar. 15

Extent of Federal Public Lands

Federal public lands comprise approximately 61% of Unit 12 and consist of 48% National Park Service (NPS) managed lands, 11 % U.S. Fish and Wildlife Service managed lands, and 2% Bureau of Land Management (BLM) managed lands.

Federal public lands comprise approximately 29% of Unit 20E and consist of 20% NPS managed lands and 9% BLM managed lands.

Customary and Traditional Use Determinations

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for lynx in Units 12 and 20E. All Federally qualified subsistence users may harvest lynx in these units.

Regulatory History

In 1987, the Alaska Department of Fish and Game (ADF&G) adopted a tracking harvest strategy for managing lynx (ADF&G 1987). This strategy calls for shortening or closing trapping seasons when lynx numbers are low, and lengthening or opening seasons when lynx are abundant. In the spring of 1992, the Alaska Board of Game adopted maximum possible seasons for a number of management units within the state, and delegated authority to ADF&G to adjust seasons within seasonal windows. The decision to adjust the season was based upon the reported number of lynx harvested and the percentage of kittens within the total harvest.

The Board endorsed the State's strategy for setting lynx seasons and regularly made annual adjustments to the Federal seasons to align with State seasons. In 2001, in response to Proposal WP01-44, the Board adopted a statewide regulatory provision and issued a Delegation of Authority Letter so that the Assistant Regional Director for the Office of Subsistence Management (OSM) could adjust lynx trapping regulations through the use of the ADF&G tracking harvest strategy. This delegated authority required coordination with ADF&G, consultation with appropriate Federal land management agencies, development of a staff analysis to evaluate the effects of the changes to the season and harvest limit, and Interagency Staff Committee concurrence (FWS 2001).

In 2004, the Board adopted Proposal WP04-36, which clarified implementation procedures for Delegation of Authority to the Assistant Regional Director for OSM. The existing Delegation of Authority Letter allowed the Assistant Regional Director to adjust seasons and harvest limits through Special Action provisions. However, the Board's intent had been to allow annual adjustments using current harvest information and in line with the State's tracking harvest strategy. This action designated a Nov. 10 – Feb. 28 maximum season but allowed the Assistant Regional Director to continue making annual adjustments to seasons and harvest limits (FWS 2004).

By 2008 the Alaska Board of Game had discontinued use of the tracking harvest strategy in Units 12 and 20E, and had established permanent seasons in these units. To maintain parallel State and Federal management strategies, the Board adopted with modification Proposal WP10-04 in 2010. This resulted in

removal of Units 12 and 20E, along with a number of other units, from the area for which the Assistant Regional Director for OSM had the delegated authority to open, close or adjust Federal subsistence lynx seasons and to set harvest and possession limits (FWS 2010).

In 2010, the Alaska Board of Game adopted Proposal 17, which resulted in the establishment of the current lynx season and limit for Units 12 and 20E. This action by the Alaska Board of Game addressed concerns that some trappers were targeting lynx in November, when harvest was limited to 5 lynx, but not reporting them until December, when there was no harvest limit. The original rationale for limiting harvest to five lynx during November was to allow trappers to retain lynx trapped incidentally when targeting other species, even though pelt quality is low at this time of year (ADF&G 2010a).

Biological Background

Lynx are common in Alaska (Yom-Tov et al. 2007). Snowshoe hares are the predominant prey of lynx and are believed to comprise up to 83% of the species’ diet (Yom-Tov et al. 2007; O’Donoghue et al. 1997). As a result, lynx populations fluctuate in direct response to changes in hare abundance (Yom-Tov et al. 2007). Snowshoe hares have a cyclical population trend that lasts from 8 – 11 years and lynx population numbers fluctuate in tandem with this trend, with a lag of 1 – 2 years (FWS 2013).

In Alaska, sealing records are used as a proxy for determining lynx population trends. An analysis of statewide lynx harvest sealing records from 1990 through 2013 reveals three population highs, occurring 1991 – 1992, 2000 – 2001, and 2008 – 2009, followed shortly by population lows, occurring 1995 – 1996, 2002 – 2003, and 2012 – 2013 (ADF&G 2002, 2005, 2006, 2007, 2010b, 2010c, 2010d, 2012, 2013a, 2013b; **Figure 1**). The lynx population in Interior Alaska remains in the low phase of the cycle (Berg 2015, pers. comm.; Burch 2015, pers. comm.; Gross 2015, pers. comm.)

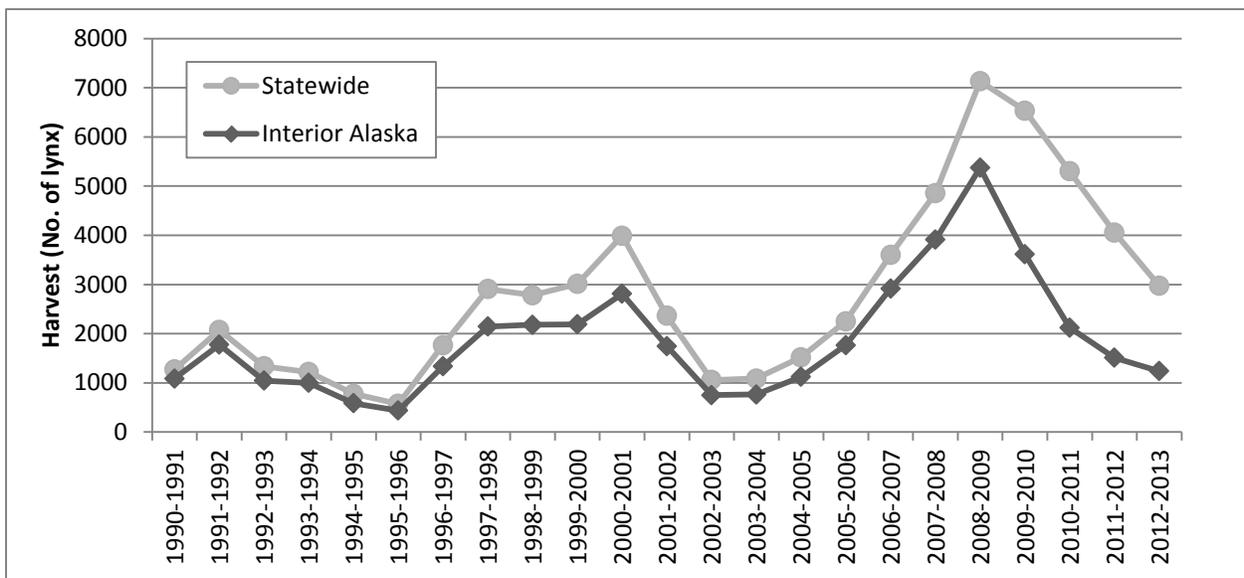


Figure 1. Lynx Population Trends, based on Harvest Sealing Data 1990-2013. Interior Alaska includes Units 12, 19A-D, 20A-F, 21A-E, 24A-C, 25A-D. (ADF&G 2002, 2005, 2006, 2007, 2010b, 2010c, 2010d, 2012, 2013a, 2013b).

Harvest History

The State no longer utilizes a tracking harvest strategy for managing lynx harvest in Interior Alaska. Rather, fixed seasons and harvest limits are implemented in Units 12 and 20E (Gross 2015, pers. comm.). Under this system, harvest limits remain static despite sizable fluctuations in lynx abundance. However, trapper effort parallels lynx abundance (Berg 2015, pers. comm.; Gross 2015, pers. comm.), and few trappers are active during the low phase (Bentzen 2010). See **Table 1** for reported lynx harvest in Units 12 and 20E.

Table 1. Reported Lynx Harvest in Units 12 and 20E, based on ADF&G Trapper Questionnaires, 2004-2013 (ADF&G 2006, 2007, 2010b, 2010c, 2010d, 2012, 2013a, 2013b).

Regulatory Year	Unit 12	Unit 20E
2004-2005	14	2
2005-2006	0	0
2006-2007	171	8
2007-2008	164	177
2008-2009	139	297
2009-2010	<i>No data</i>	<i>No data</i>
2010-2011	99	20
2011-2012	5	16
2012-2013	23	2

Effects of the Proposal

If adopted, this proposal would allow unlimited harvest Nov. 1 – Mar. 15, which would result in increased opportunity for Federally qualified subsistence users. Adoption of this proposal is not expected to have an appreciable effect on the lynx population, since lynx populations are regulated primarily by prey availability and because trapper effort and harvest decline sharply during the low phase of the population cycle. Additionally, adoption of this proposal would reduce regulatory complexity for lynx in Units 12 and 20E by creating parallel Federal and State lynx trapping seasons and by removing the Nov. 1 – Nov. 30 harvest limit.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-68.

Justification

Adoption of this proposal will provide additional harvest opportunities for Federally qualified subsistence users by lengthening the season and eliminating the harvest limit for the Nov. 1 – Nov. 30 time period. These changes are not expected to affect the lynx population, since lynx populations are regulated primarily by prey availability and because trapper effort declines during times of low lynx abundance. These changes will also reduce regulatory complexity, which will benefit subsistence users and is consistent with past Federal regulatory adjustments that reflect changes in State seasons and harvest limits.

LITERATURE CITED

ADF&G, Division of Wildlife Conservation. 1987. Report to the Board of Game on lynx management. 30 pages.

ADF&G. 2002. Trapper questionnaire; Statewide annual report: 1 July 2001 – 30 June 2002. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2002.pdf>. 70 pp. Retrieved: April 9, 2015.

ADF&G. 2005. Trapper questionnaire; Statewide annual report: 1 July 2003 – 30 June 2004. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2004.pdf>. 69 pp. Retrieved: April 9, 2015.

ADF&G. 2006. Trapper questionnaire; Statewide annual report: 1 July 2004 – 30 June 2005. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2005.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2007. Trapper questionnaire; Statewide annual report: 1 July 2005 – 30 June 2006. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2006.pdf>. 76 pp. Retrieved: April 9, 2015.

ADF&G 2010a. Department comments to Alaska Board of Game. Alaska Department of Fish and Game, Division of Wildlife Conservation. Juneau, AK.

Internet: <http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=02-26-2010&meeting=fairbanks> 48pp. Retrieved Jun 3, 2015.

ADF&G. 2010b. Trapper questionnaire; Statewide annual report: 1 July 2008 – 30 June 2009. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2009.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010c. Trapper questionnaire; Statewide annual report: 1 July 2007 – 30 June 2008. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2008.pdf>. 72 pp. Retrieved: April 9, 2015.

ADF&G. 2010d. Trapper questionnaire; Statewide annual report: 1 July 2006 – 30 June 2007. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK.

Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2007.pdf>. 82 pp. Retrieved: April 9, 2015.

ADF&G. 2012. Trapper questionnaire; Statewide annual report: 1 July 2010 – 30 June 2011. Wildlife Management Report, ADF&G/DWC/WMR-2012-2. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2011.pdf>. 64 pp. Retrieved: April 9, 2015.

ADF&G. 2013a. Trapper questionnaire; Statewide annual report: 1 July 2012 – 30 June 2013. Wildlife Management Report, ADF&G/DWC/WMR-2013-5. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2013.pdf>. 66 pp. Retrieved: April 9, 2015.

ADF&G. 2013b. Trapper questionnaire; Statewide annual report: 1 July 2011 – 30 June 2012. Wildlife Management Report, ADF&G/DWC/WMR-2013-4. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau AK. Internet: <http://www.adfg.alaska.gov/static/hunting/trapping/pdfs/trap2012.pdf>. 62 pp. Retrieved: April 9, 2015.

Bentzen, T.W. 2010. Units 12 and 20E furbearer. Pages 155-169 *in* P. Harper, editor. Furbearer management report of survey and inventory activities 1 July 2006 – 30 June 2009. Alaska Department of Fish and Game. Project 7.0. Juneau, AK.

Berg, N. 2015. Wildlife biologist. Personal communication: phone. U.S. Fish and Wildlife Service. Tok, AK.

Burch, J. 2015. Wildlife biologist. Personal communication: email. National Park Service. Anchorage, AK.

Gross, J.A. 2015. Wildlife biologist. Personal communication: email. ADF&G. Tok, AK.

FWS. 2001. Staff Analysis WP01-44. Federal Subsistence Board Meeting Materials May 9-10, 2001. Office of Subsistence Management, FWS, Anchorage, AK.

FWS. 2004. Staff Analysis WP04-36. Pages 241-244 *in* Federal Subsistence Board Meeting Materials May 18-21, 2004. Office of Subsistence Management, FWS, Anchorage, AK.

FWS. 2010. Staff Analysis WP10-04. Pages 46-62 *in* Federal Subsistence Board Meeting Materials May 18-21, 2010. Office of Subsistence Management, FWS, Anchorage, AK. 1081 pp.

FWS. 2013. Canada lynx: *Lynx Canadensis*. Mountain Prairie Region.

Internet: http://www.fws.gov/mountain-prairie/species/mammals/lynx/CandaLynxFactSheet_091613.pdf. Retrieved: April 28, 2015.

O'Donoghue, M., Boutin, S., Krebs, C. J. and Hofer, E. J. 1997. Numerical responses of coyotes and lynx to the snowshoe hare cycle. *Oikos* 80: 150-162.

Yom-Tov, Y., Yom-Tov, S., MacDonald, D. and E. Yom-Tov. 2007. Population cycles and changes in body size of the lynx in Alaska. *Oecologia: Population Ecology*. 152:239-244. DOI: 10.1007/s00442-006-0653-3.

WRITTEN PUBLIC COMMENTS



May 27, 2015

Federal Subsistence Board
ATTN: Theo Matuskowitz
Office of Subsistence Management
1011 E. Tudor Road, MS-121
Anchorage, Alaska 99503-6199

RE: 2016-2018 Wildlife Proposals

Dear Mr. Matuskowitz:

Enclosed is Ahtna Tene Nene' Customary & Traditional Use Committee's comments on the 2016-2018 wildlife proposals.

Sincerely,

*Dlovina Stickwan
for Roy S. Ewan*

Roy S. Ewan,
Chair

WP16-68 Unit 12 Lynx Trapping Season

Comments:

We oppose WP 16-68 to lengthen Unit 12 Lynx trapping season from Nov. 1- Nov. 30 to Nov 1- Mar. 15 with no limit. According to ADF&G Overview presented at Central/Southwest meeting in February 2015, lynx population is low, harvest is 444.

Opening a trapping season with no limit when the population is low and changing the dates to allow a longer trapping season is counterproductive to lynx populations.

WP16–69 Executive Summary	
General Description	Proposal WP16–69 requests that the moose season in Unit 20E remainder be changed from Aug. 24–Sept. 25 to Aug. 20–Sept. 30. <i>Submitted by the Upper Tanana–Fortymile Fish and Game Advisory Committee.</i>
Proposed Regulation	<p>Unit 20E —Moose</p> <p><i>Unit 20E remainder – 1 bull by joint Federal/State permit</i></p> <p><i>Aug. 20–Sept. 30</i> <i>Aug. 24–Sept. 25</i></p>
OSM Preliminary Conclusion	Support
Eastern Interior Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	None

**DRAFT STAFF ANALYSIS
WP16-69**

ISSUE

Proposal WP16-69, submitted by the Upper Tanana–Fortymile Fish and Game Advisory Committee, requests that the moose season in Unit 20E remainder be changed from Aug. 24–Sept. 25 to Aug. 20–Sept. 30.

DISCUSSION

The proponent states that many Federally qualified subsistence users are not able to hunt during the limited State moose hunting season and thus are requesting a longer Federal season in Unit 20E remainder.

Existing Federal Regulation

Unit 20E —Moose

Unit 20E remainder – 1 bull by joint Federal/State registration permit *Aug. 24 – Sept. 25*

Proposed Federal Regulation

Unit 20E —Moose

Unit 20E remainder – 1 bull by joint Federal/State permit *Aug. 20–Sept. 30*
~~*Aug. 24–Sept. 25*~~

Existing State Regulation

Unit 20E—Moose

Unit 20E remainder—Moose

<i>Unit 20E– remainder</i>	<i>Resident: One bull by permit available in person in Tok, Delta Junction, Eagle, and Fairbanks beginning Aug 13; may not possess RC860 at same time as RM865 OR</i>	<i>RM865</i>	<i>Aug. 24–Aug.28 Sept. 8–Sept. 17</i>
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Resident: One bull by permit in the Ladue River Controlled Use Area DM794/796 Nov. 1–Sept. 10

Nonresident: One bull with 50–inch antlers with 4 or more brow tines on at least one side, by permit available in person in Tok, Delta Junction, Eagle, and Fairbanks beginning Aug. 13; may not possess RC860 at the same time as RM865. RM865 Sept. 8–Sept. 17

Extent of Federal Public Lands

Federal public lands comprise approximately 30% of the lands in Unit 20E and consist of 20% National Park Service (NPS) managed lands and 9% Bureau of Land Management (BLM) managed lands (See **Unit 20 Map**).

Customary and Traditional Use Determinations

Rural residents of Unit 20E, Unit 12 (north of Wrangell-St. Elias National Preserve), Circle, Central, Dot Lake, Healy Lake and Mentasta Lake have a positive customary and traditional use determination for moose in Unit 20E.

Regulatory History

In 2000, the Alaska Board of Game created registration hunt RM865 in Unit 20E (excluding the Middle Fork Fortymile River) and split the moose season into two periods: August 24-28 and September 8-17, except within the Yukon River drainage, where the season became August 24-28 and September 5-25. The Alaska Board of Game also stipulated that a hunter could hunt both moose (RM865) and caribou (RC860), but not hold a registration permit for both species at the same time. These actions were in response to increased moose harvest, due to increasing numbers of caribou hunters in most of Unit 20E, and were designed to stabilize the moose harvest to maintain the bull:cow ratio within the management objective (Gross 2010).

In 2002, the Alaska Board of Game reduced the season within the Yukon River drainage to match the season in the remainder of Unit 20E (August 24-28 and September 8-17).

Prior to the 2004-2005 regulatory year, the Alaska Board of Game changed to the present area descriptions (listed above in State regulations), from the previous area descriptions of “Unit 20E draining into the Middle Fork of the Fortymile River upstream from the drainage

of the North Fork Fortymile River” and “Remainder of Unit 20E.” The seasons and bag limits did not change.

In February 2010, the Eastern Interior Alaska Subsistence Regional Advisory Council deliberated on Proposal WP10-101 and recommended breaking out the proposed single, all-encompassing Unit 20E area description into three area descriptions to retain the Yukon-Charley Rivers National Preserve portion and to closely align the other two portions with State regulations for purposes of permit administration and harvest reporting. The Federal Subsistence Board (Board) adopted the Council’s recommendation and the (current) regulations were effective 1 July 2010 (FWS 2010).

In 2012 the Board adopted Proposal WP12-75 changing the season for Unit 20E, that portion drained by the Middle Fork of the Fortymile River upstream from and including the Joseph Creek drainage from Aug. 24–Sept. 25 to Aug. 20–Sept. 30 to match Unit 20E, that portion with the Yukon–Charley National Preserve. This gave the Federally qualified subsistence users an additional 9 days to hunt moose in the affected area and aligned the fall season dates in the portions of Unit 20E off the road system on Federal lands (FWS 2012).

Biological Background

State management goals for moose in Units 20E are to protect, maintain and enhance the moose population in concert with other components of the ecosystem, to provide sustained moose harvest opportunity for subsistence users, maximize sustainable opportunities to participate in hunting moose, and non–consumptive uses of moose (Gross 2010). Specific State management objectives for Unit 20E are as follows (Gross 2010):

- Maintain a post hunting bull:cow ratios of at least 40 bulls:100 cows in all survey areas.
- Maintain a population of 8,000–10,000 moose.
- Maintain a harvest of 500-1,000 moose annually.

The Alaska Department of Fish and Game (ADF&G) conducted moose population estimation surveys in southern Unit 20E, within the Tok West and Tok Central survey areas during 1998–2009, using the geospatial population estimator (GSPE) moose survey technique (Ver Hoef 2001, Kellie and DeLong 2006). The data collected were utilized to determine population trends, herd composition in the survey areas and to estimate moose numbers in the entire unit by extrapolation (**Table 1**).

The highest densities of moose have been in a portion of southern Unit 20E, entirely within the Tok West and Tok Central moose survey areas, including the Mosquito Fork Fortymile River drainage downstream from and including Mosquito Flats, the West Fork Fortymile

River drainage and the northern Mount Fairplay - lower Dennison Fork Fortymile River areas, where habitat availability and quality are also highest.

Between 2005 and 2009, the calf:cow ratio averaged 31:100 cows (range 26–37) for the Tok West area whereas in the Tok Central area it was only 23:100 cows (range 16–31) (Gross 2010). Gross (2010) hypothesized that grizzly bears, one of the primary predators of moose calves, may have avoided burned areas in Tok West following large fires in 2004 and 2005. In Alaska and Yukon, calf:cow ratios of ≤ 25 are indicative of stable or declining moose populations whereas calf:cow ratios ≥ 30 usually indicate an increasing moose population (Gasaway et al. 1992).

Between 1998 and 2009, the bull:cow ratio remained above 40 bulls:100 cows, but varied across the unit. In the most popular hunting areas -- Nine Mile Trail, Mitchell's Ranch, and along the Yukon River and the Taylor Highway -- bull populations were noticeably lower, but still the bull:cow ratio remained ≥ 40 bulls:100 cows (**Table 1**) (Gross 2008; 2010).

Table 1. Moose population estimates for portions of Unit 20E using GSPE, fall 1998—2009 (Gross 2008; 2010).

Year	Bulls: 100 Cows	Yearling bulls:100 Cows	Calves: 100 Cows	Percent Calves	Total moose observed	Density moose/mi ² (90% CI)	Population estimate (90% CI)
1998 ^a	64	18	19	10	278	0.56	1,086
1998 ^b	59	14	23	14	450	0.62	1,694
1999 ^a	80	16	22	10	365	0.47	901
2000 ^a	60	11	14	8	561	0.58	1,115
2000 ^c	49	11	21	13	347	0.70	1,272
2001 ^a	76	9	14	7	531	0.47	915
2001 ^d	51	6	10	6	624	0.75	2,026
2002 ^a	59	10	25	14	364	0.60	1,166
2002 ^d	71	8	20	10	396	0.63	1,707
2003 ^e	64	9	15	9	355	0.58	1,128
2003 ^d	53	5	11	6	297	0.51	1,379
2004 ^f	61	11	26	14	283	0.59	1,435
2004 ^g	48	11	23	14	233	0.37	802
2005 ^f	55	13	30	16	543	0.73	1,801
2005 ^g	48	8	16	10	344	0.50	1,097
2006 ^f	39	9	37	20	584	0.98	2,398
2006 ^g	46	3	24	14	520	0.45	979
2007 ^f	50	11	30	16	503	0.86	2,098
2007 ^g	46	11	22	13	440	0.62	1,348
2008 ^f	47	11	27	16	509	.83	2040
2008 ^g	72	16	31	16	356	.72	1571
2009 ^f	63	18	34	18	585	1.00	2445
2009 ^g	51	11	25	14	461	0.68	1471

^a Tok West Survey Area, 1,932 mi² sampled

^b Tok Central Survey Area, 2,750 mi² sampled

^c Tok Central Survey Area, 1,821 mi² sampled

^d Tok Central Survey Area, 2,703 mi² sampled

^e Tok West Survey Area, 1,944 mi² sampled

^f Tok West Survey Area, 2,452 mi² sampled

^g Tok Central Survey Area, 2,178 mi² sampled

Twinning rates in the southern portion of Unit 20E were moderate at 24-30% in 2004, 2005 and 2007, but higher in 2006 at 47% (Gross 2008). These twinning rates indicate that nutritional status is adequate to support an increase in the moose population (Boertje et. al. 2007).

Harvest History

Between 2005 and 2013, an average of 159 moose was harvested annually in Unit 20E (Table 2) which is about 3-4% of the population. Nonlocal residents harvested an average 113 (71%) moose per year compared to local residents which averaged 25 (16%) (Table 2). The primary hunting areas for moose in Unit 20E are along the Taylor Highway corridor and the Mosquito Fork of the Fortymile drainage.

Table 2. Moose harvest and residency in Unit 20E, 2005/2006 to 2013/2014 (ADF&G 2015, OSM 2015).

Regulatory Year	Bulls	Cows	Total ^a	Local Resident (%) ^b	Nonlocal Resident (%)	Nonresident (%)
2005/2006	137	0	137	27 (20)	78 (57)	33 (24)
2006/2007	129	1	130	27 (21)	85 (65)	18 (14)
2007/2008	144	0	144	24 (17)	108 (75)	12 (8)
2008/2009	176	0	176	25 (14)	130 (74)	23 (13)
2009/2010	169	0	169	22 (13)	129 (76)	21 (12)
2010/2011	165	0	165	27 (16)	119 (72)	19 (11)
2011/2012	186	1	187	30 (16)	134 (72)	23 (12)
2012/2013	182	1	183	29 (16)	131 (72)	22 (12)
2013/2014	139	1	140	19 (14)	108 (77)	13 (9)
Mean	159	0.4	159	25 (16)	113 (71)	20 (13)

^a Total may exceed sum by residency because some hunters fail to report residency

^b Local means residents of Units 12, 20E, and portions of 20D. Main communities are Eagle, Chicken, Boundary, Northway, Tetlin, Tok, Tanacross, Slana, and Dot Lake.

Effects of the Proposal

If this proposal is adopted, it would align the fall hunting season for the three areas of Unit 20E, thus reducing regulatory complexity. In addition it would give Federally qualified subsistence users an additional 9 days of hunting opportunity in Unit 20E remainder. It is unlikely that the increase in harvest opportunity in Unit 20E remainder will have any negative population level effects because local residents have accounted for only a small proportion of the harvest in the past. Based on information available through 2009 there are no conservation concerns for the moose population should this proposal be adopted.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-69

Justification

If this proposal is adopted, Federally qualified subsistence users will be provided an additional 9 days of opportunity to harvest moose in Unit 20 E remainder, which would align the Federal fall seasons within all portions of Unit 20E. The moose population in Unit 20E should be able to support anticipated small increase in the number of bulls harvested by Federally qualified subsistence users in Unit 20E remainder.

LITERATURE CITED

ADF&G. 2015. Hunt harvest summary. Database accessed 8 August, 2014.

Boertje, R.D., K. A. Kellie, C. T. Seaton, M.A. Keech, D.D. Young, B.W. Dale, L.G. Adams and A.R. Alderman. 2007. Ranking Alaska moose nutrition; signals to begin liberal antlerless harvests. *Journal of Wildlife Management* 71:1494-1506.

FWS. 2010. Staff analysis WP10-101. Pages 1002–1015 *in* Federal Subsistence Board Meeting Materials May 18 – May 21, 2010. Office of Subsistence Management, FWS. Anchorage, AK 1083 pp.

FWS. 2012. Staff analysis WP12-75. Pages 331–339 *in* Federal Subsistence Board Meeting Materials January 17–January 20, 2012. Office of Subsistence Management, FWS. Anchorage, AK 1219 pp.

Gasaway, W.C., R.D. Boertje, D.V. Grangaard, D.G. Kelleyhouse, R.O. Stephenson and D.G. Larsen. 1992. The rold of predation in limiting moose at low densities in Alaska and Yukon and implications for conservation. *Wildlife Monographs* 120.

Gross, J. A. 2008. Unit 20E moose. Pages 424–440 *in* P. Harper, editor. Moose management report of survey and inventory activities 1 July 2005 through 30 June 2007. Project 1.0. ADF&G. Juneau, Alaska.

Gross, J. A. 2010. Alaska Department of Fish and Game. Personal communication. Tok, Alaska.

Kellie, K. A., and R. A. DeLong. 2006. Geospatial survey operations manual. ADF&G. Fairbanks, Alaska, USA. Website address:
<http://winfonet.alaska.gov/sandi/moose/surveys/documents/GSPEOperationsManual.pdf> .

OSM. 2015. Alaska Federal Subsistence Program Harvest Database. Office of Subsistence Management. Anchorage, AK.

Ver Hoef, J. M. 2001. Predicting finite populations from spatially correlated data. 2000 Proceedings of the Section on Statistics and the Environment of the American Statistical Association. pp. 93–98.

WP16–70 Executive Summary	
General Description	Proposal WP16–70 requests that the regulation allowing for brown bears to be hunted over bait in Unit 25D be rescinded. <i>Submitted by David Bachrach of Homer.</i>
Proposed Regulation	<p>Unit 25D – Brown Bear</p> <p><i>Unit 25D – 2 bears every regulatory year</i> <i>July 1 – June 30</i></p> <p>§____.26(n)(25)(iii)(A) <i>You may use bait to hunt black bear between April 15 and June 30 and between August 1 and September 25; in Unit 25D you may use bait to hunt brown bear between April 15 and June 30 and between August 1 and September 25; you may use bait to hunt wolves on FWS and BLM lands.</i></p>
OSM Preliminary Conclusion	Support
Eastern Interior Alaska Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	3 Support

**DRAFT STAFF ANALYSIS
WP16-70**

ISSUES

Proposal WP16-70, submitted by David Bachrach of Homer, requests that the regulation allowing for brown bears to be hunted over bait in Unit 25D be rescinded.

DISCUSSION

The proponent states that the Federal Subsistence Board (Board) increased the harvest limit on brown bears in Unit 25D from one to two bears in 2012, and that the effect of the increase is not currently known. Also, the proponent feels that data used to assess brown bear populations in the unit are old and not from the same area in which regulations were implemented. Finally, the proponent states that allowing baiting of brown bears over bait is inconsistent with National Park Service (NPS) and U.S. Fish and Wildlife Service (USFWS) proposed rules prohibiting the taking of brown bears over bait in Federal lands.

Existing Federal Regulation

Unit 25D – Brown Bear

Unit 25D – 2 bears every regulatory year

July 1 – Jun. 30

§ _____.26(n)(25)(iii)(A) *You may use bait to hunt black bear between April 15 and June 30 and between August 1 and September 25; in Unit 25D you may use bait to hunt brown bear between April 15 and June 30 and between August 1 and September 25; you may use bait to hunt wolves on FWS and BLM lands.*

Proposed Federal Regulation

Unit 25D – Brown Bear

Unit 25D – 2 bears every regulatory year

July 1 – June 30

§ _____.26(n)(25)(iii)(A) *You may use bait to hunt black bear between April 15 and June 30 and between August 1 and September 25; ~~in Unit 25D you may use bait to hunt brown bear between April 15 and June 30 and between August 1 and September 25;~~ you may use bait to hunt wolves on FWS and BLM lands.*

Existing State Regulation

Unit 25D – Brown Bear

Units 7,12, 13D, 15, 16, 20A, 20B, 20C, 20E, 21D, 24C, 24D, and 25D brown/grizzly bears may be taken at a black bear bait station subject to the same restrictions as black bear. Hunters who take brown bears over bait in these areas are required to salvage the edible meat in addition to the hide and skull. Hunters must comply with seasons, bag limits, and sealing requirements for brown/grizzly bears (registration permits and locking tags may be required in some areas, contact ADF&G for details).

Residents – two bears every regulatory year

July 1 – Nov. 30

Mar. 1 – June 30

Nonresidents – one bear every regulatory year

Sept. 1 – Nov. 30

Mar. 1 – June 15

Extent of Federal Public Lands

Federal public lands comprise approximately 63% of Unit 25D and consist of 62% US Fish and Wildlife Service managed lands and 1% Bureau of Land Management managed lands (**Unit 25 Map**).

Customary and Traditional Use Determinations

Rural residents of Unit 25D have a customary and traditional use determination for brown bear in Unit 25D.

Cultural Knowledge

Athabascan communities recognize brown bear as an important subsistence resource. Bears were harvested using spears, bow and arrows, and snares. Snares were sometimes baited (Nelson et al. 1982, Van Lanen et al. 2012). Rifles have replaced traditional methods of killing bears (Nelson 1973, Van Lanen et al. 2012). At the Eastern Interior Alaska Subsistence Regional Advisory Council (Council) meeting on February 21, 2013, in Fairbanks, a Council member from a Qwich'in village said:

In the springtime you'll find the bears just coming out of their dens and the trappers . . . would use [carcasses] as bait . . . whatever didn't get eaten by the dogs, they would use that for bait in the springtime to get the spring bears. And you'd use whatever was left from your moose kill in the fall for bait to get a fall bear (EIRAC 2013: 255-256).

Those were the two times of year that [bear were] normally taken, which the State season reflects. But I'd just like to see it in the Federal reg book as well so I don't have to play that lawyer GPS "where am I" game to go from State and Federal land . . . and I could leave my bait stations where they are and not have to move camp miles to get back onto Federal land or back onto State land. We have a checkerboard of land ownership in the Yukon Flats (EIRAC 2013: 255-256).

According to Van Lanen et al. (2012), use of brown bears has been historically low and harvest of the species was often incidental to other activities. No mention was made of brown bear baiting being used as a traditional method of harvest.

Regulatory History

At its January 2012 meeting, the Federal Subsistence Board (Board) adopted Proposal WP12-62 with modification, which increased the harvest limit for brown bears in Unit 25D from one bear every regulatory year to two bears every regulatory year.

At its March 2012 meeting, the Alaska Board of Game (BOG) addressed several proposals looking to allow harvesting of brown bears at bait sites: Proposal 168 to allow baiting of brown bears in Unit 21D was adopted. Proposal 196 to allow brown bear baiting in Units 12 and 20E with the same season and restrictions as black bear baiting was adopted. Proposal 232 to allow the harvest of grizzly bears over a black bear bait site with the requirement to salvage the meat and hide in Unit 20C was also adopted.

At its February 2014 meeting, the BOG adopted Proposal 80, to allow harvest of brown bears over black bear bait in Unit 25D, stating that it would be utilized primarily by local residents. Nonresidents would still be required to use a guide for brown bear baiting.

In April of 2014, the Board adopted Proposal WP14-50, which allowed baiting of brown bears at black bear baiting sites in Unit 25D. The Board felt that bear baiting was a traditional practice for local rural users and that whether or not a bear was killed by baiting or by other hunting methods was irrelevant from a population perspective.

Biological Background

Brown bears are widely distributed in northeastern Alaska. The brown bear population in Unit 25 declined in the 1960s primarily from aircraft-supported hunting associated with guiding. As a result, regulations were implemented to limit harvest starting in 1971. As the population recovered, regulations were gradually liberalized. Population trend data for Unit 25 are currently sparse; however, there is a possibility that the population has increased or expanded into new habitat based on an increase in sightings of brown bears by local residents on the Yukon River compared to years prior to 2000 (Lenart 2011).

The current population estimates of brown bears in Units 25A, 25B, and 25D are based on extrapolations from studies done in the 1980s and 1990s, with an estimated 1,200 brown bears (2.4 bears/100 mi²) (Lenart 2011). Estimated densities and population size varies slightly between the units. In the mountainous portion of Unit 25C, Eagan (1995) (*cited* in Young 2007) determined that there was a medium density (1.3-2.6 bears/100 mi²) based on extrapolations from studies done in Unit 20A in the 1980s and 1990s.

In northern Alaska, female brown bears do not successfully reproduce until they are older than 5 years (Reynolds 1987). The delay in reproduction, as well as small litter sizes, long intervals between successful reproductive events, and short potential reproductive periods lead to the low rates of successful production in brown bears in northern Alaska (USFWS 1982). In addition, female brown bears exhibit high fidelity to home ranges and little emigration or immigration (Reynolds 1993). Therefore, brown bears are often managed conservatively.

Brown bears in Unit 25D have been identified as a significant predator on moose calves contributing to maintaining a low density of moose. In their moose mortality study, Bertram and Vivion (2002) found predation was responsible for 97% of known calf mortality, with brown bears causing 39% of it, second only to black bear at 45%. As a result, the *Yukon Flats Cooperative Moose Management Plan* (ADF&G 2002) prescribes increasing brown bear harvest.

The *Yukon Flats Cooperative Moose Management Plan* notes the following about the brown bear population in Unit 25D:

There are an estimated 380 grizzly bears in Unit 25D, or about 1 bear per 46 mi². Based on a 5% sustainable harvest rate, the estimated sustainable harvest is about 19 bears, assuming some harvest of female bears. The reported harvest of grizzly bears averages 3-4 each year and some additional bears are taken but not sealed. Increased awareness and concern about the effects of bear predation on moose has resulted in greater local interest in harvesting bears (*Yukon Flats Cooperative Moose Management Plan*, 2002: 25).

The State management objectives for Unit 25D are to manage for a temporary reduction in grizzly bear numbers and predation on moose. After this reduction is achieved, bear harvest will be reduced to allow the bear population to recover (Lenart 2011).

Harvest History

Brown bear mortality in Units 25B and 25D has been low in most years. Between 2000 and 2012 an average of 4 brown bears were killed annually in these units (**Table 1**). There was a spike of 11 bears killed in regulatory year 2002/03, most likely in response to increased effort to harvest bears as prescribed in the Yukon Flats Cooperative Moose Management Plan (Lenart 2011). Underreporting of harvest is suspected due to the difficulty in getting a bear sealed in this remote area and there is a discrepancy between reported harvest and harvest recorded during household surveys (Van Lanen et al. 2012, Stevens and Maracle 2012). For example, annual harvest of brown bears between 2006 and 2010 averaged 23 animals according to household survey data (**Table 2**), while the annual reported harvest during this same period averaged just 6 animals. The average annual harvest as reported by household surveys exceeds the sustainable harvest for Unit 25D. There are two registered guides on Yukon Flats National Wildlife Refuge who harvest bears in Unit 25D.

Table 1. Units 25B and 25D brown bear reported mortality, RY 2000-2010 (Lenart 2011, Crawford 2013, pers. comm.).

Regulatory Year	Total Reported Mortality
2000-2001	1
2001-2002	1
2002-2003	11
2003-2004	2
2004-2005	3
2005-2006	1
2006-2007	4
2007-2008	6
2008-2009	6
2009-2010	6
2010-2011	2
2011-2012	3

Table 2. Unit 25B and 25D brown bear mortality (Lenart 2007, Young 2007, Van Lanen et al. 2012) from household survey data.

Regulatory Year	Household Survey Data Mortality ^a
1995-1996	1
1996-1997	0
1997-1998	1
1998-1999	0
1999-2000	-
2000-2001	-
2001-2002	-

2002-2003	5
2003-2004	-
2004-2005	22
2005-2006	-
2006-2007	37
2007-2008	17
2008-2009	22
2009-2010	16

^aHousehold survey data does not include nonlocal harvest of brown bears.

Effects of the Proposal

If this proposal is adopted, brown bears would no longer be allowed to be harvested using bait on Federal public lands in Unit 25D by Federally qualified subsistence users. The latest population estimates for brown bears in Unit 25D are now more than 20 years old and based on extrapolations from studies done in the 1980s and 1990s. Indeed, without recent population estimates, managers have been relying on detecting trends in brown bear populations based on sex and age composition of bears harvests, which can be problematic due to vulnerability to harvest of different cohorts, patchy distribution of harvest as a result of differences in hunter accessibility, and detected trends being affected by changes in bag limits, seasons and other hunt parameters rather than any actual trends in population size (Miller et al. 2011).

Hunting brown bears over bait would most likely lead to an increase in hunter success versus a “spot and stalk” hunt because it is an efficient method of hunting (Dunkley and Cattet 2003, Gore 2003).

Additionally, the harvest limit for brown bears in Unit 25D was changed from one to two bears every regulatory year in 2012. Allowing the baiting of brown bears, combined with the recent doubling of the brown bear harvest limit in such a short period of time could have an adverse impact on the species, especially in northern portions of the state where brown bears are known to have low reproductive rates.

Contrary to what the proponent states, allowing the harvest of brown bears over bait on Federal public lands in Unit 25D by Federally qualified subsistence users is not inconsistent with the proposed rule by the USFWS prohibiting the harvest of brown bears over bait on these lands. The prohibitions mentioned in the proposed rule would only apply to non-Federally qualified users hunting on Federal public lands.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-70.

Justification

Brown bear population estimates for Unit 25D are now more than 20 years old and based on extrapolations from studies done in the 1980s and 1990s. It is difficult to predict what the effect of allowing baiting for the species on Federal land would be, and the opportunity to harvest brown bears in this manner in Unit 25D has only been in place for on regulatory cycle. Population trends are being estimated based on harvest, which is problematic for a variety of reasons. Bear baiting is an efficient

method of hunting and would likely lead to an increase in hunting success versus the “spot and stalk” hunting method now used. This, coupled with the recent doubling of the harvest limit in Unit 25D under Federal regulations, the preponderance of underreporting of harvest in Unit 25, and the already low reproductive rates of the species in northern Alaska would indicate caution in allowing this method of harvest in Unit 25D to continue. A conservative approach to an increase in harvest for this species is warranted.

LITERATURE CITED

- Alaska Department of Fish and Game. 2002. Yukon Flats cooperative moose management plan. Fairbanks, AK. <http://www.wildlife.alaska.gov/management/planning/planning_pdfs/yukonflats_plan.pdf> Accessed December 29, 2009.
- Bertram, M., and M. Vivion. 2002. Moose mortality in eastern Interior Alaska. *Journal of Wildlife Management* 66:747-756.
- Crawford, D. 2013. Federal Liaison Team. Personal communication: email. ADF&G. Anchorage, AK.
- Dunkley, L. and M.R.L. Cattet. 2003. A comprehensive review of the ecological and human social effects of artificial feeding and baiting of wildlife. Canadian cooperative wildlife health centre: Newsletters and publications. Paper 21.
- EIRAC. 2013. Transcripts of the Eastern Interior Alaska Subsistence Regional Advisory Council meeting, February 21, 2013, in Fairbanks, Alaska. OSM, FWS. Anchorage.
- Gore, M. 2003. Black bears: a situation analysis on baiting and hounding in the United States with relevance for Maine. Main Environmental Policy Institute. 28pp.
- Lenart, E.A. 2007. Units 25A, 25B, 25D, 26B, and 26C brown bear. Pages 300-323 *in* P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2004-30 June 2006. ADF&G. Project 4.0. Juneau, AK.
- Lenart, E.A. 2011. Units 25A, 25B, 25D, 26B, and 26C brown bear. Pages 299-322 *in* P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2008-30 June 2010. ADF&G. Project 4.0. Juneau, AK.
- Miller, S.D., J.W. Schoen, J. Faro, and D. Klein. 2011. Trends in intensive management of Alaska’s grizzly bears, 1980-2010.
- Nelson, R. K. 1973. *Hunters of the northern forest: Designs for survival among the Alaskan Kutchin*. University of Chicago Press, Chicago.
- Nelson, R.K., K.H. Mautner, and G.R. Bane. 1982. *Tracts in the wildland: A portrayal of Koyukon and Nunamiut subsistence*. Univ. of Alaska Cooperative Park Studies Unit, Anthropology and Historic Preservation, Fairbanks.
- Reynolds, H.V. 1993. Evaluation of the effects of harvest on grizzly bear population dynamics in the northcentral Alaska range. ADF&G. Federal Aid in Wildlife Restoration. Research Final Report. Grant W-23-5.

Reynolds, H.V. 1987. The brown/grizzly bear *Ursus arctos horribilis*, pages 41-42 in J. Rennie, C. Schwartz, H.V. Reynolds and S.C. Amstrup. Bears of Alaska in life and legend. AK. Nat. Hist. Assn. 63 pp.

U.S. Census. 2013. United States Census 2010 is in our hands. <https://www.census.gov/2010census/>, retrieved June 5.

USFWS. 1982. Brown Bear (*Ursus arctos*). Pages 247-248. Initial report baseline study of fish, wildlife and their habitats. Anchorage, AK.

Stevens, C.L. and K.B. Maracle. 2012. Subsistence harvest of land mammals, Yukon Flats, AK., March 2010-February 2011.

Van Lanen, J.M., C.M. Stevens, C.L. Brown, K.B. Maracle, and D.S. Foster. 2012. Subsistence land mammal harvests and uses, Yukon Flats, Alaska: 2008-2010 harvest report and ethnographic update. ADF&G, Division of Subsistence Technical Paper No. 377, Anchorage, AK.

Yukon Flats Cooperative Moose Management Plan. 2002. ADF&G, Div. of Wildlife Conservation. Anchorage, AK.

Young, D.D., Jr. 2007. Units 20A, 20B, 20C, 20F, and 25C brown bear. Pages 212-228 in P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2004-30 June 2006. ADF&G. Project 4.0. Juneau, AK.

WRITTEN PUBLIC COMMENTS

May 27, 2015
Office of Subsistence Management
Attn: Regulations Specialist
1011 East Tudor Road, Mail Stop 121
Anchorage, Alaska 99503

Reference: WP16-70

To whom it may concern:

Brown bears and bear conservation is a high priority for me, not only from a business perspective, but also for my personal values, recreation, and spiritual well being. For nearly 15 years, I've been actively involved in reviewing, analyzing and commenting on brown bear trophy hunting, harvesting methods, predator management, and tourism industry issues. A great deal of my energy has been spent on public education and outreach (through the Kenai Brown Bear Committee et al) on living with bears, including the hazards of food conditioning brown bears and mitigation techniques. An ongoing issue of concern and public education in Alaska has been conditioning bears to "attractants" like fish waste, unsecured garbage and freezers that might attract bears to homes, businesses, and recreation areas which could result in bear-human conflicts.

The public safety concerns posed by food conditioned bears are universally recognized by natural resource agencies throughout the range of the species. Food conditioned bears are more likely to be a danger to humans than those that are not food conditioned. Further, food conditioning of bears tends to increase the likelihood of a bear being killed in defense of life or property. Baiting is incongruent with best management practices and standard public educational messaging on the issue of food and bears.

After reviewing the transcripts of the Federal Subsistence Board (FSB) meeting where Proposal WP14-50 passed allowing for brown bear baiting in the Yukon Flats National Wildlife Refuge, it appears that critical conservation concerns were ignored simply to make federal hunting regulations consistent with state hunting regulations. Listed below are some of these concerns:

1. The population data used was a mathematical extrapolation from the 1980's and 1990's, some 20-30 years old, and not even for the same area where the regulation was implemented.
2. The FSB raised the limit from one to two bears as of July 9, 2012, and the effects of that increased opportunity are not known.

3. The State of Alaska allows brown bear baiting in GMU 25D for the purpose of temporarily reducing brown bear numbers, largely to benefit moose populations. To align with the state in this regard is in violation of the FSB predator management policy.

4. Brown bears have a very low reproductive rate, warranting scientific concern for potential over harvest, particularly when baseline data is unknown or anecdotal.

Additionally, brown bear baiting in the Yukon Flats National Wildlife Refuge has set a dangerous precedent for this activity to occur on additional national wildlife refuges and other federal lands in Alaska. In fact, this has already begun to occur with new proposals to allow brown bear baiting in GMU 11 and 12 on federal lands.

This regulation is also inconsistent with the NPS and USFWS current and proposed rules prohibiting the taking of brown bears over bait on federal lands.

Passing this proposal will not affect subsistence use, as there is ample opportunity to hunt brown bears on federal lands in this GMU.

I urge you to support and pass WP16-70.

Thank you for considering my comments.

Sincerely,

Dave Bachrach
Homer, AK



Matuskowitz, Theo <theo_matuskowitz@fws.gov>

Fwd: Letter supporting FSB proposal WP 16-70

1 message

AK Subsistence, FW7 <subsistence@fws.gov> Tue, Jun 9, 2015 at 12:21 PM
To: Theo Matuskowitz <theo_matuskowitz@fws.gov>, Kayla Mckinney <kayla_mckinney@fws.gov>

----- Forwarded message -----

From: **Derek Stonorov** <dstonorov@gmail.com>
Date: Tue, Jun 9, 2015 at 12:18 PM
Subject: Letter supporting FSB proposal WP 16-70
To: subsistence@fws.gov

To: Federal Subsistence Board

From: Derek Stonorov P.O. Box 15005, Fritz Creek, Alaska 99603

Subject: Letter of support for FSB proposal WP 16-70.

Please do support WP 16-70 to change the brown bear baiting regulations in YFNWR.
Please do not support WP 16-18 to allow brown bear baiting in GMU Units 10 and 11.

Brown bear baiting—or any bear baiting for that matter—sets a dangerous precedent for wildlife management, especially on federal lands. Bear baiting increases hunter efficiency and can most certainly can lead to over harvest.

A discussion of brown bear baiting in any context other than predator control is a waste of the FSB time.

Brown bear populations in GMUs 10 and 11 as well as the YFNWR are certainly not known and what little data available is 20-30 years old and it is very doubtful that the methods used by ADF&G for making these estimates would stand up to peer review.

I have lived and hunted in Alaska for more than 50 years. I am a wildlife biologist and served on the Homer Fish and Game Advisory Committee for many years.

Thank you for your time,

Derek Stonorov



Friends of Alaska National Wildlife Refuges National Friends of the Year 2010

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May 15, 2015

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Kanuti NWR

Kenai NWR

Kodiak NWR

Koyukuk NWR

Nowitna NWR

Selawik NWR

Tetlin NWR

Togiak NWR

Yukon Delta NWR

Yukon Flats NWR

Office of Subsistence Management
Attn: Regulations Specialist
1011 East Tudor Road, Mail Stop 121
Anchorage, Alaska 99503

Reference: WP16-70

To Whom it May Concern:

Friends of Alaska National Wildlife Refuges requests that the Federal Subsistence Board (FSB) approve proposal WP16-70. Friends was unaware of proposal WP14-50 that was approved at the FSB meeting in April 2014. That proposal allowed for the taking of brown bears over bait in the Yukon Flats National Wildlife Refuge, in Game Management Unit (GMU) 25D. Friends believes this sets a dangerous precedent for this activity to occur on other National Wildlife Refuges and federal lands in Alaska, which is already beginning. The current FSB proposal cycle has a new proposal to allow brown bear baiting in GMUs 11 and 12 on federal lands. Had Friends known about proposal WP14-50, we would have asked that this "means and methods" not be approved for use on any National Wildlife Refuge.

We are concerned about brown bear conservation in Yukon Flats National Wildlife Refuge, especially since the Alaska Board of Game authorized the taking of brown bears over bait in this GMU with the goal of a "temporary reduction" in the brown bear population. This not justified by any scientific evidence that reduction of brown bear numbers increases the abundance of moose and other game animals. We feel that the term "temporary reduction" is a de facto predator control program, which is in conflict with the purposes and management of the Yukon Flats National Wildlife Refuge and the National Wildlife Refuge System.

We urge you to pass WP16-70.

Thank you for considering our comments.

Sincerely,

David C. Raskin, Ph.D.
President

WP16–18 Executive Summary	
General Description	Proposal WP16-18 requests that brown bears be allowed to be hunted over bait in Units 11 and 12 with seasons from Apr. 15-June 15 and Apr. 15-June 30, respectively. <i>Submitted by: Wrangell-St. Elias National Park Subsistence Resource Commission.</i>
Proposed Regulation	<p>§ __.26 (b) <i>Except for special provision found at paragraph (n)(1) through (26) of this section, the following methods and means of taking wildlife for subsistence uses are prohibited:</i></p> <p style="text-align: center;">* * * *</p> <p>(14) <i>Using bait for taking ungulates, bear, wolf, or wolverine; except you may use bait to take wolves and wolverine with a trapping license, and you may use bait to take black bears and brown bears with a hunting license as authorized in Unit-specific regulations at paragraphs (n)(1) through (26) of this section.</i></p> <p style="text-align: center;">Unit 11—Brown Bears</p> <p><i>1 bear</i> <i>Aug. 10-June 15.</i></p> <p><i>(i) Unit specific regulations:</i></p> <p><i>(A) You may use bait to hunt black and brown bear between April 15 and June 15.</i></p> <p style="text-align: center;">Unit 12—Brown Bears</p> <p><i>1 bear</i> <i>Aug. 10-June 30.</i></p> <p><i>(i) Unit specific regulations:</i></p> <p><i>(A) You may use bait to hunt black and brown bear between April 15 and June 30; you may use bait to hunt wolves on FWS and BLM lands.</i></p>
OSM Preliminary Conclusion	Defer
Southcentral Regional Advisory Council Recommendation	

WP16–18 Executive Summary	
Eastern Interior Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	1 Support, 2 Oppose

**DRAFT STAFF ANALYSIS
WP16-18**

ISSUES

Proposal WP16-18, submitted by the Wrangell-St. Elias National Park Subsistence Resource Commission, requests that brown bears be allowed to be hunted over bait in Units 11 and 12 with a season from Apr. 15-June 15 and Apr. 15-June 30, respectively.

DISCUSSION

The proponent claims that the proposed changes would increase harvest opportunity for rural residents in the spring, particularly in heavily forested areas where brown bears do not concentrate.

Existing Federal Regulation

§__.26 (b) *Except for special provision found at paragraph (n)(1) through (26) of this section, the following methods and means of taking wildlife for subsistence uses are prohibited:*

* * * *

(14) Using bait for taking ungulates, bear, wolf, or wolverine; except you may use bait to take wolves and wolverine with a trapping license, and you may use bait to take black bears and brown bears with a hunting license as authorized in Unit-specific regulations at paragraphs (n)(1) through (26) of this section.

Unit 11—Brown Bears

1 bear *Aug. 10-June 15.*

(i) Unit specific regulations:

(A) You may use bait to hunt black bear between April 15 and June 15.

Unit 12—Brown Bears

1 bear *Aug. 10-June 30.*

(i) Unit specific regulations:

(A) You may use bait to hunt black bear between April 15 and June 30; you may use bait to hunt wolves on FWS and BLM lands.

Proposed Federal Regulation

§__.26 (b) Except for special provision found at paragraph (n)(1) through (26) of this section, the following methods and means of taking wildlife for subsistence uses are prohibited:

* * * *

(14) Using bait for taking ungulates, bear, wolf, or wolverine; except you may use bait to take wolves and wolverine with a trapping license, and you may use bait to take black bears and brown bears with a hunting license as authorized in Unit-specific regulations at paragraphs (n)(1) through (26) of this section.

Unit 11—Brown Bears

1 bear

Aug. 10-June 15.

(i) Unit specific regulations:

(A) You may use bait to hunt black **and brown** bear between April 15 and June 15.

Unit 12—Brown Bears

1 bear

Aug. 10-June 30.

(i) Unit specific regulations:

(A) You may use bait to hunt black **and brown** bear between April 15 and June 30; you may use bait to hunt wolves on FWS and BLM lands.

Existing State Regulation

In Units 7, 11, 12, 13*, 14B*, 15, 16, 20A, 20B, 20C, 20E, 21D, 24C, 24D, and 25D brown/grizzly bears may be taken at a black bear bait station subject to the same restrictions as black bear. Hunters who take brown bears over bait in these areas are required to salvage the edible meat in addition to the hide and skull. Hunters must comply with seasons, bag limits, and sealing requirements for brown/grizzly bears (registration permits and locking tags may be required in some areas, contact ADF&G for details).*

**Units 11, 13, and 14B were opened to brown bear baiting by the Board of Game in 2015, effective July 1, 2015.*

Apr. 15 – June 30

Unit 11—Brown Bears

Residents and Nonresidents—1 bear every regulatory year.

Aug. 10-Jun 15

Unit 12—Brown Bears

Residents and Nonresidents—1 bear every regulatory year.

Aug. 10-Jun 30

Extent of Federal Public Lands

Federal public lands comprise approximately 88% of Unit 11 and consist of 84.5% National Park Service (NPS) managed lands, 3.3% U.S. Forest Service (USFS) managed lands, and 0.1% Bureau of Land Management (BLM) managed lands (see **Unit Map 11**).

Federal public lands comprise approximately 61% of Unit 12 and consist of 48.2% NPS managed lands, 10.9% U.S. Fish and Wildlife Service (USFWS) managed lands, and 1.8% BLM managed lands (see **Unit Map 12**).

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 brown bear in Unit 11, north of the 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 brown bear in Unit 11, remainder.

Rural residents of Unit 12, Dot Lake, Chistochina, Gakona, Mentasta Lake, and Slana have a customary and traditional use determination for brown bear in Unit 12.

Regulatory History

In 1990, the Federal Subsistence Board (Board) did not adopt State brown bear regulations for Units 11 and 12 as brown bears were not considered a subsistence resource. As a result, there were no Federal seasons for brown bears in Units 11 and 12 until the late 1990s.

In 1997, the Board adopted Proposal P97-23 with modification, giving residents of Unit 12 and Dot Lake a customary and traditional use determination for brown bear in Unit 12 and recognizing brown bears as a subsistence resource.

In 1998, the Board adopted Proposal P98-96 with modification, adding residents of Chistochina, Gakona, Mentasta Lake, and Slana to the customary and traditional use determination for brown bear in Unit 12.

In 1998, the Board also adopted Proposal P98-097, creating an Aug. 10 – June 30 brown bear season in Unit 12 with a harvest limit of 1 bear. This was done to allow communities in Unit 12 with a customary and traditional use determination to hunt brown bear under Federal regulations and to align Federal and State regulations as users could already hunt brown bear on most (non-National Park) Federal lands under State regulations. The Federal harvest limit and season for brown bear in Unit 12 has not been changed since.

Also in 1998, the Board adopted Proposal P98-22, which made a customary and traditional use determination for brown bears in Unit 11. Residents in Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Tazlina, Tonsina, and Units 11 and 12 received a positive customary and traditional use determination in Unit 11, north of the Sanford River. Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Tazlina, Tonsina, and Unit 11 received a positive customary and traditional use determination in Unit 11 remainder.

In 1999, the Board adopted Proposal P99-004, which requested a brown bear season in Unit 11 of Sept. 1 – May 31 with a harvest limit of 1 bear. Brown bear populations appeared healthy and the Proposal intended to provide harvest opportunity of a customary and traditional resource to Federally qualified subsistence users, and because users could already hunt portions of the unit under State regulations.

In 2003, the Board adopted Proposal WP03-13, which extended the brown bear season in Unit 11 from Sept. 1–May 31 to Aug. 10-June 15. This was done to align Federal and State regulations, to provide additional harvest opportunity for Federally qualified subsistence users, and because there were no conservation concerns.

In 2012, the Alaska Board of Game adopted Proposal 196, allowing brown bears to be taken at bait stations in Unit 12. This was done to allow more opportunity to harvest brown bear as take of brown bears in Unit 12 was consistently below sustainable harvest levels (ADF&G 2012).

In 2013, the NPS adopted temporary restrictions under the Wrangell-St. Elias National Park and Preserve (NPP) compendium on taking brown bears over bait in National Preserves under the new State regulations to avoid public safety issues and to avoid food conditioning bears. These temporary restrictions were adopted again in 2014 and 2015. Consequently, the State provision allowing the take of brown bears over bait in Unit 12 has not gone into effect on National Preserve lands (Wrangell-St. Elias National Preserve, NPS 2015).

In 2015, the State adopted Proposal 93, allowing brown bears to be taken at bait stations in Unit 11, effective July 1, 2015. This was done to provide users additional opportunity and because there are no biological concerns for brown bears in Unit 11 (ADF&G 2015a).

The NPS temporary restrictions implemented in 2015 also apply to Unit 11. Therefore, National Preserve lands in Unit 11 (Wrangell-St. Elias National Preserve) are not open to the take of brown bears over bait under State regulations.

Current Events

The National Park Service proposed to permanently restrict the take of brown bears over bait under State regulations on National Preserves under National Park Service regulations in 2014 (NPS 2015).

The National Wildlife Refuge System (NWRS) is currently reviewing proposed changes to NWRS regulations, including the prohibition of the take of brown bears over bait under State general hunting and trapping regulations. These proposed changes are in the scoping phase of formal rulemaking. These changes would not affect Federal subsistence regulations (USFWS 2015).

Biological Background

State management objectives for Unit 11 brown bears are as follows (Schwanke 2011).

- Provide maximum opportunity to hunt brown bears in Unit 11.

State management goals and objectives for Unit 12 brown bears are as follows (Bentzen 2011):

- Maintain the brown/grizzly bear population and its habitat in concert with other components of the ecosystem.
- Provide the greatest sustained opportunity to hunt brown/grizzly bears in Unit 12.
- Manage harvests so 3-year mean harvest does not exceed 28 bears and includes at least 55% males in the harvest.

No formal brown bear population estimates have been conducted for Unit 11, although frequent observations by Alaska Department of Fish and Game (ADF&G) staff and the public suggest an abundant

and well-distributed population (Schwanke 2011). Frequent sightings of sows with cubs suggest good productivity in this unit as well.

In 2000, the brown bear population in Unit 12 was estimated at 350-425 bears and has likely remained unchanged since then. Based on harvest, productivity appears adequate (Bentzen 2011).

Habitat

Unit 11 is generally considered good brown bear habitat due to the variety of habitats, prevalence of salmon streams and ungulates, and large tracts of undeveloped land (Schwanke 2011). Brown bears inhabit all of Unit 11, except the high-elevation glaciers.

Habitat in Unit 12 is considered of moderate quality for brown bears. Habitat is relatively undisturbed, but streams do not contain reliable seasonal salmon runs. Wildfires and timber harvest projects in Unit 12 are expected to enhance brown bear habitat over the long-term (Bentzen 2011).

Harvest History

Brown bear harvest in Unit 11 averaged 16 bears annually through the 1960s and 1970s, but declined substantially after 1980 when Wrangell-St. Elias National Park and Preserve were established, closing much of the unit to brown bear harvest. Harvest increased after 1999, when a Federal brown bear season was established for Unit 11, opening the park to subsistence brown bear hunting. However, overall harvest remains low compared to adjacent areas with similar habitat (i.e. Unit 13, Schwanke 2011). Between 2005 and 2013, harvest ranged from 13-26 bears/year, with an average annual harvest of 17.3 bears (Schwanke 2011, Faulise 2015, ADF&G 2015b, **Figure 1**).

Brown bear harvest rates for Unit 12 are within State management objectives. Between 1996 and 2013, harvest of brown bears in Unit 12 ranged from 8-33 bears/year, with an average annual harvest of 18.7 bears (Bentzen 2011, Faulise 2015, **Figure 2**). The 3 year mean harvest of male bears in Unit 12 was within State management objectives for 14 out of 16 years (1998-2013), and ranged from 53-69%, with an average annual harvest of 60% males (Bentzen 2011, Faulise 2015, **Figure 3**).

In 2012, the State legalized take of brown bear over bait in Unit 12. The following spring (2013), the number of bear bait stations in Unit 12 increased to 89 from an 11 year average of 50 bait stations/year between regulatory years 2000/01 and 2011/12 (ADF&G 2014). Brown bear harvest in 2012/13 and 2013/14 was above the 18-year average, but down from 2011/12 harvests (Faulise 2015, **Figure 2**). Research, defense of life or property, and other human-related, non-hunting accidents comprised a small percentage of brown bear mortalities in this unit (0-3 bears per year) (Bentzen 2011).

Non-locals and non-residents have historically harvested most of the brown bears in Units 11 and 12. From 2005/06 to 2009/10, local residents accounted for 6-31% of the annual brown bear harvest (1-5

bears/year) in Unit 11 (Schwanke 2011). From 2005/06 to 2010/11, local residents accounted for 6-36% of the annual brown bear harvest (1-4 bears/year) in Unit 12 (Bentzen 2011).

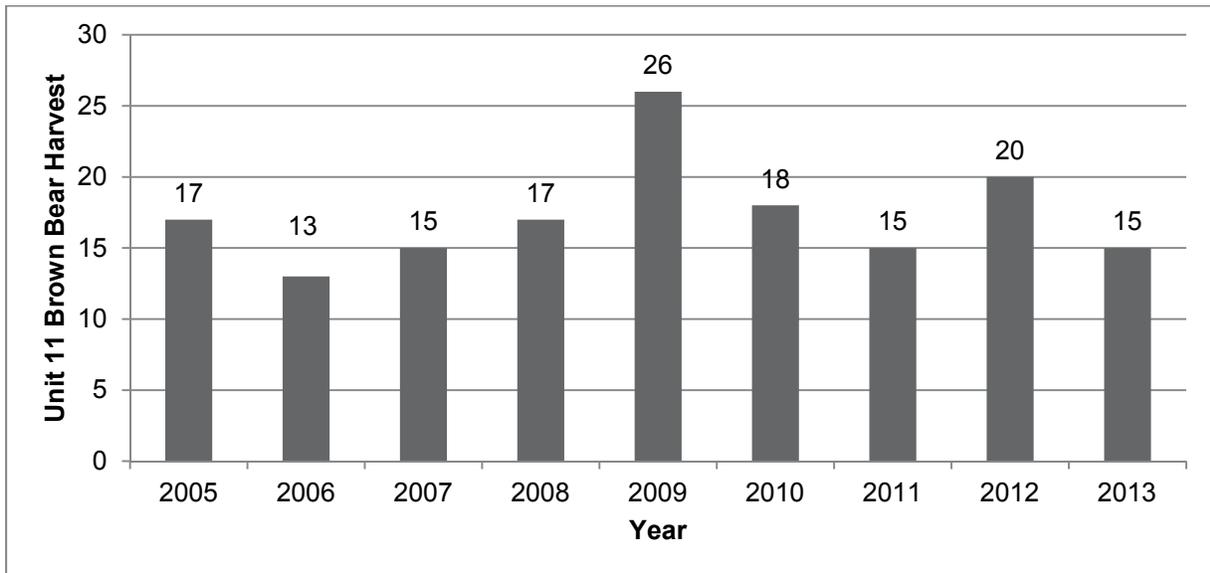


Figure 1. Unit 11 brown bear harvest, 2005-2013. (2005-2009 data is from Schwanke 2011. 2010-2013 data is from Faulise 2015, pers. comm.)

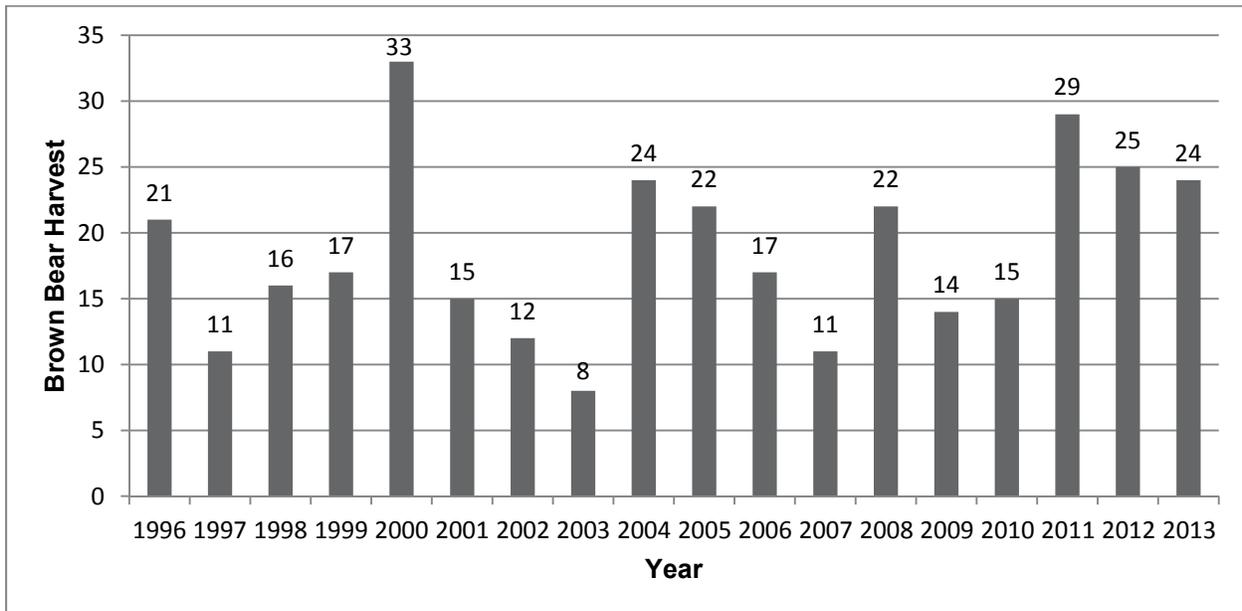


Figure 2. Unit 12 brown bear harvest, 1996-2013. (1996-2009 data is from Bentzen 2011. 2010-2013 data is from Faulise 2015, pers. comm.)

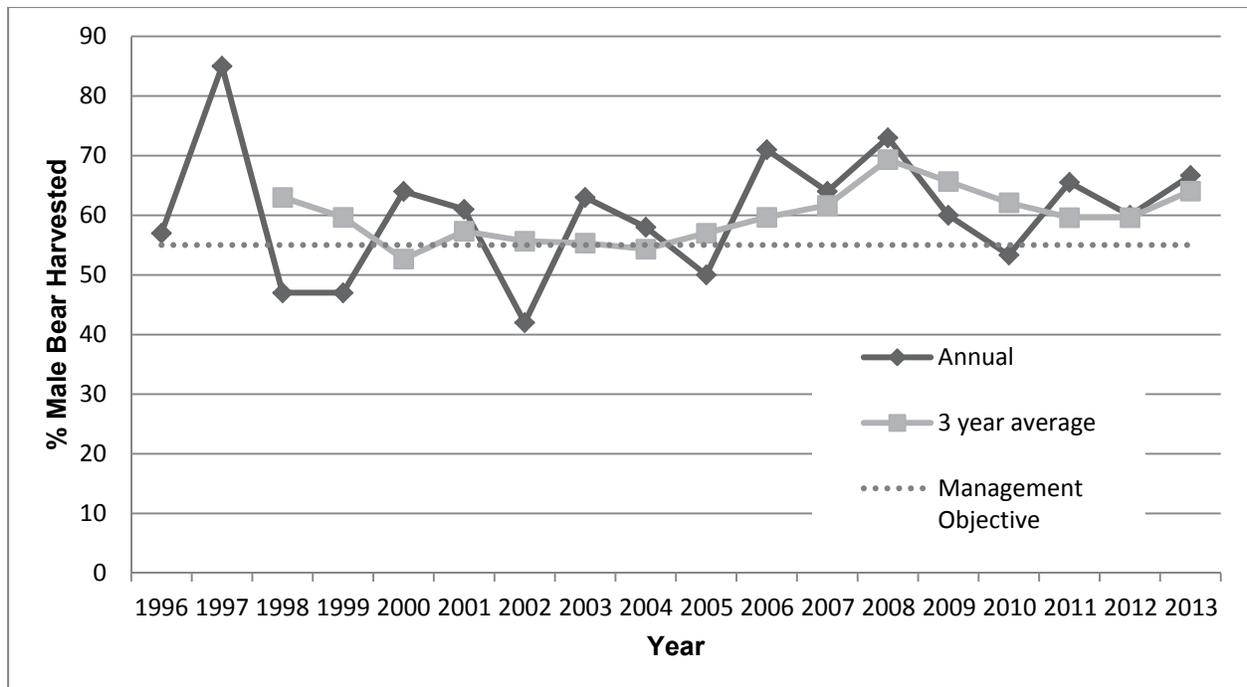


Figure 3. Percent of male bears harvested in Unit 12, 1996-2013 (1996-2009 data is from Bentzen 2011. 2010-2013 data is from Faulise 2015, pers. comm.)

Effects of the Proposal

Adopting this proposal would enable Federally qualified subsistence users to take brown bears over bait in Unit 11 from Apr. 15-June 15 and in Unit 12 from Apr. 15-June 30, providing additional harvest opportunities.

Adoption of this proposal may affect brown bear populations in both units. Baiting is considered a more efficient harvest strategy than the traditional “spot and stalk” method, particularly in forested areas where brown bears do not concentrate (Dunkley and Cattet 2003, OSM 2014). While brown bears can already be harvested over bait on BLM, USFS and FWS managed lands under State regulations, adopting this proposal would open Wrangell-St. Elias National Park and Preserve (NPP) lands to brown bear baiting by Federally qualified subsistence users, which may increase the brown bear harvest in Units 11 and 12.

Local residents comprise a minority of the brown bear harvests in Units 11 and 12. Additionally, brown bear harvest data indicate that the number of bears harvested in Unit 12 did not increase substantially following the allowance of brown bear baiting under State regulations. Due to these reasons, any increase in harvest resulting from opening Wrangell-St. Elias NPP to take of brown bears over bait is expected to be small.

Baiting may also result in food conditioned bears, raising concerns about public safety (Dunkley and Cattet 2003, NPS 2015). However, as brown bears have been feeding at black bear baiting stations for years, no increased threat to public safety is expected.

OSM PRELIMINARY CONCLUSION

Defer Proposal WP16-18

Justification

The NPS has concerns about conditioning bears to human foods at bait stations. Not all bears feeding at bait stations are harvested, so bears not harvested can become conditioned to human foods and contribute to safety concerns for local residents and/or the recreating public. The NPS is currently considering whether hunting brown bears over bait is an acceptable activity on NPS managed lands. Accordingly, the NPS recommends that Federal Subsistence Board defer this proposal until the NPS has an opportunity to consider this use not only in the context of biological effects and human safety considerations, but also the legal and policy framework for Alaska's park system areas.

Additionally, in the absence of recent population estimates and good information about sustainable harvest levels, a conservative approach is warranted prior to authorizing more efficient methods of harvest such as baiting.

LITERATURE CITED

ADF&G. 2012. Final recommendations. Board of Game proposals. March 2012-Region III. Alaska Department of Fish and Game. Div. of Wildlife Conservation and Div. of Subsistence. Fairbanks, AK.

ADF&G. 2014. Tok Alaska Area Presentation. Interior Region. February 14-23, 2014. Alaska Board of Game Meeting Information. Fairbanks, AK.

<http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=02-14-2014&meeting=fairbanks>. Retrieved: June 8, 2015.

ADF&G. 2015a. Alaska Department of Fish and Game staff comments. Central/southwest region IV proposals. Alaska Board of Game Meeting. 13-20 February, 2015. Wasilla, Alaska. Pgs. 81-82.

<http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=02-13-2015&meeting=wasilla>. Accessed May 2015.

ADF&G. 2015b. Unit 11 and 13 proposals. Oral report. Alaska Board of Game meeting information. Central/Southwest Region. 13-20 February 2015. Wasilla, AK. Pg. 175-180.

<http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=02-13-2015&meeting=wasilla>. Accessed May 2015.

Bentzen, T.W. 2011. Unit 12 brown bear. Pages 129-140 *in* P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2008-30 June 2010. Alaska Department of Fish and Game. Project 4.0. Juneau, Alaska.

Dunkley, L. and M.L. Cattet. 2003. A comprehensive review of the ecological and human social effects of artificial feeding and baiting of wildlife. Canadian cooperative wildlife health centre: Newsletters and publications. Paper 21.

Faulise, T. 2015. Program technician. Alaska Department of Fish and Game. 2010-2013 brown bear sealing data for Units 11 and 12. E-mail. May 20, 2015.

NPS. 2015. Wrangell-St. Elias National Park and Preserve compendium 2015. National Park Service. http://www.nps.gov/akso/management/current_compndiums.cfm. Retrieved: June 8, 2015.

OSM. 1998. Subsistence Management Regulations for the harvest of fish and wildlife on Federal public lands in Alaska. 1 July 1997-30 June 1998. Office of Subsistence Management. Anchorage, AK.

OSM. 1999. Subsistence Management Regulations for the harvest of fish and wildlife on Federal public lands in Alaska. 1 July 1998-30 June 1999. Office of Subsistence Management. Anchorage, AK.

OSM. 2014. Staff analysis of WP14-50. Office of Subsistence Management, USFWS. Anchorage, AK.

Schwanke, R.A. 2011. Unit 11 brown bear management report. Pages 122-128 *in* P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2008-30 June 2010. Alaska Department of Fish and Game. Juneau, Alaska.

USFWS. 2015. Proposed regulatory changes. National Wildlife Refuge System, USFWS. http://www.fws.gov/alaska/nwr/ak_nwr_pr.htm. Retrieved: June 8, 2015.

WRITTEN PUBLIC COMMENTS

May 27, 2015

Office of Subsistence Management
Attn: Regulations Specialist
1011 East Tudor Road, Mail Stop 121
Anchorage, Alaska 99503

Reference: WP16-18

To whom it may concern:

An ongoing issue of concern and public education in Alaska has been conditioning bears to “attractants” like fish waste, unsecured garbage and freezers that might attract bears to homes, businesses, and recreation areas which could result in bear-human conflicts.

The public safety concerns posed by food conditioned bears are universally recognized by natural resource agencies throughout the range of the species. Food conditioned bears are more likely to be a danger to humans than those that are not food conditioned. Further, food conditioning of bears tends to increase the likelihood of a bear being killed in defense of life or property. Baiting is incongruent with best management practices and standard public educational messaging on the issue of food and bears.

Conservation concerns must be given a priority over the simplification of hunting regulations, listed below some of these concerns:

1. I was unable to locate any current brown bear population data for the GMUs in the Proposal.
2. Brown bears have a very low reproductive rate, warranting scientific concern for potential over harvest, particularly when baseline data is unknown or anecdotal.
3. The Board of Game liberalized brown bear regulations in 2003 to increase the harvest of bears in GMU 11 to benefit ungulate populations.

4. The State of Alaska already allows brown bear baiting in GMU 12 largely to benefit ungulate populations. To align with the state in this regard is in violation of the Federal Subsistence Board predator management policy.

This regulation is also inconsistent with the NPS and USFWS current and proposed rules prohibiting the taking of brown bears over bait on federal lands.

Passing this proposal will not affect subsistence use, as there is ample opportunity to hunt brown bears on federal lands in these GMUs.

I ask that you to oppose WP16-18.

Thank you for considering my comments.

Sincerely,

Dave Bachrach
Homer, AK



Matuskowitz, Theo <theo_matuskowitz@fws.gov>

Fwd: Letter supporting FSB proposal WP 16-70

1 message

AK Subsistence, FW7 <subsistence@fws.gov>

Tue, Jun 9, 2015 at 12:21 PM

To: Theo Matuskowitz <theo_matuskowitz@fws.gov>, Kayla Mckinney <kayla_mckinney@fws.gov>

----- Forwarded message -----

From: **Derek Stonorov** <dstonorov@gmail.com>

Date: Tue, Jun 9, 2015 at 12:18 PM

Subject: Letter supporting FSB proposal WP 16-70

To: subsistence@fws.gov

To: Federal Subsistence Board

From: Derek Stonorov P.O. Box 15005, Fritz Creek, Alaska 99603

Subject: Letter of support for FSB proposal WP 16-70.

Please do support WP 16-70 to change the brown bear baiting regulations in YFNWR.

Please do not support WP 16-18 to allow brown bear baiting in GMU Units 10 and 11.

Brown bear baiting--or any bear baiting for that matter--sets a dangerous precedent for wildlife management, especially on federal lands. Bear baiting increases hunter efficiency and can most certainly can lead to over harvest.

A discussion of brown bear baiting in any context other than predator control is a waste of the FSB time.

Brown bear populations in GMUs 10 and 11 as well as the YFNWR are certainly not known and what little data available is 20-30 years old and it is very doubtful that the methods used by ADF&G for making these estimates would stand up to peer review.

I have lived and hunted in Alaska for more than 50 years. I am a wildlife biologist and served on the Homer Fish and Game Advisory Committee for many years.

Thank you for your time,

Derek Stonorov



May 27, 2015

Federal Subsistence Board
ATTN: Theo Matuskowitz
Office of Subsistence Management
1011 E. Tudor Road, MS-121
Anchorage, Alaska 99503-6199

RE: 2016-2018 Wildlife Proposals

Dear Mr. Matuskowitz:

Enclosed is Ahtna Tene Nene' Customary & Traditional Use Committee's comments on the 2016-2018 wildlife proposals.

Sincerely,

*Olivia Stickwan
for Roy S. Ewan*

Roy S. Ewan,
Chair

2016-2018 Wildlife Proposal Comments

WP16-16 Closure Of The Paxson Hunting Areas

Comments:

We oppose WP16-16 which proposes the closure of the Paxson Area which is unencumbered federal public lands. Federally qualified subsistence users will not have an opportunity to hunt for large and small game near or off the highway system within the Paxson hunting areas.

Closure of this significant customary and traditionally use area for hunting, gathering and fishing will disenfranchise federally qualified subsistence users. Federally qualified subsistence users will have to hunt elsewhere on federal public lands, other federal public lands are largely inaccessible.

Hunting areas on Federal public lands in Unit 13 is minimal. Closing this additional acreage in which to hunt for large and small game would be disadvantageous to the local federally qualified subsistence users. Paxson areas are the ideal place to hunt, fish and pick berries. Closure of the Paxson Areas will adversely affect hunters that combine hunting with other subsistence activities, such as picking berries or fishing.

Paxson Lake area, as described above, were/are Ahtna People's customary and traditionally use areas for hunting, gathering and other subsistence purposes. Ahtna people have used these areas for thousands of years, to hunt, fish and gather plants. Please refer to the report entitled, *Some Ethnographic and Historical Information on the Use of Large Land Mammals in the Copper Basin* by William E. Simeone: page 38, August 2006, it states, "in some areas places, such as Paxson Lake, Tanada Lake, or Tazlina Lake, caribou were stampeded into the water and speared from canoes". Other documentation, in this report by the late Ahtna Chief Ben Neeley, states that he and his family hunted up the Gulkana River and into the Tangle Lakes area: page 28, August 2006.

WP16-17 Trans-Alaska Oil Pipeline Right-of-way Is Prohibited

Comments:

We support Proposal WP17-16 to remove regulatory language that hunting within the Alaska Oil Pipeline right-of-way is illegal.

As the proposal states, hunting in the Alaska Oil Pipeline right-of-way under federal regulation is more restrictive than state regulations. Federal regulations should allow more liberal hunting opportunities than state regulations. Hunting for moose under state regulations in the Alaska Oil Pipeline right-of-way is not regulated.

WP16-18 Allowing Bait To Hunt Brown Bear In Unit 11 And Unit 12

Comments:

We support WP16-18 to allow federally qualified hunters to use bait in Unit 11 and Unit 12 to hunt brown bear. In Unit 11 allow bait to hunt brown bear between April 15 and June 15, and in Unit 12 allow bait to hunt brown bear from April 15 and June 30.

Taking bears over bait has been and still is a method to harvest black and brown bears in the Copper Basin communities. Ahtna People customarily and traditionally used snares to kill bears to protect drying salmon on fish racks. Opportunistically harvesting brown and black bears occurred to feed families. Some Ahtna people ate brown bears and others did not. Brown bears' meat was consumed, meat was boiled or fried, hides were used for clothing, such as gloves, mattresses in tents, mukluks, claws were used as jewelry or necklaces, bladder was used as windows, fat was used as heating source and for lighting in dwellings.

There isn't a conservation concern for black or brown bears in Unit 11 and Unit 12. Harvesting a few bears in areas across the Copper River, in forested areas, will help to keep the natural abundance and diversity of wildlife in population within balance.

WP16-19 Ahtna Culture Camp Hunting Season Extension For Taking Moose And Caribou

Comments:

We support WP16-19 to change the dates when moose or caribou may be taken for the Ahtna Heritage Culture Camp. We propose to change the dates to 1 Bull Moose may be taken from July 15-August 31 or 2 caribou from July 15-August 31. No combination of caribou and moose may be taken.

As the proposal states, moose or caribou is needed for this culture camp in the months of July and August. The months of July and August are ideal months to hold a culture camp. July is the warmest month of year, fishing season is still open, salmon is provided to feed participants. August month is also the ideal month to pick berries and other plants, hunt for moose and caribou to harvest meat, organs, heads, etc. to provide nutrients and healthy customary and traditional foods for the participants that attend the camp. Berries and other plants are needed to provide healthy foods as well as to show how plants were customarily and traditionally used by the Ahtna People.

This culture camp instructs younger generation and others on Ahtna's ways of life. Customary and traditional uses of meat of fish, small and large wild game, and plant use are taught at this culture camp. Language, history of the Ahtna People, stories and legends are told to younger generation so that our culture and history continues to be alive. Values such as sharing of harvest are also taught, meat that is left over is shared with Elders to take home. Ahtna's way of life continues through the teaching and instructing from the Elders to everyone that attends this culture camp. It is essential for the Elders to continue to pass on their wisdom and traditional knowledge to everyone that attends this culture camp.

WP16-20 Unit 11 Sheep Hunting Season

Comments:

We oppose WP16-20 Unit 11 Sheep proposal to change the harvest limit from 1 sheep to Rams with $\frac{3}{4}$ curl horn or larger. According to an Overview given at Alaska Board of Game meeting in February 2015, sheep populations in Unit 11 are stable. A regulatory change of ram horn size at this time isn't necessary, changing Unit 11 sheep regulations will restrict Federally Qualified Subsistence Users to hunt only for larger rams. If the proponent has a concern about the population of sheep in Unit 11, a proposal to the Alaska Board of Game could address this issue. On average sport hunters harvest as many or more sheep than Federally Qualified Subsistence Users. Additionally, Federally Qualified Subsistence Users cannot fly into hunt on National Park Lands. Sports hunters are allowed to fly in to hunt on preserve lands. Sport hunters are the main concern, in most years, they harvest more sheep in Unit 11 than Federally Qualified Subsistence Users.

WP16-60 Unit 12 C&T for Chisana Caribou

Comments:

We support WP16-60 with an amendment to allow only federally qualified subsistence users with a positive customary and traditional use for caribou in Unit 12. We oppose opening Unit 12 Chisana Caribou hunt to non-federally qualified subsistence hunters. Adding the communities of Dot Lake, Healy Lake and Tanacross will provide an opportunity for them to harvest Chisana caribou to sustain their livelihood and meet subsistence needs.

As the proposal states, harvesting a Chisana caribou is difficult due to the terrain and access to the hunting area. Most likely not too many more Chisana Caribou will be harvested by including C&T for these additional communities to the Unit 12 caribou hunt.

Additionally, Wrangell St. Elias National Park Superintendent has the discretion to close the hunt, if the hunters are reaching the harvest quota for this caribou herd.

WP16-67 Unit 12 Beaver Hunting/Trapping Season

We support WP16-67 to change Unit 12 Beaver to hunting and trapping season from September 15 to June 10 with no limit, meat or hide must be salvaged, traps, snares or firearms may be used. Aligning state and federal methods and means, hunting seasons, no limit, meat or hide must be salvaged will allow more hunting and trapping opportunities on federal public lands.

Beaver population data is collected through surveys given to trappers. The Department of Fish & Game relies on this survey to determine beaver population. Harvest data gathered through surveys that trappers fill out and return to ADF&G office indicates that there isn't a conservation concern. According ADF&G Overview given at Central/Southwest meeting in February 2015, beaver population is stable/high, and beaver harvest was 225.

WP16-68 Unit 12 Lynx Trapping Season

Comments:

We oppose WP 16-68 to lengthen Unit 12 Lynx trapping season from Nov. 1- Nov. 30 to Nov 1- Mar. 15 with no limit. According to ADF&G Overview presented at Central/Southwest meeting in February 2015, lynx population is low, harvest is 444.

Opening a trapping season with no limit when the population is low and changing the dates to allow a longer trapping season is counterproductive to lynx populations.



AK Subsistence, FW7 <subsistence@fws.gov>

WP16-70

tom collopy <tiglax@mac.com>

Sat, Sep 5, 2015 at 12:38 PM

To: subsistence@fws.gov

Cc: AK Adventures <dave@akadventures.us>, Andy Loranger <Andy_Loranger@fws.gov>, Steve Delehanty <steve_delehanty@fws.gov>, Mike Boylan <mfboylan@gmail.com>

Fellow Alaskans:

this is my second attempt to comment on WP16-70. My earlier remarks apparently are lost in cyberspace. While my remarks may be late, I think it's important for people in your office to understand how a significant portion of the populace views bear baiting.

I am a professional photographer. I specialize in images of Alaska and Alaskan wildlife. I am a member of numerous organizations of wildlife photographers; most, if not all, of the people associated with wildlife photography share the views i am about to outline.

Baiting bears, any bears, but especially brown bears is an irresponsible practice. Interactions, both intended and unintended, with people in the areas where baiting occurs are dangerous for people as well as for bears. The possibility of people being maimed or killed by conditioned brown bears is significant.

Additionally, unless the rules have recently changed, only trained biologists working in tightly controlled conditions are allowed to feed wildlife in national wildlife refuges. It goes without saying that if baiting is allowed in Yukon Flats NWR, it won't be long before other refuges come under pressure to allow similar activities, bringing into question the title "wildlife refuge".

I urge you to prohibit baiting in Yukon Flats NWR.

In the succinct words of former Minnesota governor Jesse Ventura regarding bear baiting: "that ain't huntin...that's assassination"....

thanks for reading this. feel free to quote me

tom collopy
wild north photography
p.o. box 845
homer, ak 99603

WP16–16 Executive Summary	
General Description	Proposal WP16–16 requests that Federal public lands within the Paxson Closed Area in Unit 13 be closed to hunting big game by Federally qualified subsistence users. <i>Submitted by Paxson Fish and Game Advisory Committee.</i>
Proposed Regulation	<p>Unit 13</p> <p><i>___ .26(n)(v) In the following areas, the taking of wildlife for subsistence uses is prohibited or restricted on public lands:</i></p> <p><i>___ . 26(n)(v)(E) Unit 13-- the Paxson Closed Area, the eastern drainage of the Gulkana River lying west of the Richardson Highway and the western drainage of the Gulkana River between the Denali Highway and the north end of Paxson Lake where the Gulkana River enters Paxson lake is closed to the taking of big game.</i></p>
OSM Preliminary Conclusion	Oppose
Southcentral Regional Advisory Council Recommendation	
Eastern Interior Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	11 Oppose

**DRAFT STAFF ANALYSIS
WP16-16**

ISSUES

Proposal WP16-16, submitted by the Paxson Fish and Game Advisory Committee, requests that Federal public lands within the Paxson Closed Area in Unit 13 be closed to hunting big game by Federally qualified subsistence users.

DISCUSSION

The proponent requests closing Federal public lands to hunting big game within the Paxson Closed Area in Unit 13 for biological and esthetic reasons. Additionally, the proponent states that the Paxson Closed Area provides readily available viewing areas for moose, caribou, and brown bears which regularly access the small section of the Gulkana River in search of salmon.

Existing Federal Regulation

Unit 13

___.26(n)(v) In the following areas, the taking of wildlife for subsistence uses is prohibited or restricted on public lands:

Proposed Federal Regulation

Unit 13

___.26(n)(v) In the following areas, the taking of wildlife for subsistence uses is prohibited or restricted on public lands:

___. 26(n)(v)(E) Unit 13-- the Paxson Closed Area, the eastern drainage of the Gulkana River lying west of the Richardson Highway and the western drainage of the Gulkana River between the Denali Highway and the north end of Paxson Lake where the Gulkana River enters Paxson lake is closed to the taking of big game.

Existing State Regulation

Unit 13

Paxson Closed Area: the eastern drainage of the Gulkana River lying

west of the Richardson Highway (between MP 182 and MP185.5) and the western drainage of the Gulkana River between the Denali Hwy (between MP0 and MP4.7) and the north end of Paxson Lake where the Gulkana River enters Paxson Lake is closed to the taking of any big game.

Extent of Federal Public Lands

Federal public lands comprise approximately 16% of Unit 13B and consist entirely of Bureau of Land Management (BLM) managed lands. Approximately 1,500 acres of land managed by BLM fall within the Paxson Closed Area and would be affected by this request (**Map1**).

Customary and Traditional Use Determinations

Residents that have a positive customary and traditional use determination for brown and black bears, caribou, Goat, Dall sheep, moose, wolf, and wolverines in Units 6,9,10,11,12,13, 20D and 16–26 are presented in **Table 1**.

Table 1. Unit specific customary and traditional use determinations.

SPECIES	CUSTOMARY AND TRADITIONAL DETERMINATION IN UNIT 13B
<i>Moose</i>	<i>Residents of Units 13, 20D (except for Fort Greely), Chickaloon, and Slana.</i>
<i>Caribou</i>	<i>Residents of Units 11, 12, (along the Nabesna Road and Tok Cutoff Road, mileposts 79-110). 13,20D (except for Fort Greely), and Chickaloon</i>
<i>Black Bear, Goat, Sheep, Wolverine</i>	<i>All rural residents.</i>
<i>Brown Bear</i>	<i>Residents of Unit 13 and Slana.</i>
<i>Wolf</i>	<i>Residents of Units 6, 9, 10 (Unimak Island only), 11, 12, 13, 16-26, and Chickaloon</i>

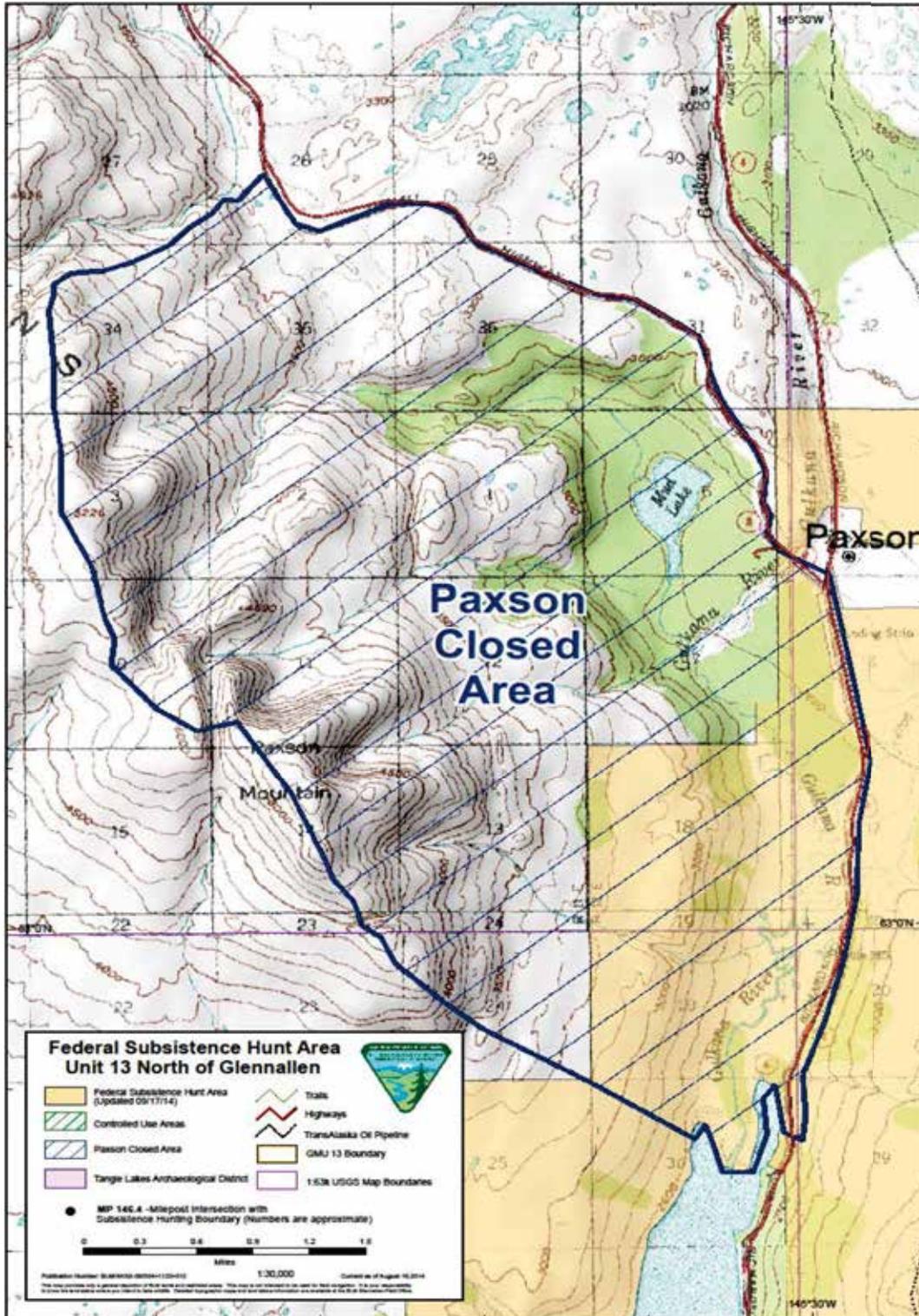
Regulatory History

The Paxson Closed Area in Unit 13B (**Map 1**) was established by the State in 1958 to provide a viewing area adjacent to the junction of the Richardson and Denali Highways (ADF&G 2015). During 1991/1992 and 1992/1993 regulatory years, Federal public lands within the Paxson Closed Area were closed to the hunting of big game under the Special Provisions section for Unit 13 in the Federal Subsistence Management Regulations for Federal public lands in Alaska. However, the hunting for small game was still allowed in the Paxson Closed Area. In 1992, the Federal Subsistence Board (Board) closed the Paxson Closed Area in Unit 13B to the taking of big game (57 Fed. Reg. 181. 43085 (C) [September 17, 1992] Proposed Rule).

However, in the Final Rule (58 Fed. Reg. 103. 31252-31295 [June 1, 1993]) references to several management areas or controlled use areas, including the Paxson Closed Area, that were identified in the 1992-1993 Subpart D of the Federal Subsistence Regulations were removed. This change coincided with the major conveyances/selections of BLM lands in Unit 13. Through Title IX of the Alaska National Interest Lands Conservation Act (ANILCA), the State of Alaska was allowed to overselect (by 25%) lands it wanted conveyed from the Federal Government. Once the State's selections have been established, prioritized, and finalized, any remaining overselected lands are returned to the BLM management authority. The State top filed (refers to the case where lands are dual selected {e.g Native and State} – the Native selection is attached to the land and the State selection would be over the top of that selection, thus *top filed*) the Federal public lands within the Paxson Closed Area in 1993 and 1994 and BLM made a “no effect” finding in 1994, 1995, and 2008. In June 2014, the Glennallen Field Office of BLM became aware of the unencumbered Federal public lands within the Paxson Closed Area and they were subsequently removed from State selection. As a result, Federal public lands in the Paxson Closed Area were determined to be opened to the taking of big game by Federally qualified subsistence users under Federal subsistence regulations.

Current Events

BLM has been working to convey selected lands throughout the State. In August 2014, it was determined that approximately 30,000 acres of BLM-managed lands near Paxson were not encumbered with selections from the State or Native-Select and thus met the Alaska National Interest Lands Conservation Act definition of public lands. Approximately 1,500 acres fell within the State's Paxson Closed Area. Consequently, once the land within the Paxson Closed Area returned to BLM control, it was open hunting of big game by default. In the absence of a closure enacted pursuant to the Federal Subsistence Board's *Policy on Closures to Hunting, Trapping and Fishing on Federal Public Lands and Waters in Alaska* (adopted Aug. 29, 2007), Federal public lands are open for hunting to both Federally qualified and non-Federally qualified users where



Map 1. Location of Federal public lands (Federal Subsistence hunt Area) within the Paxson Closed Area (BLM 2014).

Federal and State hunting regulations are in place. Thus, the Paxson Closed Area became open to both State and Federal users.

Biological Background

Big game as defined in the Federal Subsistence Regulations includes black bear, brown bear, bison, caribou, Sitka black –tailed deer, elk, mountain goat, moose, muskox, Dall sheep, wolf, and wolverine (§__25(a)). Currently there are open seasons on black bear, brown bear, caribou, goat, moose, sheep, wolf and wolverine on Federal public lands in Unit 13. Mountain goats and Dall sheep do not occur in the Paxson Closed Area so will not be considered in this analysis. Although wolverines occur in the Paxson Closed Area within Unit 13B, there is only limited density information in the moderate to high elevation areas for Units 13A and 13D and harvest information is only available unit-wide for Unit 13. Thus the available data may not be applicable to the forested habitats at lower elevations. Most of the wolverine harvest in Unit 13B, which averages about 12 per year, occurs north of Denali Highway outside of Paxson Closed Area (Robbins 2015, pers. comm.) Therefore, wolverine will not be considered further in this analysis.

Caribou

The Nelchina Caribou Herd (NCH) population has fluctuated widely since the 1940s. The population was estimated to be between 5,000 –15,000 in the 1940s, 70,000 in the mid-1960s, 7,000–10,000 in 1972, and 50,000 in 1995.

State management goals and objectives since the late 1990s for NCH are as follows (Schwanke 2011):

- 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 3,000–6000 caribou.

From 2001 to 2010, fall population estimates for the NCH have remained relatively stable with an estimated herd size between 30,000-44,000 animals (**Table 2**). In June 2007, a post-calving census estimated the NCH to be approximately 32,569 caribou (ADF&G 2008). The population was estimated at 33,146 and 44,954 caribou in 2009 and 2010, respectively (ADF&G 2009, ADF&G 2010).

The productivity and recruitment for the NCH between 1985 and 1996 was high with an average of 52 calves:100 cows. The annual harvestable surplus of Nelchina caribou is dependent on productivity and survival of calves, which is determined from the June and October surveys conducted by ADF&G (ADF&G 2010). From 2001–2010 there was an average of 42 calves:100 cows, which is above State management goals (Toby and Kellyhouse 2007, ADF&G 2008, Schwanke 2011). During 2010, an average of 55 calves:100 cows were counted during the fall composition surveys (Schwanke 2011) .

Between 2001 and 2008, the bull:cow ratio was below the State management objective with an average of 32 bulls:100 cows. The lowest ratio of 23 bulls:100 cows was in 2006-2007. From 2008 to 2010, the average bull:cow ratio increased to 38 bulls:100 cows (**Table 2**).

Winter habitat for the NCH ranges from northern Unit 13 to Unit 20E. Winter range in 20E is generally considered high quality due to high lichen biomass as a result of old burns (>50 years) (Dale 2000, Joly et al. 2003). In 2004, a large proportion of NCH winter range in Unit 20E burned. Many caribou still winter in Unit 20E, although caribou now utilize adjacent unburned areas. Winter distribution for the NCH in 2006 extended into Unit 13E, across Units 13A and 13B, and northeast into Units 11, 12 and 20E (Tobey and Kelleyhouse 2007). In some years, a small number of caribou winter in Unit 13D and have been observed as far south as the Edgerton Highway. The eastern Talkeetna Mountains, from the Fog Lakes southeast to the Little Nelchina River, is the typical calving area for the NCH with the core calving area extending from the Little Nelchina River north to Kosina Creek (Tobey and Kelleyhouse 2007).

Moose

In the early 1900s moose densities in Unit 13 were low but increased gradually until peaking in the mid-1960s. The population then declined due to a combination of factors including overhunting, severe winters, and predation. The population reached a low in 1975 and then started to increase by 1978, reaching a second peak in 1987. From 1987-2001 the moose population declined by an estimated 47% (Tobey and Schwanke 2008, 2010).

State management goals and objectives for moose in Unit 13 are as follows (Tobey and Schwanke 2010):

- Increase the Unit 13 moose population to 20,000 to 30,000 moose with a minimum of:
 - 25–30 calves:100 cows.
 - 25 bulls:100 cows
 - 10 yearling bulls:100 cows
- Provide for an annual harvest of 1,200–2000 moose and a subsistence harvest of 300–600 moose per year.

Alaska Department of the Fish and Game (ADF&G) conducts fall counts to determine the sex and age composition and population trends in large count areas distributed throughout Unit 13. From 2001–2009 the number of moose observed in Unit 13 during the fall increased from 3466 in 2001 to 4,481 in 2008 (**Table 3**). Although the bull:cow and yearling bull:cow ratios increased with the population increases between 2001–2008, the calf:cow ratios were below the management objective.

Table 2. Nelchina caribou fall composition counts and estimated herd size, regulatory years 2001 – 2010 (Tobey and Kelleyhouse 2007, ADF&G 2008, Schwanke 2011, Robbins 2015, pers. comm.).

Regulatory Year	Total bulls: 100 cows	Calves: 100 cows	Calves (%)	Cows (%)	Total bulls (%)	Composition Sample size	Total Adults	Estimate of herd size	Post calving count ^a
2001-2002	37	40	22	57	21	3,949	26,159	33,745	35,106
2002-2003	31	48	27	56	17	1,710	25,161	34,380	35,939
2003-2004	31	35	21	60	19	3,140	23,786	30,141	31,114
2004-2005	31	45	26	57	17	1,640	27,299	36,677	38,961
2005-2006	36	41	23	57	20	3,263	28,071	36,428	36,993
2006-2007	24 ^b	48 ^b	25	61	14	3,300	NA	34,699 ^b	N/A
2007-2008	34	35	21	59	20	3,027	26,124	32,569	33,744
2008-2009	39	40	22	56	22	3,378	NA	33,288 ^b	N/A
2009-2010	42	29	17	58	25	3,076	28,198	33,837	33,146
2010-2011	64	55	25	46	29	5,474	33,646	44,985	44,954
2011-2012	58	45	22	49	29	3907	32404	41394	
2012-2013	57	31	16	54	30	5249	43386	50646	

^a Spring census
^b Modeled estimate

Table 3. Unit 13 fall aerial moose composition counts (Tobey and Schwanke 2008, Tobey and Schwanke 2010, Robbins 2015, pers.comm.).

Year	Bulls:100 cows	Yearling bulls: 100 cows	Calves: 100 cows	% Calves	Adults observed	Total moose observed	Moose/hour	Density moose/mi ² (observed range)
2001	23	3	15	11	3,086	3,466	37	1.0 (0.6 – 1.4)
2002 ^a	24	6	22	15	2,918	3,428	36	1.0 (0.5 – 1.2)
2003	24	8	18	12	3,707	4,230	47	1.2 (0.5 – 1.7)
2004	28	6	22	15	3,215	3,768	40	1.1 (0.5 – 1.7)
2005	27	7	18	13	3,500	4,009	45	1.1 (0.4 – 1.4)
2006	30	8	23	15	3,416	4,028	49	1.1 (0.5 – 1.5)
2007 ^b	32	10	22	14	3,875	4,517	40	1.3 (0.5 – 1.8)
2008 ^c	35	12	19	13	3,918	4,481	54	1.3 (0.5 - 1.9)
2009 ^b	34	9	23	15	4,315	5,046	50	1.7 (0.5-2.0)
2010	30	10	21	14	4558	5,313	53	1.5 (0.6-2.2 0)
2011	33	10	23	15	4777	5604	53	1.6 (0.5-2.2)
^a Two of eight count areas were not flown in 2002, therefore data was estimated for those areas								
^b One of eight count areas was not flown in 2007, therefore data was estimated								
^c (Schwanke 2009, pers. comm..)								

Moose are most abundant along the southern slopes of the Alaska Range and within the Alphabet Hills portion of Unit 13B (**Table 4**). Moose typically congregate in subalpine habitats during fall rutting and move down to lower elevations as the snow increases. Historically, moose numbers in Unit 13B tend to fluctuate more than in lower density areas (Tobey and Schwanke 2008). From 2001–2009, the bull:cow ratio was close to or exceeded management objectives, whereas the yearling:cow and calf:cow ratios were below management objectives. In 2009, the bull:cow and calf:cow ratios for Unit 13B met the management objectives but the yearling bull:cow ratio did not (**Table 4**) (Tobey and Schwanke 2010).

Winter distribution depends mainly on snow depth and to a lesser extent, wolf distribution (Tobey and Schwanke 2010). Severe winters with deep snow are known to cause winter mortality by increasing nutritional stress through restriction of movements. This prevents access to adequate and/or quality food (Coady 1974, Testa 2004, Bubenik 2007, Innes 2010), and increases the risk of predation, primarily by

Table 4. Unit 13B fall aerial moose composition counts (2001-2007) (Tobey 2002, Tobey 2004, Tobey and Kelleyhouse 2006, Tobey and Schwanke 2008, Tobey and Schwanke 2010, Robbins 2015, pers. comm.)

Year	Bulls:100 cows	Yearling bulls: 100 cows	Calves: 100 cows	% Calves	Total moose observed	Density moose/mi ²
2001	22	3	16	11	1,833	1.2
2003	22	6	17	12	1,943	1.3
2005	27	7	23	15	1,891	1.3
2007	35	12	20	13	2,265	1.5
2009	36	7	29	18	2,230	1.5
2011	36	10	25	15	2,677	1.8

wolves (Bishop and Rausch 1974, Peterson 1984). Snow depths greater than 35 inches represent a critical depth for adults (Coady 1974) with calves, older adults (≥ 8 yrs old), and adult males more susceptible to nutritional stress and death (Coady 1982).

In 2004–2005, despite the severe snowpack conditions compared to the previous 11 years (Testa 2004), moose numbers remained fairly stable in Unit 13B (Tobey and Schwanke 2008).

Brown and Black Bear

Information concerning the management of brown and black bears in Unit 13B is sparse, with most of the information coming from what is known unit wide. The State’s management objective is to have a population of 350 brown bears in Unit 13. Most of the information on population size, composition, reproductive and survival rates for brown bears in Unit 13 come from studies conducted between 1980-1988 (Schwanke 2011b). All the available population estimates are based on anecdotal information and/or extrapolation. The most recent brown bear population estimate, based on density estimates from studies conducted in the Upper Susitna River from 1979-1987 (Ballard et al. 1982, Miller 1987, 1988) was 1,456 in 1997 (Miller 1997).

From 2005 to 2009, 120 brown bears per year were harvested by residents in Unit 13B with an average of 140 bears harvested per year unit wide (Schwanke 2011b). Although the first Federal subsistence season for brown bears in Unit 13 was established in 1999 (FWS 1999) there is no harvest data available for brown bears taken on Federal public lands in Unit 13B.

Black bears in Unit 13 typically inhabit forested areas during the winter and summer and move into the shrub zones to feed on berries in the fall and occasionally during the spring (Miller 1987). In 1985, based on a study conducted in the Upper Susitna River, there were an estimated 90 black bears/1,000 km² (Robbins 2011). No population estimates were made for Unit 13 because the area studied by Miller (1987) was considered marginal habitat compared to more favorable areas of Unit 13 (Robbins 2011). From 2005 to 2009, 17 black bears per year were harvested in Unit 13B and an average 145 bears/yr. were harvested unit wide (Robbins 2011). Due primarily to the status of the Paxson Closed Area, there is no data available for black bear harvest by Federally qualified subsistence users on Federal public lands in Unit 13B.

Wolf

Wolf populations in Unit 13 have fluctuated since the 1930s due to prey densities, hunting and trapping, and predator control efforts by the U.S. Fish and Wildlife Service between 1948 and 1953 and ADF&G since 2000 (Skoog 1968, Ballard et al. 1987). Population size and trends are monitored through information obtained from a variety of sources including trapper surveys, sightings from Federal and State employees, and the public. This information is combined with the sealing data to develop pre-harvest (fall) and post-harvest (spring) population estimates for Units 13A, 13B, 13C and a portion of 13E (Schwanke 2102).

State management goals and objectives for wolves are as follows (Schwanke 2012):

- Determine wolf population estimates yearly
- Achieve and maintain a post-hunting and trapping season population of 135-163 wolves (3.2-3.9 wolves/1,000 km²) in the available habitat unit wide.

The spring wolf population in Unit 13 was approximately 230 wolves between 2000 and 2005 and within the population objective between 2006–2008 and 2010 (**Table 5**, Schwanke 2012). In 2010-2011 the spring population estimate for Unit 13B was 29 (7.3/1,000 km²). The average spring density was 3.6/1,000 km² for the entire unit from 2010-2011. Information on the distribution and movements of radio-collared wolves has shown that immigration into Unit 13 from the Kenai Peninsula, Denali National Park, Unit 12, and Unit 20 is relatively common (Schwanke 2012). Approximately 80% of wolf mortality in Unit 13 is due to human harvest, 11% to intraspecific strife, and 9% to accidents, injuries, starvation, and drowning (Ballard 1987).

Harvest History

Although there has been no *legal* harvest of big game species in the Paxson Closed Area within Unit 13B since 1992, hunting has occurred in Unit 13B outside of the closed area. (**Table 6, Table 7, Table 8, Table 9**). It is not anticipated that the harvest of big game species on Federal public lands within the Paxson Closed Area would negatively impact populations of big game species as the area in question is only 1,500 acres.

Table 5. Wolf spring and fall population estimates in Unit 13 from 2006-2010 (Schwanke 2012, Robbins 2015, pers. comm.).

Regulatory Year	Fall ^a		Spring ^b		Packs
	Pop	Range	Pop	Range	
2006-2007	280	(265–295)	160	(145–175)	54
2007-2008	254	(240–270)	153	(145–175)	46
2008-2009	273	(260–280)	144	(135–160)	49
2009-2010	272	(260–280)	180	(165–190)	54
2010-2011	314	(290–315)	146	(145-175)	55
2011-2012	204		104		
2012-2013	266		191		
2013–2014	320				

^a Fall estimate – Pre-trapping season population

^b Spring estimate – Post-trapping season population

Table 6. Number of Federal harvest permits, sex composition, and caribou harvest in Unit 13B between 2003-2013 (OSM 2015, Robbins 2015, pers. comm.).

Year	Number of Permits Issued	Number of Permits Hunted	Caribou Harvest	Bulls	Cows	Unknown
2003/04	152	152	79	79	0	0
2004/05	1095	1,091	298	219	78	1
2005/06	1160	1,160	582	344	231	7
2006/07	1160	1,160	550	303	233	14
2007/08	24893	893	357	235	116	6
2008/09	904	904	257	169	84	4
2009/10	1072	1,066	338	332	6	0
2010/11	1079	1,073	411	293	114	4
2011/12	699	699	86	54	31	0
2012/13	769	769	361	226	132	2
2013/14	641	640	147	112	35	0
Total	9624	9,607	3,466	2,366	1,060	38
Mean	875	873	315	215	96	3

Table 7. State and Federal caribou harvest in Unit 13B.

Year	State Harvest	Federal Harvest
2009/10	546	338
2010/11	1,183	411
2011/2012	988	86
2012-2013	1,714	361
2013-2014	775	147

Table 8. Harvest quota, harvest estimate, and estimates of the fall population for the Nelchina Caribou Herd in Unit 13 (Robbins 2015, pers. comm.)

Year	Harvest Quota	Reported Harvest	Fall Population ^a
2010	2300	2439	48,000
2011	2400	2515	41,000
2012	5500	4429	50,000
2013	2500	2640	37,000
2014	3000	2818 ^b	

^a General estimate for comparison^b Preliminary results hunt closed March 31**Table 9.** Unit 13B big game harvest 2009-2013 (OSM 2015, Robbins 2015, pers. comm.)

Year	Moose	Brown Bear	Black Bear	Wolf	Wolverine
2009/10	244	26	5	17	12
2010/11	304	18	3	14	11
2011/12	267	18	7	20	8
2012/13	201	20	4	10	12
2013/14	201	22	7	24	16
Total	1217	104	26	85	59
Mean	243	21	5	17	12

Effects of the Proposal

If Federal public lands within the Paxson Closed Area remains open to Federally qualified subsistence users, there is the potential of increased conflict with others that use the area for recreational purposes such as viewing moose, caribou, and brown bears, which regularly access the small section of the Gulkana River in search of salmon. Local community members stated that the area provides a critical sanctuary for moose during the winter, and that there could be potential disruption to the caribou herd migration if it remains open to Federally qualified subsistence users. In addition, there may be safety concerns and the potential loss of tourism. Safety concerns may be somewhat diminished since the hunting of small game has occurred in the Paxson Closed Area since it was established.

The Southcentral Subsistence Regional Advisory Council expressed support at its winter 2015 meeting (SCRAC 2015) for keeping Federal public lands open to subsistence hunting of big game. Currently, there are no conservation concerns for any of the big game species in the area that would warrant a closure of Federal public lands or waters. Opening these lands to Federally qualified subsistence users does not prevent non-Federally qualified users from accessing this area.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP16-16

Justification

Section 816 of ANILCA provides that an area may be closed “for reasons of public safety, administration, or to assure the continued viability of a particular fish or wildlife population.” Such closure authority has been delegated to the Federal Subsistence Board at §__ .10(d)(4)(vii). None of the three reasons for enacted a closure are present. Populations of big game species that occur within Unit 13B are stable or increasing and thus there are no conservation concerns. Current levels of harvest have not had a negative impact on big game species in Unit 13B. Sustainable harvest levels for big game species are evaluated by ADF&G, with regulations and permit numbers adjusted as needed. The Paxson Closed Area is approximately 29,000 acres and the size of the area open to Federally qualified subsistence users is a very small portion, approximately 1,500 acres, and thus the impacts to viewing opportunities will be minimal.

Moreover, opposition is supported by the Federal Subsistence Board’s *Policy on Closures to Hunting, Trapping and Fishing on Federal Public Lands and Waters in Alaska*. There, the Board established a hierarchy that would be followed in closures: (1) closure first to non-Federally qualified users, (2) allocation among Federally qualified subsistence users under Section 804, and (3) complete closure. This proposal skips the first step and seeks closure to Federally qualified subsistence users without first closing to non-Federally qualified users. Federally qualified subsistence users should be allowed the opportunity to harvest big game species on Federal public lands within Paxson Closed Area in Unit 13B.

LITERATURE CITED

- ADF&G 2015. Map of the Paxson Closed Area in Unit 13B, Alaska.
<http://www.adfg.alaska.gov/static/hunting/maps/specialareas/pdf/CL_paxson.pdf>. Retrieved February 24, 2015.
- ADF&G 2009. Caribou Annual Survey and Inventory. Federal Aid Annual Performance Report Grant W-33-7, Anchorage, AK.
- ADF&G 2010. Game Mangement Unit 13: Nelchina Caribou Herd Report. Alaska Department of Fish and Game. Glennallen, AK. 6pages.
- ADF&G 2008. Caribou Annual Survey and Inventory. Federal Aid Annual Performance Report Grant W-33-6, Anchorage, AK.
- Ballard, W.B., S.D. Miller, and T.H. Spraker. 1982. Home range, daily movements, and reproductive biology of brown bear in southcentral Alaska. *Canadian Field Naturalist* 96:1-5.
- Ballard, W.B., J.S. Whitman, and C.L. Gardner. 1987. Ecology of an exploited wolf population in southcentral Alaska. *Wildlife Monographs* 98: 54 pp.
- Bishop, R.H. and R.A. Rausch, 1974. Moose population fluctuations in Alaska, 1950-1972. *Le Naturaliste Canadien*. 101:559-593.
- BLM 2014. Map of the Federal Subsistence Hunt Area Unit 13 North of Glennallen, Alaska. Publication Number: BLM/AK/GI-08/004+1120+012. August 18, 2014. BLM Glennallen Field Office, BLM, Glennallen, AK.
- Bubenik, Anthony B. 2007. Behavior. Pages 173-222 in A.W. Franzmann, C.C. Schwartz, R.E. McCabe, editors. *Ecology and management of the North American moose*. 2nd ed. University press of Colorado, Boulder, CO. 173-222.
- Coady, J.W., 1982. Moose. Pages 902-922 in J.A. Chapman and G.A. Feldhamer, editors. *Wild Mammals of North America*. Johns Hopkins University press, Baltimore, MD.
- Coady J. W. 1974. Influence of snow on the behavior of moose. *Naturaliste Canadien* 101:417-436.
- Dale, B.W. 2000. The Influence of Seasonal Spatial Distribution on Growth and Age of First Reproduction of Nelchina Caribou with Comparisons to the Mentasta Herd. Research Performance Report. 1 July 1999 – 30 June 2000. Federal Aid Annual Performance Report Grant W-27-3, Study 3.44. Anchorage, AK.
- FWS 1999. Staff Analysis P99-021. Pages 39–46 in Federal Subsistence Board Meeting Materials
- Innes, R. J. 2010. *Alces americanus*. in Fire Effects Information System, (online) U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). <http://www.fs.fed.us/database/feis> retrieved March 11, 2015.
- Joly, K., B.W. Dale, W.B. Collins, and L.G. Adams. 2003. Winter habitat use by female caribou in relation to wildland fires in interior Alaska. *Canadian Journal of Zoology* 81:1192-1201.

Miller, S.D. 1987. Big Game Studies. Vol VI. Final 1986 Report. Susitna–Hydroelectric Project. ADF&G, Juneau 276 pp.

Miller, S.D. 1988. Impacts of increased hunting pressure on the density, structure, and dynamics of brown bear populations in Alaska's Management Unit 13. Alaska Department of the Fish and Game. Federal Aid in Wildlife Restoration Progress Report. Project W-22-6. Job IVG-4.21. ADF&G, Juneau, AK 149 pp.

Miller, S.D. 1997. Impacts of heavy hunting pressure on the density and demographics of brown bear population in southcentral Alaska. Alaska Department of Fish and Game, Federal Aid in Wildlife Restoration Research Final Report. Projects W-24-2, W-24-3, W-24-3 Study 4.26. ADF&G, Juneau, AK. 96 pp.

OSM. 2015. Harvest database. Office of Subsistence Management, USFWS. Anchorage, AK

Peterson, R.O. J.D. Woolington, T. N. Bailey. 1984. Wolves of the Kenai Peninsula, Alaska. Wildlife Monographs. No 88. The Wildlife Society, Washington, D.C. 52pp.

Robbins. F.W. 2011. Unit 13 black bear management report. Pages 167-173 in P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2008 –30 June 2010. Project 17.0. ADF&G. Juneau, AK.

Robbins, F.W. 2015. Wildlife biologist. Personal communication. Phone, email. ADF&G.

Schwanke, R.A.. 2011a. Unit 13 and 14B caribou management report. Pages 90-108 in P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2008 –30 June 2010. ADF&G. Juneau, AK.

Schwanke, R.A.. 2011b. Unit 13 brown bear management report. Pages 141-150 in P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2008 –30 June 2010. ADF&G. Juneau, AK.

Schwanke, R.A. 2012. Unit 13 wolf management report. Pages 92-100 in P. Harper, editor. Wolf management report of survey and inventory activities 1 July 2008–30 June 2011. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2012-4. ADF&G, Juneau, AK.

SCRAC. 2015. Transcripts of the Southcentral Subsistence regional Advisory Council proceedings, February 19, 2015 in Anchorage, Alaska. Office of Subsistence Management, FWS, Anchorage, AK.

Skoog, R.O. 1968. Ecology of Caribou (*Rangifer tarandus ranti*) in Alaska. Ph.D. Thesis. University of California, Berkeley. 699pp.

Testa, J.W. 2004. Population dynamics and life history trade-offs of moose (*Alces alces*) in Southcentral Alaska. Ecology 85(5):1439-1452.

Tobey, R.W. 2002. Unit 13 moose management report. Pages 140 – 153 in C. Healy, editor. Moose management report of survey and inventory activities 1 July 1999 – 30 June 2001. Alaska Department of Fish and Game. Project 1.0. Juneau, Alaska.

Tobey, R. W. 2004. Unit 13 moose management report. Pages 147-160 in C. Brown, editor. Moose management report of survey and inventory activities 1 July 2001-30 June 2003. Alaska Department of Fish and Game. Project 1.0. Juneau, Alaska.

Tobey, R.W. and R.A. Kelleyhouse. 2006. Unit 13 moose management report. Pages 144-158 *in* P. Harper, editor. Moose management report of survey and inventory activities 1 July 2003 – 30 June 2005. Alaska Department of Fish and Game. Project 1.0. Juneau, Alaska.

Tobey B. and R. Kelleyhouse. 2007. Units 13 and 14B caribou management report. Pages 83-99 *in* P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2004-30 June 2006. Alaska Department of Fish and Game. Juneau, AK.

Tobey, R. W. and R.A. Schwanke. 2008. Unit 13 moose management report. Pages 151-164 *in* P. Harper, editor. Moose management report of survey and inventory activities 1 July 2005-30 June 2007. ADF&G. Project 1.0. Juneau, AK.

Tobey, R. W. and R.A. Schwanke. 2010. Unit 13 moose management report. Pages 150-164 *in* P. Harper, editor. Moose management report of survey and inventory activities 1 July 2007-30 June 2009. ADF&G. Project 1.0. Juneau, AK.

WRITTEN PUBLIC COMMENTS

PAGE 1

To: Office of Subsistence Management
In regards to Wildlife Proposal WP16-16
Paxson Closed Area.
Comments:

My name is Bill Nowotny Live mile 150
(Sourdough) I AM NOT in favor of closing
THE PAXSON moose, caribou, Bear Bill Nowotny
5-6-2015

My Name is Jim Murray I live at Meiers Lk
MI 170 Richardson Hwy There is No biological
Reason to close this Area To Subsistence
Hunting

Jim Murray 5-6-2015

Please leave this hunting area open for Federal
hunting. There are very few areas for us to hunt as
it is. Thank you for your help and consideration
in this matter.

Shane Huckabay 5-7-2015

leave it open ~~to the~~
Patty Denton - I live at Sourdough, AK,
We want the WP16-16 left open
Patty Denton 5-6-15

I Total Denton feel that there is no reason for
the Paxson closed Area ~~open~~ Federal hunting could be
left open
D. Denton 5-6-15

There's not many places to hunt anymore ^{PAGE 2}
since lined in this area for over 50 years.
And have seen things get worse every
year. Leave this area open.

P.O. Box 122
Eliem Allen, AK 99588 H.A. (Tommy) Unsicker

Request that this area be left open as it's getting more
difficult to obtain hunting areas

Dale Uneda
P.O. Box 616
Glennallen, AK 99588

Dale Uneda

JAMES COOPER James Cooper
P.O. Box 257

Glennallen, AK 99588

Petition for current Federal hunt areas
to remain ^{open} on Richardson Hwy
mile points 175.1 to 183

Jeremiah Jones
Keep area open

Jeremiah Jones

Rocky Oliver Rocky Oliver
P.O. Box 803 Glennallen
Keep area open

Roman K. Foltz
P.O. Box 375
Keep open

Ahtna Tene Nene' Customary & Traditional Use Committee Comments

WP16-16 Closure Of The Paxson Hunting Areas

Comments:

We oppose WP 16-16 which proposes the closure of the Paxson Area which is unencumbered federal public lands. Federally qualified subsistence users will not have an opportunity to hunt for large and small game near or off the highway system within the Paxson hunting areas.

Closure of this significant customary and traditionally use area for hunting, gathering and fishing will disenfranchise federally qualified subsistence users. Federally qualified subsistence users will have to hunt elsewhere on federal public lands, other federal public lands are largely inaccessible.

Hunting areas on Federal public lands in Unit 13 is minimal. Closing this additional acreage in which to hunt for large and small game would be disadvantageous to the local federally qualified subsistence users. Paxson areas are the ideal place to hunt, fish and pick berries. Closure of the Paxson Areas will adversely affect hunters that combine hunting with other subsistence activities, such as picking berries or fishing.

Paxson Lake area, as described above, were/are Ahtna People's customary and traditionally use areas for hunting, gathering and other subsistence purposes. Ahtna people have used these areas for thousands of years, to hunt, fish and gather plants. Please refer to the report entitled, *Some Ethnographic and Historical Information on the Use of Large Land Mammals in the Copper Basin* by William E. Simeone: page 38, August 2006, it states, "in some areas places, such as Paxson Lake, Tanada Lake, or Tazlina Lake, caribou were stampeded into the water and speared from canoes". Other documentation, in this report by the late Ahtna Chief Ben Neeley, states that he and his family hunted up the Gulkana River and into the Tangle Lakes area: page 28, August 2006.

WP16–17 Executive Summary	
General Description	Proposal WP16–17 requests that the restriction prohibiting Federally qualified subsistence users from hunting caribou within the Trans-Alaska Oil Pipeline right-of-way in Unit 13 remainder be rescinded. <i>Submitted by the Southcentral Alaska Subsistence Regional Advisory Council.</i>
Proposed Regulation	<p>Unit 13 remainder – Caribou</p> <p><i>2 bulls by Federal registration permit only</i> <i>Aug. 1–Sept. 30</i></p> <p><i>You may not hunt with the Trans-Alaska oil Pipeline right-of-way. The right-of-way is the area occupied by the pipeline (buried or above ground) and the cleared area 25 feet on either side of the pipeline.</i> <i>Oct. 21–Mar. 31</i></p>
OSM Preliminary Conclusion	Support
Southcentral Regional Advisory Council Recommendation	
Eastern Interior Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	1 Support

**DRAFT STAFF ANALYSIS
WP16-17**

ISSUES

Proposal WP16-17, submitted by the Southcentral Alaska Subsistence Regional Advisory Council, requests that the restriction prohibiting Federally qualified subsistence users from hunting caribou within the Trans-Alaska Oil Pipeline right-of-way in Unit 13 remainder be rescinded.

DISCUSSION

The proponent states that the current restriction in Unit 13 remainder is an undue burden on Federally qualified subsistence users and is not related to any conservation concerns for the Nelchina Caribou Herd. The proponent also states that rural residents are subject to citations, while there are no restrictions to hunting within the pipeline corridor under current regulations.

Existing Federal Regulation

Unit 13 remainder – Caribou

2 bulls by Federal registration permit only

*Aug. 1–Sept. 30
Oct. 21–Mar. 31*

You may not hunt with the Trans-Alaska Oil Pipeline right-of-way. The right-of-way is the area occupied by the pipeline (buried or above ground) and the cleared area 25 feet on either side of the pipeline.

Proposed Federal Regulation

Unit 13 remainder – Caribou

2 bulls by Federal registration permit only

*Aug. 1–Sept. 30
Oct. 21–Mar. 31*

~~*You may not hunt with the Trans-Alaska oil Pipeline right-of-way. The right of way is the area occupied by the pipeline (buried or above ground) and the cleared area 25 feet on either side of the pipeline.*~~

Unit 13E: Residents of Units 11, 12 (along the Nabesna Road), 13, Chickaloon, McKinley Village, and the area along the Parks Highway between mileposts 216-239 (excluding the residents of Denali National Park Headquarters).

Regulatory History

The Nelchina Caribou Herd (NCH) is an important resource for many rural and non-rural users due to its proximity to Anchorage and Fairbanks and its distribution within Units 11, 12, 13, and 20E (Tobey 2003). A State Tier II system for NCH harvest was established in 1990 for Unit 13. A State Tier I permit was added for the 1996/97 and 1997/98 seasons to allow any Alaskan resident to harvest cows or young bulls, in order to reduce the herd to the management objective. In 1998, the Tier I hunt was closed, as the herd was brought within management objectives due to increased harvest and lower calf recruitment.

The two Federal registration hunts in Unit 13 are for residents of Units 11, 13, and residents along the Nabesna Road in Unit 12 and Delta Junction in Unit 20. In 1998 the Federal Subsistence Board (Board) adopted Proposal P98-036 to extend the winter caribou season from Jan. 5–Mar. 31 to Oct. 21–Mar. 31 (FWS 1998a). This gave Federally qualified subsistence users the same opportunity to harvest an animal as those hunting under the State regulations. In 1998, the Board adopted Proposal P98-034, which opened the Federal registration hunt to residents of Unit 12, Dot Lake, Healy Lake and Mentasta between November and April when the NCH migrate through the Tetlin National Wildlife Refuge (FWS 1998b).

In 2001, the Board adopted Proposal WP01-07, which changed the harvest limit of 2 caribou to 2 bulls by Federal registration permit only, for all of Unit 13 (FWS 2001).

In 2003, the Board adopted Proposal WP03-14, which changed the harvest limit for Unit 13A and 13B back to 2 caribou from 2 bulls, with the harvest of bulls being allowed only during the Aug. 10 – Sept. 30 season. For the Oct. 21 – Mar. 31 winter season, the BLM's Glennallen Field Office Manager was delegated authority to determine the sex of animals taken in consultation with the Alaska Department of Fish and Game (ADF&G) area biologist and the Chairs of the Eastern Interior Alaska and Southcentral Alaska Regional Subsistence Advisory Councils. For the remainder of Unit 13, the harvest limit remained 2 bulls for the Aug. 10 – Sept. 30 and Oct. 21 – Mar. 31 season (FWS 2003).

In 2005, the Board adopted Proposal WP05-08 for Unit 13A and 13B to allow the sex of caribou harvested to be determined for both seasons by the BLM Glennallen Field Office Manager in consultation with the ADF&G area biologist and Chairs of the Eastern Interior Alaska and Southcentral Alaska Regional Subsistence Advisory Councils. This was in effect for the entire season (Aug. 10 – Sept. 30 and Oct. 21 – Mar. 31), not just the winter season (FWS 2005).

Emergency Order 02-01-07 closed the remainder of the 2006/2007 State season for the NCH on February 4, 2007 due to high State hunter success in the State Tier II hunt. Likewise, Emergency Order 02-08-07 closed the 2007/2008 Tier II hunt on September 20, 2007 and was scheduled to

re-open on October 21, 2007. However concerns about unreported harvest in the State and Federal hunt resulted in a closure for the remainder of the season.

For the 2009/2010 season, the State Tier II hunt was eliminated. Two hunts were added: a Tier I hunt and a Community Harvest hunt for residents of Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina, and Copper Center. The harvest limit for each was one caribou (sex to be announced annually) with season dates of Aug. 10 – Sept. 20 and Oct. 21 – Mar. 31 with a harvest quota of 300 caribou. A Federally qualified subsistence user could opt into the State community harvest system or use a State registration permit to harvest one caribou and then get a Federal permit to harvest an additional caribou since the Federal harvest limit was two caribou.

In July 2010, the Alaska Superior Court found that elimination of the Tier II hunt was arbitrary and unreasonable (ADF&G 2010a). In response, the Board of Game held an emergency teleconference in July 2010, and opened a Tier II hunt from Oct. 21 – Mar. 31, maintained the existing Tier I season, awarded up to 500 additional Tier I permits (ADF&G 2010a).

Emergency Order 04-1-10 closed the remainder of the winter Nelchina Tier II season due to harvest reports indicating that approximately 1,404 bulls and 547 cows were harvested and the unreported harvest was expected to raise the total harvest above the harvest objective (ADF&G 2010b, FWS 2102).

In 2012, the Board adopted Proposal WP12-25, which added an additional 9 days to the beginning of the fall caribou season to provide more opportunity for Federally qualified subsistence users. The season was extended from Aug. 10–Sept. 30 to Aug. 1 –Sept. 30 (FWS 2012).

Biological Background

The NCH calving occurs in the eastern Talkeetna Mountains from the Little Nelchina River north to Fog Lakes, with the core calving area from the Little Nelchina River to Kosina Creek. Core calving areas are also used during post calving and early summer (Schwanke 2011). The NCH disperses during the summer and early fall. Their fall distribution can extend from the Denali Highway near Butte Lake, across the Alphabet Hills and Lake Louise flats, and as far east as the Gulkana River (Schwanke 2011).

The NCH typically leaves Unit 13 in October for wintering areas in Units 11, 12, and 20E and typically does not return until April. Some caribou remain in the northern portion of Unit 13 and are an important food source for Federally qualified subsistence users during the winter season. Winter range in Unit 20E is generally considered high quality due to high lichen biomass as a result of old burns (>50 years) (Dale 2000, Joly et al. 2003). In 2004, a large proportion of NCH winter range in Unit 20E burned. Many caribou (60-95%) still winter in Unit 20E, although caribou now utilize adjacent unburned areas (Schwanke 2011). In addition to winter habitat loss in Unit 20E, competition with the Fortymile herd, which also uses Unit 20E year round (Boertje and Gardner 1998) and is increasing, could impact the NCH. Winter distribution for the NCH in 2006 extended into Unit 13E, across 13A and 13B, and northeast into Units 11, 12 and 20E (Tobey and

Kelleyhouse 2007). In some years, a small number of caribou winter in Unit 13D and have been observed as far south as the Edgerton Highway.

The NCH population has fluctuated widely since the 1940s. The population was estimated to be between 5,000–15,000 in the 1940s, 70,000 in the mid-1960s, 7,000–10,000 in 1972, and 50,000 in 1995.

State management goals and objectives for the NCH are as follows (Schwanke 2011):

- 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 3,000–6000 caribou.

In June 2007, NCH was estimated to be approximately 32,569 caribou (ADF&G 2008) from a post-calving survey. The population was estimated at 33,000 and 44,000 caribou in 2009 and 2010 respectively (ADF&G 2009, ADF&G 2010c). From 2001 to 2013 fall population estimates for the NCH have remained relatively stable, with an estimated herd size between 30,000-50,000 animals (**Table 1**).

Historically, the productivity and recruitment of the NCH has been high, with an average of 52 calves:100 cows (1985-1996). The annual harvestable surplus of Nelchina caribou is dependent on productivity and survival of calves, which is determined from surveys in June and October conducted by ADF&G (ADF&G 2010c). From 2001–2010 there was an average of 42 calves:100 cows, which is above State management objectives (Toby and Kellyhouse 2007, ADF&G 2008, Schwanke 2011). During 2010, an average of 55 calves:100 cows were counted during the fall composition surveys (Schwanke 2011).

Between 2001 and 2008, the bull:cow ratio was below the State management objective with an average of 32 bulls:100 cows. The lowest bull:cow ratio was in 2006-2007 with 23 bulls:100 cows. The average bull:cow ratio increased significantly from 38 bulls:100 cows from 2008 to 2010, to 80 bulls:100 cows from 2011–13 (**Table 1**). Relatively mild winters combined with fewer predators are factors that may have contributed to this increase (Robbins 2015, pers. comm.).

Table 1. Nelchina caribou fall composition counts and estimated herd size, regulatory years 2001 – 2010 (Tobey and Kelleyhouse 2007, ADF&G 2008, 2010c, Schwanke 2011, Robbins 2015, pers.comm.).

Regulatory Year	Total bulls: 100 cows	Calves: 100 cows	Calves (%)	Cows (%)	Total bulls (%)	Composition Sample size	Total Adults	Estimate of herd size	Post calving count ^a
2001-2002	37	40	22	57	21	3,949	26,159	33,745	35,106
2002-2003	31	48	27	56	17	1,710	25,161	34,380	35,939
2003-2004	31	35	21	60	19	3,140	23,786	30,141	31,114
2004-2005	31	45	26	57	17	1,640	27,299	36,677	38,961
2005-2006	36	41	23	57	20	3,263	28,071	36,428	36,993
2006-2007	24 ^b	48 ^b	25	61	14	3,300	NA	34,699 ^b	N/A
2007-2008	34	35	21	59	20	3,027	26,124	32,569	33,744
2008-2009	39	40	22	56	22	3,378	NA	33,288 ^b	N/A
2009-2010	42	29	17	58	25	3,076	28,198	33,837	33,146
2010-2011	64	55	25	46	29	5,474	33,646	44,985	44,954
2011-2012	58	45	22	49	29	3907	32,404	41,394	
2012-2013	57	31	16	54	30	5249	43,386	50,646	

^a Spring census^b Modeled estimate

Harvest History

The NCH continues to be a popular hunt for many users because of its easy accessibility and proximity to Fairbanks and Anchorage. The number of caribou harvested under the Federal Subsistence regulations in the 2013/2014 regulatory year (279) was below the long term average 410 per year (range 273-610) from 2003–2013 (**Table 2**).

Between 2004 and 2009, State hunts (TC566/RC566) were the primary source of harvest of the NCH and accounted for 75% of the overall harvest (**Table 3**). Federal registration hunts (FC1302; formerly RC513/514), administered by the BLM comprised 24% of the harvest from 2004 to 2009. From 2004 to 2013, harvest under a Federal registration permit has averaged 410 caribou annually (range 273 to 610) (**Table 2**).

Table 2. Number of Federal harvest permits, sex composition, and caribou harvest in Unit 13 between 2003-2013 (Bullock 2015, OSM 2015, Robbins 2015, pers.comm.).

Year	Number of Permits Issued	Number of Permits Hunted	Caribou Harvest	Bulls	Cows	Unknown
2003/04	2,574	1,240	322	317	2	3
2004/05	2,555	1,337	335	248	85	2
2005/06	2,557	1,499	610	365	238	7
2006/07	2,631	1,317	570	318	238	14
2007/08	2,403	1,094	385	259	120	6
2008/09	2,532	1,229	273	180	89	4
2009/10	2,576	1,339	349	342	7	0
2010/11	2,852	1,535	451	316	129	6
2011/12	2,980	1,425	395	281	113	0
2012/13	2,953	1,518	537	326	203	6
2013/14	2,789	1,305	279	210	68	0
Mean	2,673	1,349	410	287	117	4

Table 3. State and Federal caribou harvest in Unit 13.

Year	State Harvest	Federal Harvest
2009/10	754	349
2010/11	1,905	451
2011/2012	2,033	395
2012-2013	3,718	537
2013-2014	2,301	279

A majority of the caribou harvested in Unit 13 are taken under State regulations (**Table 3**), which is expected given that Federal lands account for only about 15% of the total lands in Unit 13. Much of the Federal harvest occurs when caribou cross along the Richardson Highway between Paxson and Sourdough during the fall migration. Additional caribou are available to Federally qualified subsistence users throughout the entire season in small areas of 13E near Broad Pass in Denali National Park and on BLM lands along the Denali Highway near Tangle Lakes (Tobey 2005). The mean yearly caribou harvest from 2010/2011 to 2014/2015 was 2,968 caribou, (**Table 4**) which is greater than the long-term annual average harvest of approximately 2,500 caribou between 1989 and 2010 (Schwanke 2011).

Most of the caribou harvest each year in Unit 13 occurs during the fall (August and September) versus the winter season. Federally qualified subsistence users currently have an additional 10 day season at the end of September and the harvest within the first week of August is minimal compared to the State harvest

during the same time period. Success in the winter season is largely dependent upon the number of caribou that remain within Unit 13 and the success of the fall hunt. Successful harvests in the fall make the winter season more susceptible to emergency closures when the harvest quota is reached before the end of the season on March 31. The winter hunt can be important to Federally qualified subsistence users because snow machines often make caribou more accessible during a period when there is typically less competition with other hunters (Tobey and Kelleyhouse 2007).

Table 4. Harvest quota, harvest estimate, and estimates of the fall population for the Nelchina Caribou Herd in Unit 13 (Robbins 2015, pers. comm.)

Year	Harvest Quota	Reported Harvest	Fall Population ^b
2010/2011	2,300	2,439	48,000
2011/2012	2,400	2,515	41,000
2012/2013	5,500	4,429	50,000
2013/2014	2,500	2,640	37,000
2014/2015	3,000	2,818 ^a	
Mean		2,968	

^a Preliminary results hunt closed March 31

^b General estimate for comparison

Effects of the Proposal

If adopted, this proposal would remove restrictions on Federally qualified subsistence users hunting under Federal regulations within the Trans-Alaska Oil Pipeline right-of-way and will give them the same opportunity as hunters hunting under State regulations. Currently there are no conservation concerns for the NCH population.

One of the justifications for maintaining a closure under the Board's closure policy is for public safety. While there is a concern that the use of high-powered rifles in the vicinity of the Trans-Alaska Oil Pipeline right-of-way, there is no reason to deny Federally qualified subsistence users hunting under State regulations the same opportunity as those hunters hunting under State regulations. There have been no incidents since 2001, when an individual shot a hole in the Trans-Alaska Oil Pipeline, spilling 285,000 gallons of crude oil and shutting down the pipeline for three days.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-16.

Justification

The NCH within Unit 13 is stable or increasing, and there are currently no conservation concerns for the herd. Current harvest levels are sustainable and there is no indication that removal of the pipeline right-of-way restrictions for Federally qualified subsistence users is going to substantially increase harvest. Removal of restrictions for hunting in the Trans-Alaska Pipeline right-of-way will allow the Federally

qualified subsistence users to use the Pipeline corridor without fear of incurring hunting violations, and will provide the same opportunity provided under State regulations.

LITERATURE CITED

ADF&G 2008. Caribou Annual Survey and Inventory. Federal Aid Annual Performance Report Grant W-33-6, Anchorage, AK.

ADF&G 2009. Caribou Annual Survey and Inventory. Federal Aid Annual Performance Report Grant W-33-7, Anchorage, AK.

ADF&G 2010a. Overview of Nelchina Caribou Herd Regulation and Harvest History. Special Publication No. BOG 2010-05.

ADF&G 2010b. Hunting and Trapping Emergency Order No. 04-1-10. ADF&G. Glennallen, AK.

ADF&G 2010c. Game Management Unit 13: Nelchina Caribou Herd Report. ADF&G. Glennallen, AK. 6pages.

Boertje, R. D. and C.L. Gardner. 1998. Reducing mortality on the Fortymile Caribou Herd, 1 July 1997–June 30 1998. ADF&G. Federal Aid in Wildlife Restoration Reseacxh Progress Report. Grant W-27-1. Study 3.43. Juneau, AK.

Bullock, S. 2015. BLM Agency Report for Unit 13 presented at the South Central Subsistence Regional Advisory Council February 18-19, 2015 Anchorage, AK. BLM, Glennallen Field Office, Glennallen, AK.

Dale, B.W. 2000. The Influence of Seasonal Spatial Distribution on Growth and Age of First Reproduction of Nelchina Caribou with Comparisons to the Mentasta Herd. Research Performance Report. 1 July 1999 – 30 June 2000. Federal Aid Annual Performance Report Grant W-27-3, Study 3.44. Anchorage, AK.

Joly, K., B.W. Dale, W.B. Collins, and L.G. Adams. 2003. Winter habitat use by female caribou in relation to wildland fires in interior Alaska. *Canadian Journal of Zoology* 81:1192-1201.

FWS. 1998a. Staff analysis P98-36. Pages 201–209 *in* Federal Subsistence Board Meeting Materials May 4–May 8, 1998. Office of Subsistence Management, FWS. Anchorage, AK. 1449 pp.

FWS. 1998. Staff analysis P998-34/35. Pages 180–200 *in* Federal Subsistence Board Meeting Materials May 4–May 8, 1998. Office of Subsistence Management, FWS. Anchorage, AK. 1449 pp.

FWS. 2001. Staff analysis P01-07. Pages 4–14 *in* Federal Subsistence Board Meeting Materials May 9–May 10, 2001. Office of Subsistence Management, FWS. Anchorage, AK. 610 pp.

FWS. 2003. Staff analysis WP03-026. Pages 147–166 *in* Federal Subsistence Board Meeting Materials May 20–May 22, 2003. Office of Subsistence Management, FWS. Anchorage, AK. 780 pp.

FWS. 2005. Staff analysis WP05-08. Pages 43–54 *in* Federal Subsistence Board Meeting Materials May 3–May 4, 2005. Office of Subsistence Management, FWS. Anchorage, AK. 368 pp.

FWS. 2012. Staff analysis WP12-25. Pages 589–603 *in* Federal Subsistence Board Meeting Materials April 6–April 10, 1992. Office of Subsistence Management, FWS. Anchorage, AK. 1020 pp.

OSM. 2015. Harvest database. Office of Subsistence Management, FWS. Anchorage, AK

Robbins, F.W. 2015. Wildlife biologist. Personal communication. Phone, email. ADF&G. Glennallen, AK.

Schwanke, R.A.. 2011. Unit 13 and 14B caribou management report. Pages 90-108 *in* P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2008 –30 June 2010. ADF&G. Juneau, AK.

Tobey, B. 2003. Units 13 and 14B caribou management report. Pages 108-124 *in* C. Healy, editor. Caribou management report of survey and inventory activities 1 July 2000 – 30 June 2002. ADF&G. Juneau, Alaska.

Tobey, B. 2005. Units and 14B caribou management report. Pages 89-104 *in* C. Brown, editor. Caribou management report of survey and inventory activities 1 July 2002-30 June 2004. ADF&G. Juneau, Alaska.

Tobey B. and R. Kelleyhouse. 2007. Units 13 and 14B caribou management report. Pages 83-99 *in* P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2004-30 June 2006. ADF&G. Juneau, AK

WRITTEN PUBLIC COMMENTS

Ahtna Tene Nene' Customary & Traditional Use Committee Comments

WP16-17 Trans-Alaska Oil Pipeline Right-of-way Is Prohibited

Comments:

We support Proposal WP 17-16 to remove regulatory language that hunting within the Alaska Oil Pipeline right-of-way is illegal.

As the proposal states, hunting in the Alaska Oil Pipeline right-of-way under federal regulation is more restrictive than state regulations. Federal regulations should allow more liberal hunting opportunities than state regulations. Hunting for moose under state regulations in the Alaska Oil Pipeline right-of-way is not regulated.

WP16–20 Executive Summary	
General Description	Proposal WP16–20 requests that the harvest limit for sheep in Unit 11 be modified from 1 sheep to 1 ram with a $\frac{3}{4}$ curl horn or larger. <i>Submitted by Eastern Interior Alaska Subsistence Regional Advisory Council.</i>
Proposed Regulation	<p>Unit 11— Sheep</p> <p><i>1 sheep-ram with $\frac{3}{4}$ curl horn or larger</i> <i>Aug. 10 – Sept. 20</i></p> <p><i>1 sheep by Federal registration permit only by persons 60 years of age or older. Ewes accompanied by lambs or lambs may not be taken.</i> <i>Aug. 1 – Oct. 20</i></p>
OSM Preliminary Conclusion	Support
Southcentral Regional Advisory Council Recommendation	
Eastern Interior Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	1 Oppose

**DRAFT STAFF ANALYSIS
WP16-20**

ISSUES

Proposal WP16-20, submitted by Eastern Interior Alaska Subsistence Regional Advisory Council (SCRAC), requests that the harvest limit for sheep in Unit 11 be modified from 1 sheep to 1 ram with a $\frac{3}{4}$ curl horn or larger.

DISCUSSION

The proponent states that the requested change is necessary to reduce hunting pressure on ewes and younger rams. The proponent feels that a conservative approach to sheep management is needed given recent declines in the sheep population, current low densities, and the relatively easy access from the road system in Unit 11. The proponent states that a harvest limit of 1 ram with $\frac{3}{4}$ curl or larger will still give Federally qualified subsistence users a meaningful priority over people hunting under State regulations; that this change would not pose an undue hardship on subsistence users; and would allow for the population to increase.

Existing Federal Regulation

Unit 11— Sheep

1 sheep *Aug. 10 – Sept. 20*

1 sheep by Federal registration permit only by persons 60 years of age or older. Ewes accompanied by lambs or lambs may not be taken. *Aug. 1 – Oct. 20*

Proposed Federal Regulation

Unit 11— Sheep

1 ~~sheep~~ ram with $\frac{3}{4}$ curl horn or larger *Aug. 10 – Sept. 20*

1 sheep by Federal registration permit only by persons 60 years of age or older. Ewes accompanied by lambs or lambs may not be taken. *Aug. 1 – Oct. 20*

Existing State Regulation*

Unit 11 - Sheep

*Residents and Nonresidents: One ram with full-curl
horn or larger.*

Aug. 10 – Sept. 20

Extent of Federal Public Lands

Federal public lands comprise approximately 88% of Unit 11 and consists of 84.5% National Park Service (NPS) managed lands, 3.3% U.S. Forest Service (USFS) managed lands, and 0.1% Bureau of Land Management (BLM) managed lands (See **Unit 11 Map**).

Customary and Traditional Use Determinations

In Unit 11, north of the Sanford River, residents of Unit 12 and the communities and areas of Chistochina, Chitina, Copper Center, Dot Lake, Gakona, Glennallen, Gulkana, Healy Lake, Kenny Lake, Mentasta Lake, Slana, McCarthy/South Wrangell/South Park, Tazlina, and Tonsina; also residents along the Nabesna Road — milepost 0–46; and residents along the McCarthy Road — milepost 0–62 have a customary and traditional use determination for sheep.

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

Under the guidelines of ANILCA, National Park Service regulations identify qualified local rural subsistence users in National Parks and Monuments by: 1) identifying resident zone communities which 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. In order to engage in subsistence in Wrangell St. Elias National Park, the National Park Service (WRST) requires that subsistence users either live within the park’s resident zone (36 CFR 13.430, 36 CFR 13.1902) or have a subsistence permit (36 CFR 13.440) issued by the park superintendent.

Regulatory History

In 1998, the Federal Subsistence Board (Board) created a late sheep season in Unit 11 for persons 60 years of age or older. This season was extended one month beyond the regular sheep season, when sheep are at lower elevations to allow the opportunity for those “elders who are still capable of hunting, but cannot climb high enough into the mountain to find sheep during the early season, to continue to hunt and pass on traditional knowledge about sheep hunting to younger family members” (FWS 1998).

Due to declining sheep numbers, the State bag limit for resident hunters in 2001/2002 was changed from one sheep to one ram, and then in 2003/2004 to one ram with $\frac{3}{4}$ curl or larger. In 2011/2012, the State bag limit for both residents and nonresidents was changed to one ram with a full curl or larger.

In 2004, Proposal WP04-24 requested that designated hunting be allowed for the late season elder hunt in Unit 11. This proposal was opposed by the Southcentral Alaska and Eastern Interior Alaska Subsistence Regional Advisory Councils and rejected by the Board (FSB 2004). During consideration of WP04-24, there was discussion during both Council meetings regarding the opportunity for youth to accompany elders on hunts, but it was realized that the proposal under consideration dealt only with designated hunting provisions and there was a lack of detail about the provisions for allowing youth to accompany elders during the late sheep season (FWS 2004).

The Cheesh'na Tribal Council submitted Proposal WP05-06 with the goal of allowing elders to resume their traditional practices of teaching their grandchildren how to hunt sheep. The proponent stated that the existing regulation "neglects one aspect of the traditional instructional process, that the young people should have the opportunity to take the animal, rather than simply observing their elders doing so." WP05-06 was adopted by the Board at its May 2005 meeting and established the current elder/minor hunt with the season of Sept. 21 – Oct. 20 (FWS 2005). Under the provisions of the elder/minor hunt, a federal registration permit is issued to a pair of federally qualified subsistence users consisting of a youth between 8 and 15 years of age and an elder who is 60 years of age or older, and either the elder or the youth may harvest the sheep.

In 2012, the Board adopted Proposal WP12-32 with modification to change the harvest season dates for the Unit 11 elder hunt and the elder/minor hunt from Sept. 20 – Oct. 20 to Aug. 1 – Oct. 20 and prohibiting the take of lambs and ewes accompanied by lambs (FWS 2012).

Biological Background

Dall's sheep occur in most of the high alpine and subalpine areas in the Wrangell Mountains, which cross the Alaska–Canada border. Sheep population characteristics, densities, and morphology vary widely between populations in Unit 11 (Schwanke 2008, 2011). For example, sheep densities and population estimates are typically greater in the northern versus the southern portion of the range. Since 1973, when specific count areas (CA) and survey methods were established, aerial surveys to determine age and sex composition and sheep population trends have been conducted in selected trend count areas over large sections of the Wrangell and Chugach Mountains (**Figure 1**) (Schwanke 2011).

Sheep composition counts for select years (1981–2013) from aerial surveys conducted by the Alaska Department of Fish and Game (ADF&G) and Wrangell-St. Elias National Park and Preserve (WRST) within Unit 11 are presented in (**Appendix 1**). During the late 1980s and 1990s, sheep populations declined over much of the southern area of the Wrangell Mountains which includes Mount Drum southeast to the Canadian border (Strickland et al. 1993, Schwanke 2011). Based on the survey count areas, the overall sheep population in WRST has declined approximately 50% since the 1990s (**Table 1**). However the sheep populations in Unit 11 have remained fairly stable, although sheep numbers in some portions of the unit continue to be well below those observed in the 1980s and early 1990s (Table 1, Appendix 1).

Recent surveys indicate that the number of rams per 100 ewes was greater than 40 in 10 of the 11 sheep survey units surveyed in 2013 and 2014 (Appendix 1) (Putera 2015).

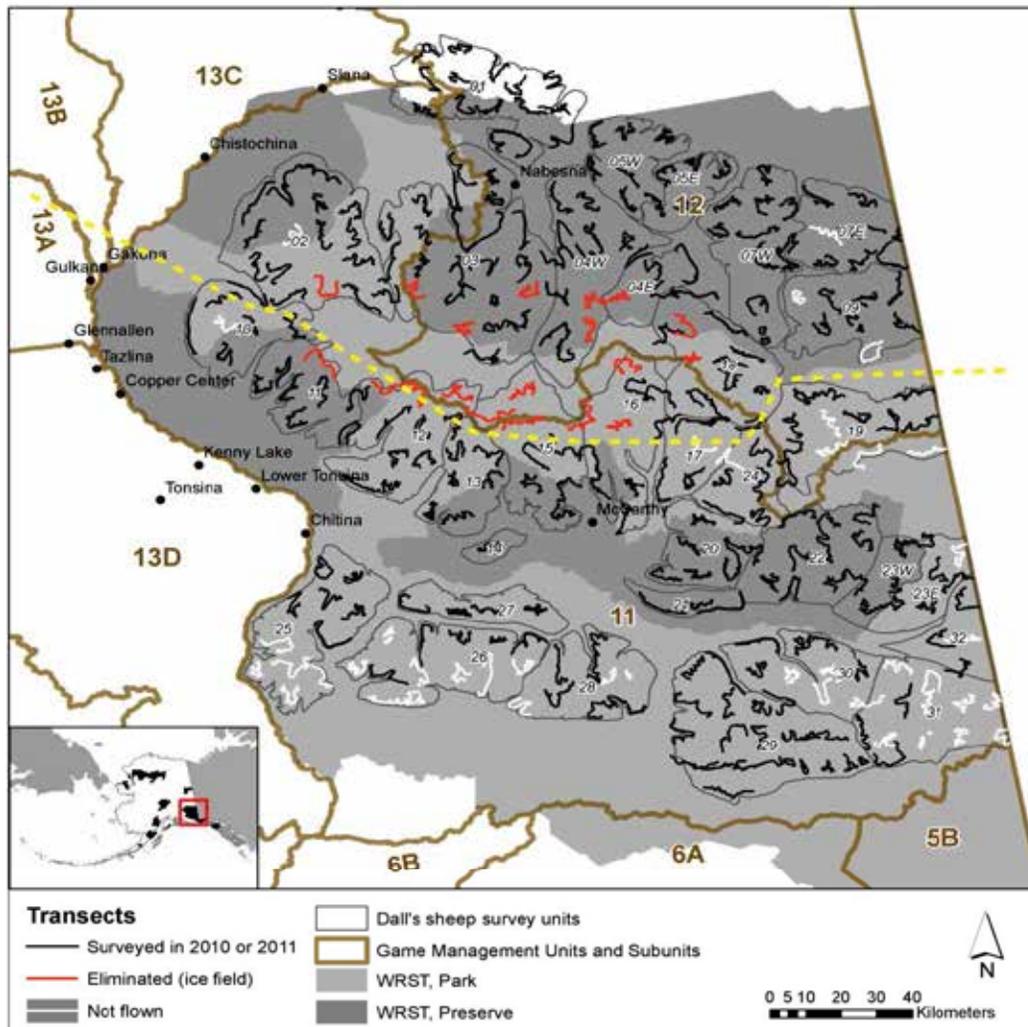


Figure 1. Game Management units, survey units (count areas) and transects used to survey Dall's sheep in Units 11 and 12 in Wrangell–St Elias National Park and Preserve in 2010 and 2011. (Putera 2013).

A brief summary by survey units and count areas are described below. CA3 West, in the north Wrangell Mountains within the Upper Copper River drainage, is located within WRST boundaries and is utilized by local subsistence hunters using four wheelers for access, making it a popular area to hunt. The sheep population in this area readily cross the Unit 11/12 boundary, thus making sheep trends in this area difficult to interpret. For example, the number of sheep observed dropped from 584 to 330 in CA3 between 2012 and 2103 although the number of rams: 100 ewes increased from 29 to 46 (**Appendix 1**) (Schwanke 2011, Putera 2015, pers. comm.). Ewes and rams increased from 2001–2012. Ewes and rams then decreased from 2012–2013, although the number of rams decreased only slightly (Schwanke 2011, Putera 2015, pers. comm.). The population was stable until 2012, although once again the results can be difficult to interpret

because the sheep move between Units 11 and 12. There are plans to survey the entire CA3 in 2015 (Putera 2105).

Table 1. Population estimates and composition of Dall’s sheep in Wrangell–St. Elias National Park and Preserve. Distance sampling methods were used for the 201-2011 population estimates (Strickland et al. 1993, Schmidt et al. 2011, Schmidt and Rattenbury 2013, Putera 2013).

Park Unit or Area (year)	Total Sheep (95% confidence intervals)	Ewe-like Sheep	Lambs	< Full-curl Rams	≥ Full-curl Rams	Lambs:100 Ewe-like Sheep	Rams:100 Ewe-like Sheep
WRST (1990)	25,972 (19,739–32,205)						
WRST (1991)	27,972 (21,524–34,420)						
WRST (1993)	17,455 (13,572–21338)						
WRST (2010-2011)	12,369 (10,680–14,600)	55%	18%	21%	6%	26%	46%
WRST South-Unit 11 (1993)	5,071 (4934–5208)						
WRST South-Unit 11 (2010-2011)	4,434 (3,682–5,470)	57%	18%	19%	6%	27%	38%
WRST North-Unit 12 (2010-2011)	7,980 (6,836–9,505)	55%	17%	22%	6%	26%	50%

Sheep populations in the southwest Wrangell Mountains include count areas CA10–14. Although the population composition in trend count areas CA 11 and CA 12 vary annually, the overall population numbers have remained at low but stable levels during the past 10 years (**Appendix 1**). In 2009, the number of full curl or larger rams or larger dropped to 2 (13%) and the number of lambs:100 ewes dropped

to a low of 20. However, sheep numbers have generally increased in both count areas during 2011 and 2013, particularly for rams in in both count areas and for ewes and lambs in CA12.

Unlike some of the other monitored populations in Unit 11 which peaked in the early 1980s, the Mount Drum population (CA 10) has remained fairly stable with only a moderate decrease in lambs and slight decrease in rams. The sheep population in the Crystalline Hills, an isolated mountain block located adjacent to the McCarthy Road (CA14), has remained at low but stable numbers (approximately 70 animals) since the mid-1990s. There was an significant increase of rams in 2013 compared to earlier surveys when very few rams were observed.

Sheep populations in the southeast Wrangell Mountains, which are count areas CA21, CA 22, and CA 23, have been relatively stable at about 200 sheep in each count area since the mid-1990s. Current survey information suggests that sheep the populations in the south Wrangell Mountains are stable. The lamb:ewe ratios appear to be healthy at 32–33 lambs:100 ewes and the ram:ewe ratios are low to moderate, ranging from 21-40 rams:100 ewes (Schwanke 2011).

While total sheep numbers for CA23 have remained fairly stable over time, differences in Federal and State regulations between the CA23West (Preserve) and CA23 East (Park) have resulted in changes in population dynamics between these two areas. The park area is managed under Federal subsistence regulations, and only residents of NPS resident zone communities and those with 13.440 permits can hunt in this area. Hunting in the preserve (CA 23 West) occurs under both Federal subsistence and State of Alaska general hunting regulations. Fixed wing aircraft may be used to access the preserve for the purpose of harvesting wildlife, but not the park. Off–road vehicles (ORV) may be used for access in both the Park and the Preserve; however, non-Federally qualified subsistence users are restricted to established ORV trails and must obtain a permit. In CA23 West, the ram to ewe ratios for 2001, 2003, and 2007 were consistently low to moderate, averaging 25 rams:100 ewes since 2001 whereas in CA 23 East, the average was 64 rams:100 ewes since 2001 (Schwanke 2011). The percentage of rams classified as full-curl or greater follow a similar pattern with 23% in the Preserve (CA 23 West) and 41% in the Park (CA23 East) for the same time period (Schwanke 2008). Although the variability of the lamb: ewe ratio was more variable in the Preserve (CA23 West) (10-33 lambs:100 ewes) compared to the Park (CA 23 East) (20-27 lambs:100 ewes) since 2001, the average number of lambs;100 ewes was similar between areas with an average of 19 lambs (CA23 West) and 21 (CA23 East).The National Park Service Central Alaska Network (CAKN) used distance sampling methods to survey Dall’s sheep in WRST in 2010 and 2011 (Schmidt et. al. 2011). Two hundred and forty three out of 303 randomly generated 20–km transects were flown. Population estimates generated from these surveys are presented in **Appendix 1**.

Harvest History

Since 1991/1992, sheep harvest in Unit 11 along with the number of hunters has declined steadily. The number of sheep taken by local residents of Units 11,12, and 13 averaged 26 between regulatory year 2005/2006 and regulatory year 2013/2014 (range 20-33) which is approximately 25% more than non-local residents which averaged 17 sheep (range 5-34) over the same time period (**Table2**). A large proportion of rams taken are already greater than $\frac{3}{4}$ curl (Robbins 2015, pers comm., Putera 2015, pers. comm.,

Schwanke 2011). Only 3 sheep have been taken in the Unit 11 Elder and Elder/Minor sheep hunts since 1998.

Table 2. Sheep harvest in Unit 11, 2005/2006 to 2013/2014 (ADF&G 2015, OSM 2015).

Regulatory Year	Rams	Ewes	Total ^a	Local Resident (%) ^b	Nonlocal Resident (%)	Nonresident (%)
2005/2006	78	5	83	32 (34)	34 (41)	17 (21)
2006/2007	62	1	63	33 (52)	18 (29)	12 (19)
2007/2008	48	5	53	26 (49)	18 (34)	9 (17)
2008/2009	54	4	58	28 (48)	25 (43)	5 (9)
2009/2010	62	2	64	27 (42)	23 (36)	14 (22)
2010/2011	48	1	49	23 (51)	15 (31)	10 (20)
2011/2012	48	0	48	28 (58)	10 (21)	10 (21)
2012/2013	33	1	34	20 (59)	7 (21)	7 (21)
2013/2014	45	0	45	23 (51)	5 (11)	17 (38)
2014/2015	46	1	47	23(49)	11(23)	13(28)
Mean	53	2	54	26 (48)	17 (31)	11 (21)

^a Total may exceed sum by residency because some hunters fail to report residency

^b Local means residents of Unit 11, 12 and 13.

Other Alternatives Considered

WRST and ADF&G are starting a study this fall to determine the effects of selective harvest on the ram population structure. The two year study will test the dominance-related mortality (DRM) hypothesis that the survival of young rams is compromised when few dominant rams are present. When most of the mature rams ($\geq 3/4$ curl) are removed by hunting, the juvenile rams participate in the rut to a greater extent. This leads to immature courtship behavior, including harassment of ewes, less tending of ewes, courting anestrus ewes, prolonging the mating season, and remaining with the ewes past the rut. The DRM hypothesis, this increased participation causes greater energy expenditure by both groups, depletes energy reserves, lowers pregnancy and parturition rates, reduces overwinter survival of ewes and could lead to

higher overwinter mortality among all cohorts of the population. WRST would like to replace the proponent's recommendation of a ram with a $\frac{3}{4}$ curl or larger with any ram until their cooperative study with ADF&G concludes in 2 years (Putera 2015, pers. comm.). Although this alternative (any ram) would be less restrictive than the proponent's request (ram with $\geq \frac{3}{4}$ curl) this alternative was not chosen at this time because the potential of disturbance to the ewes and younger rams would likely be greater if younger rams were taken which was contrary to the proponent's request. Although a large percentage of hunters typically select for the larger rams subsistence users may target smaller rams (Table 2, Schwanke 2011). The SCRAC will have time to discuss the merits of this alternative (any male) which would still be more restrictive than any sheep but less restrictive than the proposed change (ram with $\geq \frac{3}{4}$ curl) at their fall meeting.

Effects of the Proposal

If this proposal is adopted, the harvest limit for sheep will change from one sheep to 1 ram with $\frac{3}{4}$ curl or larger and be more restrictive for Federally qualified subsistence users. Federally qualified subsistence users would still have a meaningful priority (1 adult ram with $\frac{3}{4}$ curl or larger) over those hunting under State regulations (1 adult ram with full-curl or larger). This regulation change would help to reduce harvest pressure on ewes and younger rams in sheep populations within Unit 11 and may help aid in the recovery of the population by reducing the disturbance from hunting pressure to the ewes and younger rams.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-20

Justification

Since the early 1990s the sheep populations in Unit 11 have declined approximately 50%. Reducing the harvest limit from any sheep to 1 ram with a $\frac{3}{4}$ curl will help reduce hunting pressure on ewes and young rams while still retaining a meaningful harvest priority for Federally qualified subsistence users.

LITERATURE CITED

- ADF&G. 2015. Hunt harvest summary. Database accessed 8 August, 2014.
- FWS. 1998. Federal Subsistence Board Book, Region 2, Proposal 28. Office of Subsistence Management, FWS. Anchorage, AK.
- FSB. 2004. Transcripts of Federal Subsistence Board proceedings, May 21, 2004. Office of Subsistence Management, FWS. Anchorage, AK.
- FWS. 2004. Staff analysis WP04-24. Pages 161–166 *in* Federal Subsistence Board Meeting Materials May18–May 21, 2004. Office of Subsistence Management, FWS. Anchorage, AK. 1041 pp.
- FWS. 2005. Staff analysis WP05-06. Pages 17–28 *in* Federal Subsistence Board Meeting Materials May 3–May 4, 2005. Office of Subsistence Management, FWS. Anchorage, AK. 368 pp.

FWS. 2012. Staff analysis WP12-32. Pages 733–746 in Federal Subsistence Board Meeting Materials April 6–April 10, 1992. Office of Subsistence Management, FWS. Anchorage, AK. 1020 pp.

FWS. 2012. Staff analysis WP12-32. Office of Subsistence Management, FWS. Anchorage, AK

OSM. 2015. Alaska Federal Subsistence Program Harvest Database. Office of Subsistence Management. Anchorage, AK.

Putera, J. 2013. Spring 2013 Wildlife Report. Wrangell–St Elias National Park and Preserve, Copper Center, AK. 6 pp.

Putera, J. 2015. Wildlife Biologist. Personal communication. Email. Wrangell–St Elias National Park and Preserve, Copper Center, AK.

Putera, J., M. McCormick, D. Sarafin, and B. Cellarius. 2014. October 2014 Subsistence Report. Wrangell–St Elias National Park and Preserve, Copper Center, AK. 5 pp..

Robbins, F.W. 2015. Wildlife biologist. Personal communication. Phone, email. ADF&G. Glennallen, AK.

Schmidt, J.H., K.L. Rattenbury, J.P. Lawler, and M.C. Maccluskie. 2011. Using distance sampling and hierarchical models to improve estimates of Dall’s sheep abundance. *Journal of Wildlife Management*. 9999:1-11.

Schmidt, J.S., and K.L. Rattenbury. 2013. Reducing Effort While Improving Inference: Estimating Dall’s Sheep Abundance and Composition in Small Areas. *The Journal of Wildlife Management* 77:1048–1058.

Schwanke, R. A. 2008. Unit 11 Dall sheep management report. Pages 16–31 in P. Harper, editor. Dall sheep management report of survey and inventory activities 1 July 2004 – 30 June 2007. Alaska Department of Fish and Game. Project. 6.0. Juneau, Alaska.

Schwanke, R. A. 2011. Unit 11 Dall sheep management report. Pages 13–29 in P. Harper, editor. Dall sheep management report of survey and inventory activities 1 July 2007 – 30 June 2010. Alaska Department of Fish and Game. Project. 6.0. Juneau, Alaska.

Strickland, D.L., L.L. McDonald, J. Kern, and K. Jenkins. 1993. Estimation of Dall sheep numbers in the Wrangell–St Elias National Park, National Park Service, Alaska Region, Anchorage, AK. 30 pp.

WRITTEN PUBLIC COMMENTS

Ahtna Tene Nene' Customary & Traditional Use Committee Comments

WP16-20 Unit 11 Sheep Hunting Season

Comments:

We oppose WP16-20 Unit 11 Sheep proposal to change the harvest limit from 1 sheep to Rams with 3/4 curl horn or larger. According to an Overview given at Alaska Board of Game meeting in February 2015, sheep populations in Unit 11 are stable. A regulatory change of ram horn size at this time isn't necessary, changing Unit 11 sheep regulations will restrict Federally Qualified Subsistence Users to hunt only for larger rams. If the proponent has a concern about the population of sheep in Unit 11, a proposal to the Alaska Board of Game could address this issue. On average sport hunters harvest as many or more sheep than Federally Qualified Subsistence Users. Additionally, Federally Qualified Subsistence Users cannot fly into hunt on National Park Lands. Sports hunters are allowed to fly in to hunt on preserve lands. Sport hunters are the main concern, in most years, they harvest more sheep in Unit 11 than Federally Qualified Subsistence Users.

Appendix 1

Appendix 1. Unit 11 sheep composition counts from aerial surveys in count areas with Wrangell-St Elias National Park and Preserve (Schwanke 2008, 2011, Putera et al. 2014). See Figure 1 for location of count areas.

CA 2 – Mount Sanford						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
2002	13 (20)	49	105	38	59	207
2014	10 (17)	48	102	19	57	179

CA 3W – Upper Copper River						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
2001	75 (46)	89	314	24 (5)	52	502
2007	56 (50)	55	344	110 (19)	32	565
2012	9 (8)	106	400	69 (12)	29	584
2013	11(11)	85	207	27 (8)	46	330

CA 10 – Mount Drum						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
1980	4 (11)	31	107	59 (29)	33	201
1992	Unk	Unk	273	83 (17)		481
2001	11 (35)	20	65	13 (12)	48	109

CA 11 – Dadina River to Long Glacier						
Regulatory Year	Full-curl ^a (%) ^b	< Full-curl	Ewes and yearling rams ^c	Lambs (%) ^d	Rams:100 Ewes	Total Sheep Observed
1982	24 (33)	48	359	126 (23)	20	24 (33)
1994	18 (46)	21	197	85 (26)	20	18 (46)
2001	16 (37)	27	147	32 (10)	22	16 (37)
2005	10 (34)	19	127	36 (19)	23	10 (34)
2006	10 (45)	12	110	32 (20)	20	10 (45)
2007	11 (52)	10	118	37 (21)	18	11 (52)
2008	8 (33)	16	132	47 (23)	18	8 (33)
2009	2 (13)	13	114	20 (13)	13	2 (13)
2011	7 (17)	34	131	35 (17)	31	7 (17)
2013	5 (15)	28	75	16 (13)	44	5 (15)

CA 12 – Long Glacier to Kuskulana River						
Regulatory Year	Full-curl ^a (%) ^b	< Full-curl	Ewes and yearling rams ^c	Lambs (%) ^d	Rams:100 Ewes	Total Sheep Observed
1981	26 (33)	52	359	129 (232)	22	566
1993	36 (35)	67	426	39 (7)	24	568
2001	23 (30)	54	185	26 (9)	42	288
2005	19 (50)	19	105	28 (16)	36	171
2006	25 (63)	15	58	15 (13)	69	113
2007	27 (49)	28	112	41 (20)	49	208
2008	29 (53)	26	90	35 (19)	61	180

2009	25 (39)	39	81	20 (12)	79	165
2011	0 (0)	25	64	5 (5)	39	94
2013	19 (22)	69	144	26 (10)	61	258

CA 14 – Crystalline Hills						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
1981	2 (1)	5	142	60 (29)	5	209
1993	13 (10)	8	85	18 (14)	25	124
2001	1 (2)	10	43	6 (7)	26	91
2005	0 (0)	2	49	21 (29)	4	72
2013	9 (31)	20	136	45 (21)	21	210

CA 21 – Maccoll Ridge						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
1982	25 (51)	24	187	69 (23)	26	305
1994	8 (38)	13	161	22 (11)	13	204
2005	9 (31)	20	136	45 (21)	21	210
2010	4 (10)	35	80	43 (27)	49	162
2014	4 (13)	28	63	22 (19)	51	117

CA 22 – Canyon Creek to Barnard Glacier						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
1981	27 (49)	28	143	51 (20)	38	249
1993	20 (39)	31	190	63 (21)	27	304
2001	12 (22)	43	176	20 (8)	31	251
2005	16 (29)	39	139	44 (18)	40	238
2011	20 (28)	51	124	51 (21)	57	246
2013	15 (26)	43	142	34 (14)	41	234

CA 23 West – Barnard Glacier East to Park/Preserve Boundary						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
1982	20 (47)	23	194	66 (22)	22	303
2001	4 (24)	13	105	10 (8)	16	132
2003	7 (27)	19	78	12 (10)	33	116
2007	4 (18)	18	86	28 (21)	26	136
2013	3 (12)	22	34	2 (3)	74	61

CA 23 East – Park/Preserve Boundary East to Anderson Glacier						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
1982	26 (57)	20	26	7 (9)	177	79
2001	46 (52)	42	129	26 (11)	68	243
2003	25 (33)	50	117	25 (12)	64	217
2007	23 (37)	39	103	22 (12)	60	187
2013	11 (19)	46	112	20 (11)	51	189

CA 25 – Between Chitina and Hanagita Rivers						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
1983	-	- ^e	25	8 (20)	32	41
2014	2 (15)	11	23	4 (10)	57	40

CA 27 – Between Copper, Chitina, Tebay, and Bremner Rivers						
Regulatory Year	Full-curl^a (%)^b	< Full-curl	Ewes and yearling rams^c	Lambs (%)^d	Rams:100 Ewes	Total Sheep Observed
1983	-	- ^f	75	13 (11)	35	114
2014	9 (21)	34	72	18 (14)	60	133

^a Prior to 1989, the “Full Curl” column included rams 7/8 curl or larger

^b Does not include an unknown number of legal rams at least 8 years old or with both horn tips broomed. Percent full-curl is calculation as a proportion of total rams.

^c Includes yearlings of both sexes and rams of ¼ curl or less

^d Percent lambs is calculated as a proportion of total sheep observed

^e 8 Total rams seen during the survey

^f 26 Total rams seen during the survey

WP16–37 Executive Summary	
General Description	<p>Proposal WP16-37 requests changes to caribou harvest regulations in Units 21D, 22, 23, 24, 26A, and 26B, including: reduction in harvest limits; shortening bull and cow seasons; creation of new hunt areas and to be announced seasons; and a prohibition on the take of calves and cows with calves. <i>Submitted by: Jack Reakoff.</i></p>
Proposed Regulation	<p>Unit 21D—Caribou</p> <p><i>Unit 21D—north of the Yukon River and east of the Koyukuk River—caribou may be taken during a winter season to be announced by the Refuge Manager of the Koyukuk/Nowitna National Wildlife Refuge Manager and the BLM Central Yukon Field Office Manager, in consultation with ADF&G and the Chairs of the Western Interior Subsistence Regional Advisory Council, and the Middle Yukon and Ruby Fish and Game Advisory Committees.</i></p> <p><i>Unit 21D, remainder—5 caribou per day, as follows: however, cow caribou may not be taken May 16–June 30.</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i> <i>July 1–Oct. 14</i> <i>Feb. 1–June 30</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken</i> <i>Sept. 1 – Mar. 31</i></p> <p>Unit 22—Caribou</p> <p><i>Unit 22B, that portion west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage—5 caribou per day, as follows:</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i> <i>Oct. 1–Oct. 14</i> <i>Feb. 1–Apr. 30.</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken.</i> <i>Oct. 1–Mar. 31</i></p> <p><i>Up to 5 caribou per day; however, calves may not be taken; cow caribou may not be taken April 1–Aug. 31; bull caribou</i> <i>May 1–Sept. 30, a season may be opened by</i></p>

WP16–37 Executive Summary

	<p><i>may not be taken Oct. 15-Jan. 31.</i></p> <p><i>Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin River drainage (excluding the Pilgrim River drainage), American, and the Agiapuk River Drainages, including the tributaries, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day, as follows: ; however, cow caribou may not be taken May 16 June 30.</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken.</i></p> <p><i>Unit 22D, that portion in the Pilgrim River Drainage—5 caribou per day as follows:</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken.</i></p> <p><i>Up to 5 caribou per day; however, calves may not be taken; however, cow caribou may not be taken April 1-Aug. 31.</i></p> <p><i>Unit 22 remainder—5 caribou per day; however, calves may not be taken; cow caribou may not be taken Apr. 1-Aug. 31; bull caribou may not be taken Oct. 15-Jan. 31.</i></p> <p>Unit 23—Caribou</p> <p><i>Unit 23, that portion north of and including the Singoalik River drainage—155 caribou per day as follows: ; however, cow caribou may not be taken May 16 June 30</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken.</i></p>	<p><i>announcement by the Anchorage Field Office Manager of the BLM, in consultation with ADF&G.</i></p> <p>July 1–June 30.</p> <p><i>July 1-Oct. 14 Feb. 1-June 30</i></p> <p><i>Sept. 1-Mar. 31.</i></p> <p><i>Oct. 1-Oct. 14 Feb. 1-Apr. 30</i></p> <p><i>Oct. 1-Mar. 31</i></p> <p><i>May 1 – Sept. 30, season to be announced</i></p> <p>No Federal open season <i>Season to be announced</i></p> <p>July 1–June 30.</p> <p><i>July 1-Oct. 14 Feb. 1-June 30</i></p> <p><i>July 15-Apr. 30</i></p>
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Unit 23 remainder—5 caribou per day, as follows:	
<i>Up to 5 bulls per day; however, calves may not be taken;</i>	<i>July 1-Oct. 14 Feb. 1-June 30</i>
<i>Up to 5 cows per day; however, calves may not be taken.</i>	<i>Sept. 1-Mar. 31.</i>
Unit 24—Caribou	
<i>Unit 24A—south of the south bank of the Kanuti River—1 caribou</i>	<i>Aug. 10-Mar. 31</i>
<i>Unit 24B—that portion south of the south bank of the Kanuti River, upstream from and including that portion of the Kanuti-Kilolitna River drainage, bounded by the southeast bank of the Kodosin-Nolitna Creek, then downstream along the east bank of the Kanuti-Kilolitna River to its confluence with the Kanuti River—1 caribou.</i>	<i>Aug. 10–Mar. 31.</i>
<i>Unit 24A remainder, that portion north of the south bank of the Kanuti River, 24B remainder, that portion north of the south bank of the Kanuti River downstream from the Kanuti-Killitna River drainage—5 caribou per day as follows; however, cow caribou may not be taken May 16–June 30</i>	<i>July 1–June 30.</i>
<i>Up to 5 bulls per day; however, calves may not be taken;</i>	<i>July 1-Oct. 14 Feb. 1-June 30</i>
<i>Up to 5 cows per day; however, calves may not be taken.</i>	<i>July 15-Apr. 30</i>
Units 24C, 24D—5 caribou per day as follows:	
<i>Up to 5 bulls per day; however, calves may not be taken;</i>	<i>July 1-Oct. 14 Feb. 1-June 30</i>
<i>Up to 5 cows per day; however, calves may not be taken.</i>	<i>Sept. 1-Mar. 31</i>

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Unit 26—Caribou

Unit 26A, that portion of the Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River drainage—10. 5 caribou per day as follows: ; however, cow caribou may not be taken May 16–June 30. *July 1–June 30.*

Up to 5 bulls per day; however, calves may not be taken; *July 1-Oct. 14
Feb. 1–June 30*

Up to 5 cows per day; however, calves may not be taken. *July 15–Apr. 30.*

Unit 26A remainder—5 bulls per day; however, calves may not be taken; *July 1–July 15*

5 caribou per day; however, no more than 3 cows per day; cows accompanied by calves and calves may not be taken; *July 16–Oct. 15*

3 cows per day; however, calves may not be taken; *Oct. 16–Dec. 31*

5 caribou per day; however, no more than 3 cows per day; calves may not be taken; *Jan. 1–Mar. 15*

5 bulls per day; however, calves may not be taken *Mar. 16–June 30.*

Unit 26B, that portion north of 69° 30' N. lat and west of the east bank of the Kuparuk River to a point at 70° 10' N. lat., 149° 04' W. long, then west approximately 22 miles to 70° 10' N. lat. And 149° 56' W. long., then following the east bank of the Kalubik River to the Arctic Ocean—5 caribou per day; however, cow caribou may not be taken May 16–June 30. *July 1–June 30*

Unit 26B, that portion south of 69° 30' N. lat. and west of the Dalton Highway—5 caribou; however, cow caribou may be taken only from July 1–Oct. 10. *July 1–Oct. 10
May 16–June 30*

Unit 26B, that portion south of 69° 30' N. lat. and east of the Dalton Highway—5 caribou; however, cow caribou may be taken only from July 1–May 15. *July 1–June 30*

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	<p><i>Unit 26B remainder—105 caribou per day; however, cow caribou may be taken only from Oct. 1–Apr. 30</i> <i>July 1–June 30 Apr. 30</i></p> <p><i>Unit 26C—10 caribou per day.</i> <i>July 1–Apr. 30</i></p> <p><i>You may not transport more than 5 caribou per regulatory year from Unit 26 except to the community of Anaktuvuk Pass.</i></p>
OSM Preliminary Conclusion	<p>Support with modification to prohibit the harvest of cows with calves in Units 21D, 22, 23, 24, 26A and 26B, prohibit the harvest of calves in Unit 26B, extend the bull season in Units 26A and 26B, modify the cow season in Unit 26B, modify the hunt area descriptor in Unit 24, modify the harvest limit in Unit 26B, simplify and clarify the regulatory language, and delete regulatory language regarding to be announced seasons for Units 21D and 22 and delegate authority to Federal land managers to announce seasons via delegation of authority letters only.</p> <p>The modified regulations should read:</p> <p>Unit 21D—Caribou</p> <p><i>Unit 21D—north of the Yukon River and east of the Koyukuk River—caribou may be taken during a winter season to be announced by the Refuge Manager of the Koyukuk/Nowitna National Wildlife Refuge Manager and the BLM Central Yukon Field Office Manager, in consultation with ADF&G and the Chairs of the Western Interior Subsistence Regional Advisory Council, and the Middle Yukon and Ruby Fish and Game Advisory Committees.</i></p> <p><i>Unit 21D, remainder—5 caribou per day, as follows: ; however, cow caribou may not be taken May 16–June 30.</i> <i>July 1–June 30.</i></p> <p>However, calves may not be taken</p> <p>Bulls may be harvested July 1–Oct. 14 Feb. 1–June 30</p> <p>Cows may be harvested Sept. 1–Mar. 31. However, cows accompanied by calves may not be taken Sept. 1–Oct. 15.</p>

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Unit 22—Caribou

Unit 22B, that portion west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage—5 caribou per day, as follows:

However, calves may not be taken

Bulls may be harvested

*Oct. 1–Oct. 14
Feb. 1–Apr. 30.*

Cows may be harvested

Oct. 1–Mar. 31

However, cows accompanied by calves may not be taken Oct. 1–Oct. 15.

5 caribou per day; however, calves may not be taken; Cows may not be taken April 1–Aug. 31; Bulls may not be taken Oct. 15–Jan. 31.

May 1–Sept. 30, a season may be opened by announcement announced by the Anchorage Field Office Manager of the BLM, in consultation with ADF&G.

Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin River drainage (excluding the Pilgrim River drainage), American, and the Agiapuk River Drainages, including the tributaries, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day, as follows: ; however, cow caribou may not be taken May 16–June 30.

July 1–June 30.

However, calves may not be taken

Bulls may be harvested

*July 1–Oct. 14
Feb. 1–June 30*

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General Description	<p>Proposal WP16-37 requests changes to caribou harvest regulations in Units 21D, 22, 23, 24, 26A, and 26B, including: reduction in harvest limits; shortening bull and cow seasons; creation of new hunt areas and to be announced seasons; and a prohibition on the take of calves and cows with calves. <i>Submitted by: Jack Reakoff.</i></p>
Proposed Regulation	<p>Unit 21D—Caribou</p> <p><i>Unit 21D—north of the Yukon River and east of the Koyukuk River—caribou may be taken during a winter season to be announced by the Refuge Manager of the Koyukuk/Nowitna National Wildlife Refuge Manager and the BLM Central Yukon Field Office Manager, in consultation with ADF&G and the Chairs of the Western Interior Subsistence Regional Advisory Council, and the Middle Yukon and Ruby Fish and Game Advisory Committees.</i></p> <p><i>Unit 21D, remainder—5 caribou per day, as follows: however, cow caribou may not be taken May 16–June 30.</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i> <i>July 1–Oct. 14</i> <i>Feb. 1–June 30</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken</i> <i>Sept. 1 – Mar. 31</i></p> <p>Unit 22—Caribou</p> <p><i>Unit 22B, that portion west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage—5 caribou per day, as follows:</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i> <i>Oct. 1–Oct. 14</i> <i>Feb. 1–Apr. 30.</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken.</i> <i>Oct. 1–Mar. 31</i></p> <p><i>Up to 5 caribou per day; however, calves may not be taken; cow caribou may not be taken April 1–Aug. 31; bull caribou</i> <i>May 1–Sept. 30, a season may be opened by</i></p>

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	<p><i>may not be taken Oct. 15-Jan. 31.</i></p> <p><i>Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin River drainage (excluding the Pilgrim River drainage), American, and the Agiapuk River Drainages, including the tributaries, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day, as follows: ; however, cow caribou may not be taken May 16 June 30.</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken.</i></p> <p><i>Unit 22D, that portion in the Pilgrim River Drainage—5 caribou per day as follows:</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken.</i></p> <p><i>Up to 5 caribou per day; however, calves may not be taken; however, cow caribou may not be taken April 1-Aug. 31.</i></p> <p><i>Unit 22 remainder—5 caribou per day; however, calves may not be taken; cow caribou may not be taken Apr. 1-Aug. 31; bull caribou may not be taken Oct. 15-Jan. 31.</i></p> <p>Unit 23—Caribou</p> <p><i>Unit 23, that portion north of and including the Singoalik River drainage—155 caribou per day as follows: ; however, cow caribou may not be taken May 16 June 30</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken.</i></p>	<p><i>announcement by the Anchorage Field Office Manager of the BLM, in consultation with ADF&G.</i></p> <p>July 1–June 30.</p> <p><i>July 1-Oct. 14 Feb. 1-June 30</i></p> <p><i>Sept. 1-Mar. 31.</i></p> <p><i>Oct. 1-Oct. 14 Feb. 1-Apr. 30</i></p> <p><i>Oct. 1-Mar. 31</i></p> <p><i>May 1 – Sept. 30, season to be announced</i></p> <p>No Federal open season <i>Season to be announced</i></p> <p>July 1–June 30.</p> <p><i>July 1-Oct. 14 Feb. 1-June 30</i></p> <p><i>July 15-Apr. 30</i></p>
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Unit 23 remainder—5 caribou per day, as follows:	
<i>Up to 5 bulls per day; however, calves may not be taken;</i>	<i>July 1-Oct. 14 Feb. 1-June 30</i>
<i>Up to 5 cows per day; however, calves may not be taken.</i>	<i>Sept. 1-Mar. 31.</i>
Unit 24—Caribou	
<i>Unit 24A—south of the south bank of the Kanuti River—1 caribou</i>	<i>Aug. 10-Mar. 31</i>
<i>Unit 24B—that portion south of the south bank of the Kanuti River, upstream from and including that portion of the Kanuti-Kilolitna River drainage, bounded by the southeast bank of the Kodosin-Nolitna Creek, then downstream along the east bank of the Kanuti-Kilolitna River to its confluence with the Kanuti River—1 caribou.</i>	<i>Aug. 10–Mar. 31.</i>
<i>Unit 24A remainder, that portion north of the south bank of the Kanuti River, 24B remainder, that portion north of the south bank of the Kanuti River downstream from the Kanuti-Killitna River drainage—5 caribou per day as follows; however, cow caribou may not be taken May 16–June 30</i>	<i>July 1–June 30.</i>
<i>Up to 5 bulls per day; however, calves may not be taken;</i>	<i>July 1-Oct. 14 Feb. 1-June 30</i>
<i>Up to 5 cows per day; however, calves may not be taken.</i>	<i>July 15-Apr. 30</i>
Units 24C, 24D—5 caribou per day as follows:	
<i>Up to 5 bulls per day; however, calves may not be taken;</i>	<i>July 1-Oct. 14 Feb. 1-June 30</i>
<i>Up to 5 cows per day; however, calves may not be taken.</i>	<i>Sept. 1-Mar. 31</i>

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Unit 26—Caribou

Unit 26A, that portion of the Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River drainage—10– 5 caribou per day as follows: ; however, cow caribou may not be taken May 16–June 30. July 1–June 30.

Up to 5 bulls per day; however, calves may not be taken; July 1-Oct. 14
Feb. 1-June 30

Up to 5 cows per day; however, calves may not be taken. July 15-Apr. 30.

Unit 26A remainder—5 bulls per day; however, calves may not be taken; July 1-July 15

5 caribou per day; however, no more than 3 cows per day; cows accompanied by calves and calves may not be taken; July 16-Oct. 15

3 cows per day; however, calves may not be taken; Oct. 16-Dec. 31

5 caribou per day; however, no more than 3 cows per day; calves may not be taken; Jan. 1-Mar. 15

5 bulls per day; however, calves may not be taken Mar. 16-June 30.

Unit 26B, that portion north of 69° 30' N. lat and west of the east bank of the Kuparuk River to a point at 70° 10' N. lat., 149° 04' W. long, then west approximately 22 miles to 70° 10' N. lat. And 149° 56' W. long., then following the east bank of the Kalubik River to the Arctic Ocean—5 caribou per day; however, cow caribou may not be taken May 16-June 30. July 1-June 30

Unit 26B, that portion south of 69° 30' N. lat. and west of the Dalton Highway—5 caribou; however, cow caribou may be taken only from July 1-Oct. 10. July 1-Oct. 10
May 16-June 30

Unit 26B, that portion south of 69° 30' N. lat. and east of the Dalton Highway—5 caribou; however, cow caribou may be taken only from July 1-May 15. July 1-June 30

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	<p><i>Unit 26B remainder—105 caribou per day; however, cow caribou may be taken only from Oct. 1–Apr. 30</i> <i>July 1–June 30 Apr. 30</i></p> <p><i>Unit 26C—10 caribou per day.</i> <i>July 1–Apr. 30</i></p> <p><i>You may not transport more than 5 caribou per regulatory year from Unit 26 except to the community of Anaktuvuk Pass.</i></p>
OSM Preliminary Conclusion	<p>Support with modification to prohibit the harvest of cows with calves in Units 21D, 22, 23, 24, 26A and 26B, prohibit the harvest of calves in Unit 26B, extend the bull season in Units 26A and 26B, modify the cow season in Unit 26B, modify the hunt area descriptor in Unit 24, modify the harvest limit in Unit 26B, simplify and clarify the regulatory language, and delete regulatory language regarding to be announced seasons for Units 21D and 22 and delegate authority to Federal land managers to announce seasons via delegation of authority letters only.</p> <p>The modified regulations should read:</p> <p>Unit 21D—Caribou</p> <p><i>Unit 21D—north of the Yukon River and east of the Koyukuk River—caribou may be taken during a winter season to be announced by the Refuge Manager of the Koyukuk/Nowitna National Wildlife Refuge Manager and the BLM Central Yukon Field Office Manager, in consultation with ADF&G and the Chairs of the Western Interior Subsistence Regional Advisory Council, and the Middle Yukon and Ruby Fish and Game Advisory Committees.</i></p> <p><i>Unit 21D, remainder—5 caribou per day, as follows: ; however, cow caribou may not be taken May 16–June 30.</i> <i>July 1–June 30.</i></p> <p>However, calves may not be taken</p> <p>Bulls may be harvested July 1–Oct. 14 Feb. 1–June 30</p> <p>Cows may be harvested Sept. 1–Mar. 31. However, cows accompanied by calves may not be taken Sept. 1–Oct. 15.</p>

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Unit 22—Caribou

Unit 22B, that portion west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage—5 caribou per day, as follows:

However, calves may not be taken

Bulls may be harvested

*Oct. 1–Oct. 14
Feb. 1–Apr. 30.*

Cows may be harvested

However, cows accompanied by calves may not be taken Oct. 1–Oct. 15.

Oct. 1–Mar. 31

5 caribou per day; however, calves may not be taken; Cows may not be taken April 1–Aug. 31; Bulls may not be taken Oct. 15–Jan. 31.

May 1–Sept. 30, a season may be opened by ~~announcement announced by the Anchorage Field Office Manager of the BLM, in consultation with ADF&G.~~

Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the ~~Kougaruk~~, Kuzitrin River drainage (excluding the Pilgrim River drainage), ~~American~~, and the Agiapuk River Drainages, including the tributaries, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day, as follows: ; however, cow caribou may not be taken May 16–June 30.

July 1–June 30.

However, calves may not be taken

Bulls may be harvested

*July 1–Oct. 14
Feb. 1–June 30*

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<p><i>Cows may be harvested</i> <i>However, cows accompanied by calves may not be taken Sept. 1-Oct. 15.</i></p> <p><i>Unit 22D, that portion in the Pilgrim River Drainage—5 caribou per day as follows:</i></p> <p><i>However, calves may not be taken</i></p> <p><i>Bulls may be harvested</i></p> <p><i>Cows may be harvested</i> <i>However, cows accompanied by calves may not be taken Oct. 1-Oct. 15.</i></p> <p><i>5 caribou per day; however, cows may not be taken April 1-Aug. 31.</i></p> <p><i>Unit 22 remainder—5 caribou per day; however, calves may not be taken; cows may not be taken Apr. 1-Aug. 31; cows accompanied by calves may not be taken Sept. 1-Oct. 15; bulls may not be taken Oct. 15-Jan. 31.</i></p> <p>Unit 23—Caribou</p> <p><i>Unit 23, that portion north of and including the Singoalik River drainage—155 caribou per day as follows: ; however, cow caribou may not be taken May 16–June 30</i></p> <p><i>However, calves may not be taken</i></p> <p><i>Bulls may be harvested</i></p> <p><i>Cows may be harvested</i> <i>However, cows accompanied by calves may not be taken July 15-Oct. 14.</i></p>	<p><i>Sept. 1-Mar. 31.</i></p> <p><i>Oct. 1-Oct. 14</i> <i>Feb. 1-Apr. 30</i></p> <p><i>Oct. 1-Mar. 31</i></p> <p><i>May 1 – Sept. 30</i> <i>Season may be announced</i></p> <p><i>No Federal open season—Season may be announced</i></p> <p><i>July 1–June 30.</i></p> <p><i>July 1-Oct. 14</i> <i>Feb. 1--June 30</i></p> <p><i>July 15-Apr. 30</i></p>

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	<p><i>Unit 23 remainder—5 caribou per day, as follows:</i></p> <p><i>However, calves may not be taken</i></p> <p><i>Bulls may be harvested</i> <i>July 1-Oct. 14</i> <i>Feb. 1-June 30</i></p> <p><i>Cows may be harvested</i> <i>Sept. 1-Mar. 31.</i> <i>However, cows accompanied by calves may not be taken Sept. 1-Oct. 14.</i></p> <p>Unit 24—Caribou</p> <p><i>Unit 24A—south of the south bank of the Kanuti River—1 caribou</i> <i>Aug. 10-Mar. 31</i></p> <p><i>Unit 24B—that portion south of the south bank of the Kanuti River, upstream from and including that portion of the Kanuti-Kilolitna River drainage, bounded by the southeast bank of the Kodosin-Nolitna Creek, then downstream along the east bank of the Kanuti-Kilolitna River to its confluence with the Kanuti River—1 caribou.</i> <i>Aug. 10–Mar. 31</i></p> <p><i>Unit 24 that portion north of (and including) the Kanuti River in Units 24A and 24B and that portion north of the Koyukuk River downstream from the confluence with the Kanuti River in Unit 24B to the Unit 24C boundary. remainder—5 caribou per day as follows; however, cow caribou may not be taken May 16–June 30</i> <i>July 1–June 30.</i></p> <p><i>However, calves may not be taken</i></p> <p><i>Bulls may be harvested</i> <i>July 1-Oct. 14</i> <i>Feb. 1-June 30</i></p> <p><i>Cows may be harvested</i> <i>July 15-Apr. 30</i> <i>However, cows accompanied by calves may not be taken July 15-Oct. 14.</i></p> <p><i>Units 24C, 24D—5 caribou per day as follows:</i></p> <p><i>However, calves may not be taken</i></p> <p><i>Bulls may be harvested</i> <i>July 1-Oct. 14</i> <i>Feb. 1-June 30</i></p>
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	<p><i>Cows may be harvested</i> <i>Sept. 1-Mar. 31</i> <i>However, cows accompanied by calves may not be taken Sept. 1-Oct. 14.</i></p> <p>Unit 26—Caribou</p> <p><i>Unit 26A, that portion of the Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River drainage—10 5 caribou per day as follows: ; however, cow caribou may not be taken May 16–June 30.</i> <i>July 1–June 30.</i></p> <p><i>However, calves may not be taken</i></p> <p><i>Bulls may be harvested</i> <i>July 1-Oct. 14</i> <i>Feb. 1-June 30</i></p> <p><i>Cows may be harvested</i> <i>July 15-Apr. 30.</i> <i>However, cows accompanied by calves may not be taken July 15-Oct. 15.</i></p> <p><i>Unit 26A remainder</i></p> <p><i>Calves may not be taken</i></p> <p><i>5 Bulls per day may be harvested</i> <i>July 1-Oct. 14</i> <i>Dec. 6-June 30</i></p> <p><i>3 cows per day may be harvested</i> <i>July 16-Mar. 15</i> <i>However, cows accompanied by calves may not be taken July 16-Oct. 15</i></p> <p><i>Unit 26B, Northwest portion: north of 69° 30' N. lat and west of the east bank of the Kuparuk River to a point at 70° 10' N. lat., 149° 04' W. long, then west approximately 22 miles to 70° 10' N. lat. And 149° 56' W. long., then following the east bank of the Kalubik River to the Arctic Ocean—5 caribou per day; however, cows may not be taken May 16-June 30; Cows accompanied by calves may not be taken July 1-Oct. 15; Calves may not be taken.</i> <i>July 1-June 30</i></p>
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WP16–37 Executive Summary	
	<p><i>Unit 26B, that portion south of 69° 30' N. lat. and west of the Dalton Highway—5 caribou per day as follows:</i></p> <p><i>However, calves may not be taken</i></p> <p><i>Bulls may be harvested</i> <i>July 1–Oct. 14</i> <i>Dec. 10–June 30</i></p> <p><i>Cows may be harvested</i> <i>Oct. 14–Apr. 30</i></p> <p><i>Unit 26B, that portion south of 69° 30' N. lat. and east of the Dalton Highway—5 caribou per day; however, cows may not be taken from May 16–June 30; Cows accompanied by calves may not be taken July 1–Oct. 15.</i> <i>July 1–June 30</i></p> <p><i>Unit 26B remainder—105 caribou per day;</i></p> <p><i>However, calves may not be taken—cow caribou may be taken only from Oct. 1–Apr. 30.</i></p> <p><i>Bulls may be harvested</i> <i>July 1–June 30</i> <i>Apr. 30</i></p> <p><i>Cows may be harvested</i> <i>Oct. 14–Apr. 30</i></p> <p><i>You may not transport more than 5 caribou per regulatory year from Unit 26 except to the community of Anaktuvuk Pass.</i></p>
Western Interior Alaska Regional Advisory Council Recommendation	
Seward Peninsula Regional	

WP16–37 Executive Summary	
Advisory Council Recommendation	
Northwest Arctic Regional Advisory Council Recommendation	
Eastern Interior Regional Advisory Council Recommendation	
North Slope Regional Advisory Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	None

**DRAFT STAFF ANALYSIS
WP16-37**

ISSUES

Proposal WP16-37, submitted by Jack Reakoff, requests changes to caribou harvest regulations in Units 21D, 22, 23, 24, 26A, and 26B, including: reduction in harvest limits; shortening bull and cow seasons; creation of new hunt areas and to be announced seasons; and a prohibition on the take of calves and cows with calves.

DISCUSSION

The proponent requests that Federal caribou regulations be aligned with the recently adopted State regulations in order to reduce regulatory complexity and to aid in conserving the declining Western Arctic (WACH) and Teshekpuk (TCH) caribou herds. Numerous entities, including the Western Interior Alaska (WIRAC), Northwest Arctic (NWARAC), Seward Peninsula (SPRAC), and North Slope (NSRAC) Subsistence Regional Advisory Councils, have invested a lot of work developing conservation strategies for these herds. The proponent believes that the herds' conservation is imperative.

Adoption of this proposal would restrict caribou harvest at certain times of the year and reduce daily harvest limits in order to conserve the WACH and TCH. The proponent states that prohibiting the take of calves increases herd recruitment and that the season and harvest limit restrictions should not prevent subsistence users from meeting their needs.

Related Proposals: Eight other Proposals—WP16-43, WP16-45, WP16-49, WP16-52, WP16-61, WP16-62, WP16-63, WP16-64—concerning caribou regulations in Units 21D, 22, 23, 24, or 26 were submitted for the 2016-2018 regulatory cycle. The outcome of these proposals may affect the outcome of this proposal.

Existing Federal Regulations

Unit 21D—Caribou

<p><i>Unit 21D—north of the Yukon River and east of the Koyukuk River—caribou may be taken during a winter season to be announced by the Refuge Manager of the Koyukuk/Nowitna National Wildlife Refuge and the BLM Central Yukon Field Office Manager, in consultation with ADF&G and the Chairs of the Western Interior Subsistence Regional Advisory Council, and the Middle Yukon and Ruby Fish and Game Advisory Committees.</i></p>	<p><i>Winter season to be announced.</i></p>
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<p><i>Unit 21D, remainder—5 caribou per day; however, cow caribou may</i></p>	<p><i>July 1–June 30.</i></p>
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not be taken May 16–June 30.

Unit 22—Caribou

Unit 22B west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers and excluding the Libby River drainage—5 caribou per day.

*Oct. 1–Apr. 30.
May 1–Sept. 30, a season may be opened by announcement by the Anchorage Field Office Manager of the BLM, in consultation with ADF&G.*

Units 22A, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin (excluding the Pilgrim River drainage), American, and Agiapuk River Drainages, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day; cow caribou may not be taken May 16–June 30.

July 1–June 30.

Unit 22 remainder

No Federal open season

Unit 23—Caribou

15 caribou per day; however, cow caribou may not be taken May 16–June 30

July 1–June 30.

Unit 24—Caribou

Unit 24—that portion south of the south bank of the Kanuti River, upstream from and including that portion of the Kanuti-Kilolitna River drainage, bounded by the southeast bank of the Kodosin-Nolitna Creek, then downstream along the east bank of the Kanuti-Kilolitna River to its confluence with the Kanuti River—1 caribou.

Aug. 10–Mar. 31.

Unit 24, remainder—5 caribou per day; however, cow caribou may not be taken May 16–June 30

July 1–June 30.

Unit 26—Caribou

Unit 26A—10 caribou per day; however, cow caribou may not be taken May 16–June 30.

July 1–June 30.

Unit 26B—10 caribou per day; however, cow caribou may be taken only from Oct. 1–Apr. 30 July 1–June 30.

Unit 26C—10 caribou per day. July 1–Apr. 30

You may not transport more than 5 caribou per regulatory year from Unit 26 except to the community of Anaktuvuk Pass.

Proposed Federal Regulations

Unit 21D—Caribou

Unit 21D—north of the Yukon River and east of the Koyukuk River—caribou may be taken during a winter season to be announced by the Refuge Manager of the Koyukuk/Nowitna National Wildlife Refuge Manager and the BLM Central Yukon Field Office Manager, in consultation with ADF&G and the Chairs of the Western Interior Subsistence Regional Advisory Council, and the Middle Yukon and Ruby Fish and Game Advisory Committees. Winter season to be announced.

Unit 21D, remainder—5 caribou per day, as follows: ; however, cow caribou may not be taken May 16–June 30. July 1–June 30.

Up to 5 bulls per day; however, calves may not be taken; July 1–Oct. 14 Feb. 1–June 30

Up to 5 cows per day; however, calves may not be taken Sept. 1 – Mar. 31

Unit 22—Caribou

Unit 22B, that portion west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage—5 caribou per day, as follows: Oct. 1–Apr. 30.

Up to 5 bulls per day; however, calves may not be taken; Oct. 1–Oct. 14 Feb. 1–Apr. 30.

<i>Up to 5 cows per day; however, calves may not be taken.</i>	Oct. 1-Mar. 31
<i>Up to 5 caribou per day; however, calves may not be taken; cow caribou may not be taken April 1-Aug. 31; bull caribou may not be taken Oct. 15-Jan. 31.</i>	<i>May 1–Sept. 30, a season may be opened by announcement by the Anchorage Field Office Manager of the BLM, in consultation with ADF&G.</i>
<i>Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin River drainage (excluding the Pilgrim River drainage), American, and the Agiapuk River Drainages, including the tributaries, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day, as follows: ; however, cow caribou may not be taken May 16–June 30.</i>	July 1–June 30.
<i>Up to 5 bulls per day; however, calves may not be taken;</i>	July 1-Oct. 14 Feb. 1-June 30
<i>Up to 5 cows per day; however, calves may not be taken.</i>	Sept. 1-Mar. 31.
<i>Unit 22D, that portion in the Pilgrim River Drainage—5 caribou per day as follows:</i>	
<i>Up to 5 bulls per day; however, calves may not be taken;</i>	Oct. 1-Oct. 14 Feb. 1-Apr. 30
<i>Up to 5 cows per day; however, calves may not be taken.</i>	Oct. 1-Mar. 31
<i>Up to 5 caribou per day; however, calves may not be taken; however, cow caribou may not be taken April 1-Aug. 31.</i>	May 1 – Sept. 30, season to be announced
<i>Unit 22 remainder—5 caribou per day; however, calves may not be taken; cow caribou may not be taken Apr. 1-Aug. 31; bull caribou may not be taken Oct. 15-Jan. 31.</i>	No Federal open season Season to be announced
Unit 23—Caribou	
<i>Unit 23, that portion north of and including the Singoalik River drainage—155 caribou per day as follows: ; however, cow caribou may not be taken May 16–June 30</i>	July 1–June 30.
<i>Up to 5 bulls per day; however, calves may not be taken;</i>	July 1-Oct. 14 Feb. 1-June 30
<i>Up to 5 cows per day; however, calves may not be taken.</i>	July 15-Apr. 30

Unit 23 remainder—5 caribou per day, as follows:

Up to 5 bulls per day; however, calves may not be taken;	July 1-Oct. 14 Feb. 1-June 30
Up to 5 cows per day; however, calves may not be taken.	Sept. 1-Mar. 31.

Unit 24—Caribou

Unit 24A—south of the south bank of the Kanuti River—1 caribou **Aug. 10-Mar. 31**

Unit 24B—that portion south of the south bank of the Kanuti River, upstream from and including that portion of the Kanuti-Kilolitna River drainage, bounded by the southeast bank of the Kodosin-Nolitna Creek, then downstream along the east bank of the Kanuti-Kilolitna River to its confluence with the Kanuti River—1 caribou. **Aug. 10–Mar. 31.**

Unit 24A remainder, that portion north of the south bank of the Kanuti River, 24B remainder, that portion north of the south bank of the Kanuti River downstream from the Kanuti-Killitna River drainage—5 caribou per day as follows; however, cow caribou may not be taken May 16–June 30 ~~July 1–June 30.~~

Up to 5 bulls per day; however, calves may not be taken; **July 1-Oct. 14
Feb. 1-June 30**

Up to 5 cows per day; however, calves may not be taken. **July 15-Apr. 30**

Units 24C, 24D—5 caribou per day as follows:

Up to 5 bulls per day; however, calves may not be taken; **July 1-Oct. 14
Feb. 1-June 30**

Up to 5 cows per day; however, calves may not be taken. **Sept. 1-Mar. 31**

Unit 26—Caribou

Unit 26A, that portion of the Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River drainage—~~10~~ 5 caribou per day as follows; however, cow caribou may not be taken May 16–June 30. **July 1–June 30.**

Up to 5 bulls per day; however, calves may not be taken; **July 1-Oct. 14**

	<i>Feb. 1-June 30</i>
<i>Up to 5 cows per day; however, calves may not be taken.</i>	<i>July 15-Apr. 30.</i>
<i>Unit 26A remainder—5 bulls per day; however, calves may not be taken;</i>	<i>July 1-July 15</i>
<i>5 caribou per day; however, no more than 3 cows per day; cows accompanied by calves and calves may not be taken;</i>	<i>July 16-Oct. 15</i>
<i>3 cows per day; however, calves may not be taken;</i>	<i>Oct. 16-Dec. 31</i>
<i>5 caribou per day; however, no more than 3 cows per day; calves may not be taken;</i>	<i>Jan. 1-Mar. 15</i>
<i>5 bulls per day; however, calves may not be taken</i>	<i>Mar. 16-June 30.</i>
<i>Unit 26B, that portion north of 69° 30' N. lat and west of the east bank of the Kuparuk River to a point at 70° 10' N. lat., 149° 04' W. long, then west approximately 22 miles to 70° 10' N. lat. And 149° 56' W. long., then following the east bank of the Kalubik River to the Arctic Ocean—5 caribou per day; however, cow caribou may not be taken</i>	<i>July 1-June 30</i>
<i>May 16-June 30.</i>	
<i>Unit 26B, that portion south of 69° 30' N. lat. and west of the Dalton Highway—5 caribou; however, cow caribou may be taken only from</i>	<i>July 1-Oct. 10</i>
<i>July 1-Oct. 10.</i>	<i>May 16-June 30</i>
<i>Unit 26B, that portion south of 69° 30' N. lat. and east of the Dalton Highway—5 caribou; however, cow caribou may be taken only from</i>	<i>July 1-June 30</i>
<i>July 1-May 15.</i>	
<i>Unit 26B remainder—105 caribou per day; however, cow caribou may be taken only from Oct. 1-Apr. 30</i>	<i>July 1-June 30-Apr. 30</i>
<i>Unit 26C—10 caribou per day.</i>	<i>July 1-Apr. 30</i>
<i>You may not transport more than 5 caribou per regulatory year from Unit 26 except to the community of Anaktuvuk Pass.</i>	

Existing State Regulations**Unit 21D—Caribou**

North of the Yukon River and east of the Koyukuk River Residents—Two caribou may be taken during winter season May be announced

21D remainder Residents—5 caribou per day, as follows:

Up to 5 bulls per day; however, calves may not be taken; July 1-Oct. 14
Feb. 1-June 30.

Up to 5 cows per day; however, calves may not be taken Sept. 1-Mar. 31.

Nonresidents—1 bull; however, calves may not be taken Aug. 1-Sept. 30

Unit 22—Caribou

22A, that portion north of the Golsovia River drainage Residents—5 caribou per day, as follows:

Up to 5 bulls per day; however, calves may not be taken; July 1-Oct. 14
Feb. 1-June 30.

Up to 5 cows per day; however, calves may not be taken Sept. 1-Mar. 31.

Nonresidents—1 bull; however, calves may not be taken Aug. 1-Sept. 30

Unit 22B, that portion west of Golovnin Bay, Residents—5 caribou per day, as follows:

and west of a line along the west bank of the Fish and Niukluk rivers to the mouth of the Libby river, and excluding all portions of the Niukluk River drainage *Up to 5 bulls per day; however, calves may not be taken;* Oct. 1-Oct. 14
Feb. 1-Apr. 30

upstream from and including the Libby *Up to 5 cows per day; however, calves may not be taken* Oct. 1-Mar. 31

Up to 5 caribou per day; however, calves may not be taken; during the period May 1-Sept. 30, a season may be announced by emergency order; however, cow caribou Season to be announced by emergency order

<i>River drainage</i>	<p><i>may not be taken April 1-Aug. 31; bull caribou may not be taken Oct. 15-Jan. 31</i></p> <p><i>Nonresidents: 1 bull; however, calves may not be taken; during the period Aug. 1-Sept. 30, a season may be announced by emergency order</i></p>	<p><i>Season to be announced by emergency order</i></p>
<i>22B Remainder</i>	<p><i>Residents—5 caribou per day, as follows:</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken</i></p> <p><i>Nonresidents—1 bull; however, calves may not be taken</i></p>	<p><i>July 1-Oct. 14</i> <i>Feb. 1-June 30.</i></p> <p><i>Sept. 1-Mar. 31.</i></p> <p><i>Aug. 1-Sept. 30</i></p>
<i>22C</i>	<p><i>Residents—5 caribou per day, however, cows may not be taken May 16-June 30</i></p> <p><i>Nonresidents—5 caribou total, however, cows may not be taken May 16-June 30.</i></p>	<p><i>may be announced</i> <i>.</i></p> <p><i>may be announced</i></p>
<i>22D, that portion in the Pilgrim River drainage</i>	<p><i>Residents—5 caribou per day, as follows:</i></p> <p><i>Up to 5 bulls per day; however, calves may not be taken;</i></p> <p><i>Up to 5 cows per day; however, calves may not be taken</i></p> <p><i>Up to 5 caribou per day; however, calves may not be taken; during the period May 1-Sept. 30, a season may be announced by emergency order; however, cow caribou may not be taken April 1-Aug. 31</i></p> <p><i>Nonresidents: 1 bull; however, calves may not be taken; during the period Aug. 1-Sept. 30, a season may be announced by emergency order</i></p>	<p><i>Oct. 1-Oct. 14</i> <i>Feb. 1-Apr. 30</i></p> <p><i>Oct. 1-Mar. 31</i> <i>.</i></p> <p><i>Season to be announced by emergency order</i></p> <p><i>Season to be announced by emergency order</i></p>

22D, that portion in the Kuzitrin River drainage (excluding the Pilgrim River drainage) and the Agiapuk river drainage, including tributaries	Residents—5 caribou per day, as follows:	
	Up to 5 bulls per day; however, calves may not be taken;	July 1-Oct. 14 Feb. 1-June 30.
	Up to 5 cows per day; however, calves may not be taken	Sept. 1-Mar. 31.
	Nonresidents—1 bull; however, calves may not be taken	Aug. 1-Sept. 30
22E, that portion east of and including the Sanaguich River drainage	Residents—5 caribou per day, as follows:	
	Up to 5 bulls per day; however, calves may not be taken;	July 1-Oct. 14 Feb. 1-June 30.
	Up to 5 cows per day; however, calves may not be taken	Sept. 1-Mar. 31.
	Nonresidents—1 bull; however, calves may not be taken	Aug. 1-Sept. 30
22 Remainder	Residents—5 caribou per day; however, calves may not be taken; cow caribou may not be taken Apr. 1-Aug. 31; bull caribou may not be taken Oct. 15-Jan. 31	Season to be announced by emergency order
	Nonresidents—1 bull; however, calves may not be taken; during the period Aug. 1-Sept. 30, a season may be announced by emergency order	Season to be announced by emergency order

Unit 23—Caribou

23, that portion north of and including the Singoalik River drainage	Residents—5 caribou per day, as follows:	
	Up to 5 bulls per day; however, calves may not be taken;	July 1-Oct. 14 Feb. 1-June 30.
	Up to 5 cows per day; however, calves may not be taken	Jul. 15-Apr. 30
	Nonresidents—1 bull; however, calves may not be taken	Aug. 1-Sept. 30

<i>23 remainder</i>	<i>Residents—5 caribou per day, as follows:</i>	
	<i>Up to 5 bulls per day; however, calves may not be taken;</i>	<i>July 1-Oct. 14 Feb. 1-June 30.</i>
	<i>Up to 5 cows per day; however, calves may not be taken</i>	<i>Sept. 1-Mar. 31.</i>
	<i>Nonresidents—1 bull; however, calves may not be taken</i>	<i>Aug. 1-Sept. 30</i>

Unit 24—Caribou

<i>24A, south of the south bank of the Kanuti River</i>	<i>Residents—1 caribou</i>	<i>Aug. 10-Mar. 31</i>
	<i>Nonresidents—1 caribou</i>	<i>Aug. 10-Sept. 30</i>
	<i>A portion of this area is within the DHCMA and additional restrictions apply.</i>	

<i>24B, that portion south of the south bank of the Kanuti River, upstream from and including that portion of the Kanuti-Kilolitna River drainage, bounded by the southeast bank of the Kodosin-Nolitna Creek, then downstream along the east bank of the Kanuti-Kilolitna River to its confluence with the Kanuti River—1 caribou.</i>	<i>Residents—1 caribou</i>	<i>Aug. 10-Mar. 31</i>
	<i>Nonresidents—1 caribou</i>	<i>Aug. 10-Sept. 30</i>

<i>24A remainder, 24B remainder</i>	<i>Residents—5 caribou per day, as follows:</i>	
	<i>Up to 5 bulls per day; however, calves may not be taken;</i>	<i>July 1-Oct. 14 Feb. 1-June 30.</i>
	<i>Up to 5 cows per day; however, calves may not be taken</i>	<i>Jul. 15-Apr. 30</i>
	<i>Nonresidents—1 bull; however, calves may not be</i>	<i>Aug. 1-Sept. 30</i>

taken

A portion of this area is within the DHCMA and additional restrictions apply.

24C, 24D

Residents—5 caribou per day, as follows:

Up to 5 bulls per day; however, calves may not be taken; July 1-Oct. 14
Feb. 1-June 30.

Up to 5 cows per day; however, calves may not be taken Sept. 1-Mar. 31.

Nonresidents—1 bull; however, calves may not be taken Aug. 1-Sept. 30

Unit 26--Caribou

26A, that portion of the Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River drainage

Residents—5 caribou per day, as follows:

Up to 5 bulls per day; however, calves may not be taken; July 1-Oct. 14
Feb. 1-June 30.

Up to 5 cows per day; however, calves may not be taken Jul. 15-Apr. 30

Nonresidents—1 bull; however, calves may not be taken Aug. 1-Sept. 30

26A, Remainder

Residents—5 bulls per day; however, calves may not be taken; July 1-July 15

5 caribou per day; however, no more than 3 cows per day; cows accompanied by calves and calves may not be taken; July 16-Oct. 15

3 cows per day; however, calves may not be taken; Oct. 16-Dec. 31

5 caribou per day; however no more than 3 cows per day; calves may not be taken; Jan. 1-Mar. 15
Mar. 16-June 30

5 bulls per day; however, calves may not be taken Aug. 1-Sept. 30

Nonresidents—1 bull; however, calves may not be taken

<p>26B, that portion north of 69° 30' N. lat and west of the east bank of the Kuparuk River to a point at 70° 10' N. lat., 149° 04' W. long, then west approximately 22 miles to 70° 10' N. lat. And 149° 56' W. long., then following the east bank of the Kalubik River to the Arctic Ocean</p>	<p>Residents--5 caribou per day; however, cow caribou may not be taken May 16-June 30.</p> <p>Nonresidents—5 caribou</p>	<p>July 1-June 30</p> <p>.</p> <p>July 1-Apr. 30</p>
<p>26B, that portion south of 69° 30' N. lat. and west of the Dalton Highway</p>	<p>Residents and Nonresidents--5 caribou; however, cow caribou may be taken only from July 1-Oct. 10.</p>	<p>July 1-Oct. 10</p> <p>May 16-June 30</p>
<p>26B, that portion south of 69° 30' N. lat. and east of the Dalton Highway</p>	<p>Residents and Nonresidents—5 caribou; however, cow caribou may be taken only from July 1-May 15.</p>	<p>July 1-June 30</p>
<p>26B, Remainder</p>	<p>Residents—5 caribou</p> <p>Nonresidents—5 caribou</p>	<p>July 1-Apr. 30</p> <p>July 1-Apr. 30</p>
<p>26C</p>	<p>Residents—10 Caribou total; Any caribou</p> <p>Bull caribou</p> <p>Nonresidents—Two bulls</p>	<p>July 1-Apr. 30</p> <p>June 23-June 30</p> <p>Aug. 1-Sept. 30</p>

Extent of Federal Public Lands

Federal public lands comprise approximately 56% of Unit 21D and consist of 29.2.4% U.S. Fish and Wildlife Service (USFWS) managed lands, and 26.6% Bureau of Land Management (BLM) managed lands (see **Unit 21 Map**).

Federal public lands comprise approximately 42.1% of Unit 22 and consist of 27% BLM managed lands, 12.2% National Park Service (NPS) managed lands, and 2.9% USFWS managed lands (see **Unit 22 Map**).

Federal public lands comprise approximately 69% of Unit 23 and consist of 41.8% NPS managed lands, 17.5% BLM managed lands, and 9.6% USFWS managed lands (see **Unit 23 Map**).

Federal public lands comprise approximately 67% of Unit 24 and consist of 23% BLM managed lands, 21.9% NPS managed lands, and 21.8% USFWS managed lands (see **Unit 24 Map**).

Federal public lands comprise approximately 68% of Unit 26 and consist of 45.2% BLM managed lands, 17.3% USFWS managed lands, and 5% NPS managed lands (see **Unit 26 Map**).

Customary and Traditional Use Determinations

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

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

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

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

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

Residents of Unit 26 (except the Prudhoe Bay–Deadhorse Industrial Complex), Anaktuvuk Pass, and Point Hope have a customary and traditional use determination for caribou in Unit 26A and 26C.

Residents of Unit 26, Anaktuvuk Pass, Point Hope, and Unit 24 within the Dalton Highway Corridor Management Area have a customary and traditional use determination for caribou in Unit 26B.

Regulatory History

Unit 21D

In 1991, the Federal Subsistence Board (Board) adopted proposal P91-132 with modification to designate new hunt areas in Unit 21D and establish a to-be-announced winter season with a harvest limit of two caribou (FWS 1991).

In 1992, the Board approved Temporary Special Action S92-06 to open a temporary winter season for caribou in Unit 21D north of the Yukon River and east of the Koyukuk River (FWS 1992).

In 2007, the Board adopted proposal WP07-33, closing Unit 21D north of the Yukon River and east of the Koyukuk River to caribou hunting during the Federal fall season. This was done in order to conserve the declining Galena Mountain Caribou Herd (FWS 2007).

Unit 22

In 1994, the Board adopted Proposal P94-63A with modification to allow snowmachines to be used to take caribou and moose in Unit 22 (FWS 1994).

In 1996, the Board adopted Proposal P96-049 with modification to provide a customary and traditional use determination for caribou in Unit 22 for rural residents of Unit 21D west of the Koyukuk and Yukon rivers, Units 22 (except St. Lawrence Island), 23, 24. The Proposal also provided a customary and traditional use determination for caribou in Unit 22A for residents of Kotlik, Emmonak, Marshall, Mountain Village, Pilot Station, Pitka's Point, Russian Mission, St. Mary's, Sheldon Point, and Alakanuk (FWS 1996).

In 1997, the Board adopted Proposal P97-54 with modification to add residents of Hooper Bay, Scammon Bay, and Chevak to the customary and traditional use determination for caribou in Unit 22A (FWS 1997a).

In 2000, the Board adopted Proposal WP00-53 with modification allowing the use of snowmachines to position a hunter to select individual caribou for harvest in Units 22 and 23. This was done to recognize a customary and traditional practice in the region (FWS 2000a).

In 2003, the Board adopted Proposal WP03-40 with modification to establish a harvest season of July 1-June 30 and a 5 caribou per day harvest limit in portions of Units 22D and 22E. This was done because caribou had expanded their range into these subunits and harvest was not expected to impact the caribou or reindeer herds, to provide additional subsistence hunting opportunities, and to align State and Federal regulations (FWS 2003).

In 2006, the Board adopted Proposal WP06-37 with modification, which designated a new hunt area in Unit 22B with an open season of Oct. 1-Apr. 30 and a closed season from May 1-Sept. 30 unless opened by a Federal land manager. This was done to prevent incidental take of privately-owned reindeer and to reduce user conflicts (FWS 2006a).

Unit 23

In 1995, the Board adopted Proposal P95-51 to increase the caribou harvest limit from 5 per day to 15 per day to increase opportunity for subsistence hunters to maximize their hunting when the caribou were available (FWS 1995a).

In 1997, the Board adopted Proposal P97-66 with modification to provide a positive customary and traditional use determination for caribou in Unit 23 for rural residents of Unit 21D west of the Koyukuk and Yukon rivers, Galena, Units 22, 23, 24 including residents of Wiseman, but not other residents of the Dalton Highway Corridor Management Area and Unit 26A (FWS 1995b, 1997b).

In 2000, Board adopted Proposal WP00-53 with modification allowing the use of snowmachines to position and select individual caribou for harvest in Units 22 and 23. This was done to recognize a customary and traditional practice in the region (FWS 2000a).

Unit 24

In 2000, the Board adopted Proposal P00-44 to expand the hunting area north of the Kanuti River for caribou to allow Federally qualified subsistence users additional opportunities to harvest from the WACH (OSM 2000b). The harvest limit was set at 5 caribou per day with the restriction that cows may not be taken from May 16-June 30 (FWS 2000b).

The Board, however, did not change the harvest limit of one caribou in the southern section of Unit 24B and 24A which was enacted to protect the Ray Mountain Caribou Herd, a small population of about 1,000 animals, on their wintering range (Jandt 1998).

Unit 26A and 26B

In 1995, the Board adopted Proposal P95-64 to increase the harvest limit from 5 caribou per day to 10 caribou per day to increase opportunity for subsistence hunters (FWS 1995c). This harvest limit has remained in effect since then. The Board also adopted Proposal P95-62 which closed the area east of the Killik River and south of the Colville River to non-Federally qualified subsistence users on Federal public lands (OSM 1995b). This closure was enacted to prevent non-Federally qualified subsistence users from harvesting lead animals, which may have caused the migration to move away from the area that local subsistence users hunted in Unit 26A (FWS 1995b).

In 2005, the Alaska Board of Game established a Controlled Use Area for the Anaktuvuk River drainage that prohibited the use of aircraft for caribou hunting from Aug. 15–Oct. 15. The intent of this proposal was to limit access by non-subsistence users, reduce user conflicts, and lessen the impact on caribou migration.

In 2006, the Board adopted Proposal WP06-65, which opened the area east of the Killik River and south of the Colville River to non-Federally qualified subsistence users (FWS 2006b). The 1995 closure was lifted for several reasons. First, due to changes in land status because of lands selected under the Statehood Act and the Alaska Native Claims Settlement Act (ANCSA), lands formerly managed by BLM were transferred to ANCSA corporations or the State of Alaska. Only the lands east of Anaktuvuk Pass were affected by the closure, making it less effective. Second, the population level was at a point where it could support both subsistence and non-subsistence uses.

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

These regulatory changes took effect on July 1, 2015, and are the result of extensive discussion and compromise among a variety of stakeholders. State regulatory changes and the proposed changes to

Federal regulations represent the first time in over 30 years that harvest restrictions have been implemented for the WACH and TCH. The restrictions requested in this proposal for the WACH are also supported by management recommendations outlined in the Western Arctic Herd Management Plan (WACH Working Group 2011).

Four Special Actions, WSA15-03/04/05/06, submitted by the North Slope Regional Advisory Council requested changes to caribou regulations in Units 23, 24, and 26 and have recently been approved by the Federal Subsistence Board (Board), effective July 1, 2015. Temporary Special Action WSA15-03, requested designation of a new hunt area for caribou in Unit 23 where the harvest limit would be reduced from 15 caribou per day to 5 caribou per day, the harvest season be reduced for bulls and cows, and the take of calves would be prohibited.

Temporary Special Action WSA15-04, requested designation of a new hunt area for caribou in Unit 24, harvest seasons for bulls and cows to be shortened, and the take of calves to be prohibited.

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

Temporary Special Action WSA15-06, requested designation of a new hunt area for caribou in Unit 26B where the harvest limit would be reduced from 10 caribou per day to 5 caribou per day, the harvest season would be shortened, and the take of calves would be prohibited.

Current Events

Eight additional proposals concerning caribou regulations in Units 21D, 22, 23, 24, or 26 were submitted to the Board for the 2016-2018 regulatory cycle. The outcome of those proposals may affect the outcome of this proposal.

Four proposals: WP16-61, WP16-62, WP16-63, and WP16-64, submitted by the North Slope Subsistence Regional Advisory Council, mirror Temporary Special Actions WSA15-03/04/05/06 described above.

WP16-43, submitted by the Seward Peninsula Subsistence Regional Advisory Council (SPRAC), requests that portions of Unit 22A be closed to caribou hunting unless opened by the Federal in-season manager. The intent of this proposal is to prevent incidental take of privately-owned reindeer.

WP16-45, also submitted by the SPRAC, requests that additional areas be opened to caribou hunting in Unit 22 along with a modification in a hunt area descriptor.

Combined Proposals WP16-49 and WP16-52, submitted by the Northwest Arctic Subsistence Regional Advisory Council and the Upper and Lower Kobuk Advisory Committee request reductions in harvest limits for caribou in Unit 23, restrictions on bull and cow seasons, and a prohibition on the harvest of cows with calves.

Biological Background

Caribou abundance naturally fluctuates over decades (Gunn 2003, WACH Working Group 2011). Gunn (2003) reports the mean doubling rate for Alaskan caribou as 10 ± 2.3 years. Although the underlying mechanisms causing these fluctuations are uncertain, Gunn (2003) suggests climatic oscillations as the primary factor, exacerbated by predation and density-dependent reduction in forage availability, resulting in poorer body condition.

Caribou calving generally occurs from late May to mid-June (Dau 2013). Weaning generally occurs in late October and early November before the breeding season (Taillon et al 2011). Calves stay with their mothers through their first winter, which improves calves' access to food and body condition.

Joly (2000) predicts that calves orphaned later in life have greater chances of surviving. Data from Russell et al (1991) suggests 50% and 75% of the calves orphaned in September and November, respectively, survived the winter (Joly 2000). Indeed, there is little evidence that calves orphaned after weaning experience strongly reduced overwintering survival rates than non-orphaned calves (Rughetti and Festa-Bianchet 2014, Joly 2000, Holand et al. 2012). However, Holand et al. (2012) found orphaned calves to have greater losses of winter body mass than non-orphaned calves, indicating orphaned calves may be more susceptible to severe winters.

The TCH, WACH, and CACH have ranges that overlap in Unit 26A (**Figure 1**) and there can be considerable mixing of herds during the fall and winter. During the early 2000s, the number of caribou wintering on the North Slope peaked at over 700,000 animals (this includes the Porcupine Caribou Herd in northeast Alaska and Northwest Territories, Canada), which may be the highest number since the 1970s. During the 1970s, there was little overlap between these four herds, but the degree of mixing seems to be increasing (Lenart 2011, Dau 2011, Parrett 2011).

Because the proposed regulatory changes for this proposal were put forward primarily due to the decline of the WACH and TCH, the focus of the biology will be on the WACH and TCH with a brief overview of the current population status of the CACH.

Central Caribou Herd

The current status of the CACH is unclear. The most recent population count, based on aerial photo census in 2013, was over 70,000 animals, which was similar to the peak count in 2010. However, the presence of 10 collared caribou from the Porcupine Caribou Herd (PCH) detected in the CACH could represent up to 20,000 caribou, which could indicate that the CACH may have declined by about 20% since 2010 (Caribou Trails 2014, Lenart 2011).

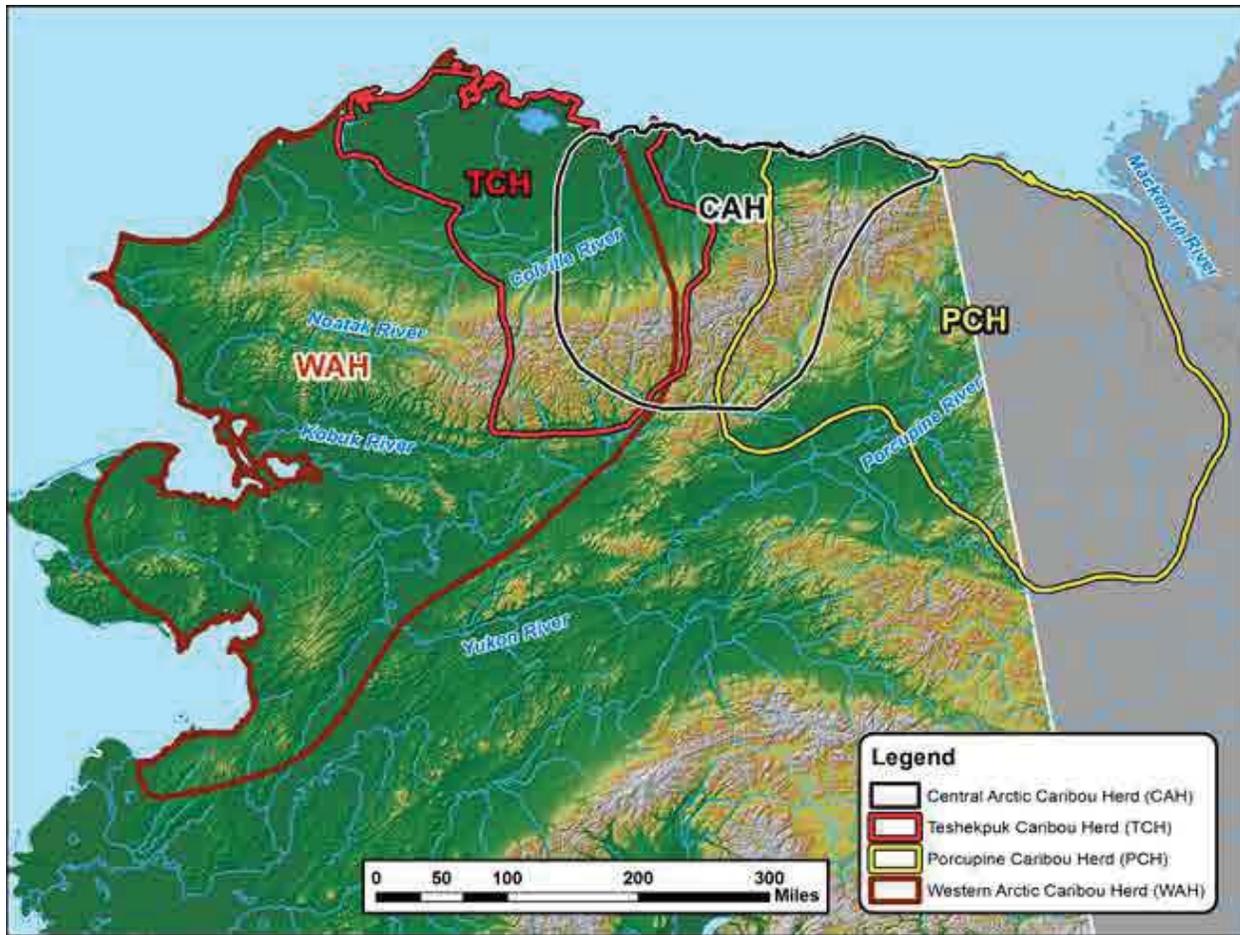


Figure 1. Herd overlap and ranges of the WACH, TCH, CACH and Porcupine caribou herds (WACH 2014).

Teshekpuk Caribou Herd

The TCH calving and summering areas overlap with the eastern portion of the National Petroleum Reserve–Alaska (NPR–A). Most of the TCH moves toward Teshekpuk Lake in May to calve in early June. The primary calving grounds of the TCH (approximately 1.8 million acres) occur to the east, southeast and northeast of Teshekpuk Lake (Person et al. 2007, Wilson et al. 2012).

From late June through July, cows and bulls move to the Beaufort Sea coast from Dease Inlet to the mouth of Kogru River (Barrow to the Colville Delta), around the north and south side of the Teshekpuk Lake, and the sand dunes along the Ikpikpuk River to seek relief from insects (Carroll 2007, Parrett 2007). The narrow corridors of land to the east and northwest of the Teshekpuk Lake are important migratory corridors to insect relief areas as well (Yokel et al. 2009). River corridors are also used more during periods of insect harassment.

Fall and winter movements are more variable, although most of the TCH winters on the coastal plain around Atkasuk, south of Teshekpuk Lake. However, the TCH has wintered as far south as the Seward Peninsula,

as far east as the Arctic National Wildlife Refuge, and in the foothills and mountains of the Brooks Range (Carroll 2007). In 2008/09, the TCH used many of these widely disparate areas in a single year (Parrett 2011).

The State has set management goals for the TCH to provide for subsistence and other hunting opportunities on a sustained yield basis, ensure that adequate habitat exists, and provide for viewing and other uses of caribou (Parrett 2013). Specific State management objectives for the TCH are as follows (Parrett 2013):

- Attempt to maintain a minimum population of 15,000 caribou, recognizing that caribou numbers naturally fluctuate.
- Maintain a harvest level of 900–2,800 caribou using strategies adapted to population levels and trends.
- Maintain a population composed of least 30 bulls:100 cows.
- Monitor herd characteristics and population parameters (on an annual or regular basis).
- Develop a better understanding of the relationships and interactions among North Slope caribou herds.
- Encourage cooperative management of the herd and its habitat among State, Federal, and local entities and all users of the herd.
- Seek to minimize conflicts between resource development and the TCH.

Since 1984, the minimum population of the TCH has been estimated using aerial photo censuses and information from radio-collared individuals. Population estimates are determined by methods described by Rivest et al. (1998) which account for caribou in groups that do not have a collared animal and for missing collars.

The TCH population increased from an estimated 18,292 caribou (minimum estimate 11,822) in 1982 to 68,932 caribou (minimum estimate 64,106) in 2008. From 2008 to 2014 the population declined by almost half to 39,000, which is still well above State management objectives (**Figure 2**, Parrett 2015, pers. comm.).

Interpretation of population estimates is difficult due to movements and range overlap among caribou herds, which results in both temporary and permanent immigration (Person et al. 2007). For example, following the 2013 census, ADF&G decided to manage the TCH based on minimum counts rather than population estimates due to substantial mixing of the TCH and WACH during the photo census, which compromises the reliability of the population estimates (Parrett 2015, pers, comm.).

From 1991-2010, the bull:cow ratio varied widely, ranging from 25-98 bulls:100 cows/year (**Figure 3**). The number of bulls declined during this time period from an average of 62 bulls:100 cows/year (1991-2000) to an average of 46 bulls:100 cows (2001-2010), which is still above State management objectives (**Figure 3**, Parrett 2013).

Between 1998-2011, the fall calf:adult ratio fluctuated widely, ranging from 6-32 calves:100 adults/year, with an average of 22.5 calves:100 adults/year (**Figure 4**). Short yearlings (SY) are 10-11 months old

caribou. SY:adult ratios are determined from spring surveys and indicate overwintering calf survival and recruitment. The SY:adult ratios were closely correlated with fall calf:adult ratios until 2009 (**Figure 4**).

From 1998-2008, the fall calf:adult and spring SY:adult ratios averaged 21 calves:100 adults/year and 20 SY:100 adults/year, respectively, indicating most calves survived the winter. Conversely, from 2009-2011, the fall calf:adult and spring SY:adult ratios averaged 30 calves:100 adults/year and 14 SY:100 adults/year, respectively, indicating much lower overwintering calf survival in recent years (Parrett 2013, **Figure 4**).

The annual mortality of adult radio collared females from the TCH has remained close to the long term (1991-2012) average of 14.5% (range 8–25%) (Parrett 2011, Caribou Trails 2014, Parrett 2015, pers. comm.). The highest cow and bull mortalities occurred in spring and fall, respectively. Female mortalities may be tied to poor nutrition while bull mortalities are likely tied to the rut. Predation is also a proximal cause of mortality. While harvest is included in mortality, it is a small proportion of the mortality for both sexes (Dau 2013).

As the TCH has declined, calf weights have declined, indicating that poor nutrition may be having a significant effect on this herd (Carroll 2015, pers. comm., Parrett 2015, pers. comm.).

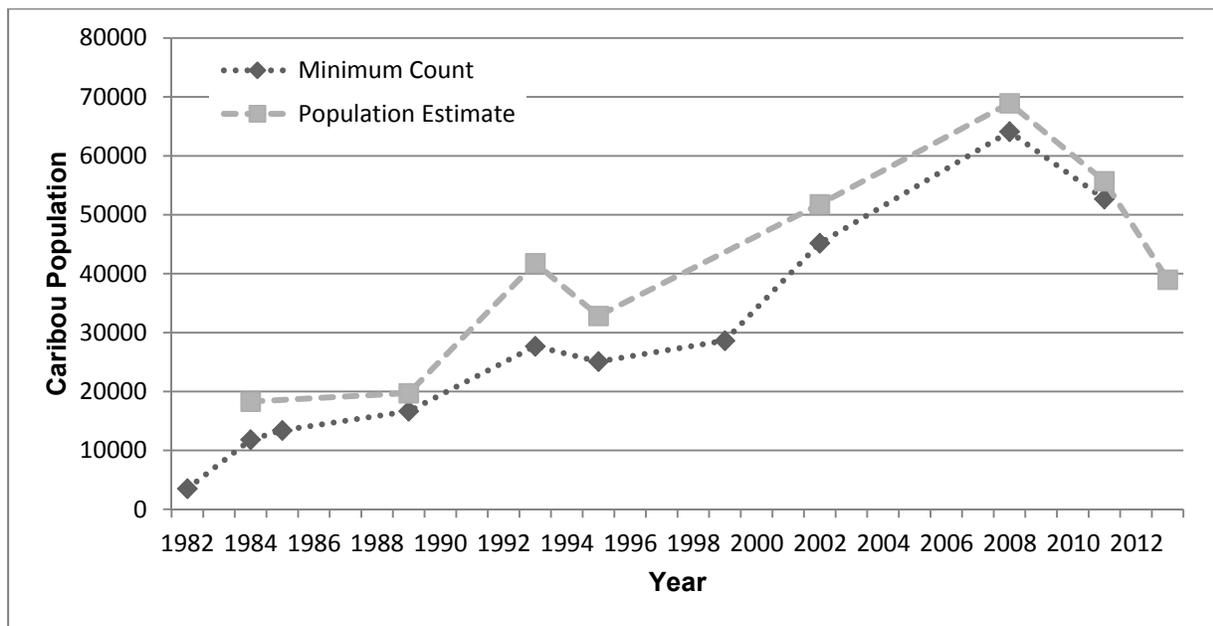


Figure 2. Minimum counts and population estimates of the Teshekpuk Caribou Herd from 1980-2014. Population estimates from 1984-2014 are based on aerial photographs of groups of caribou that contained radio-collared animals (Parrett 2011, 2013, Parrett 2015, pers. comm.).

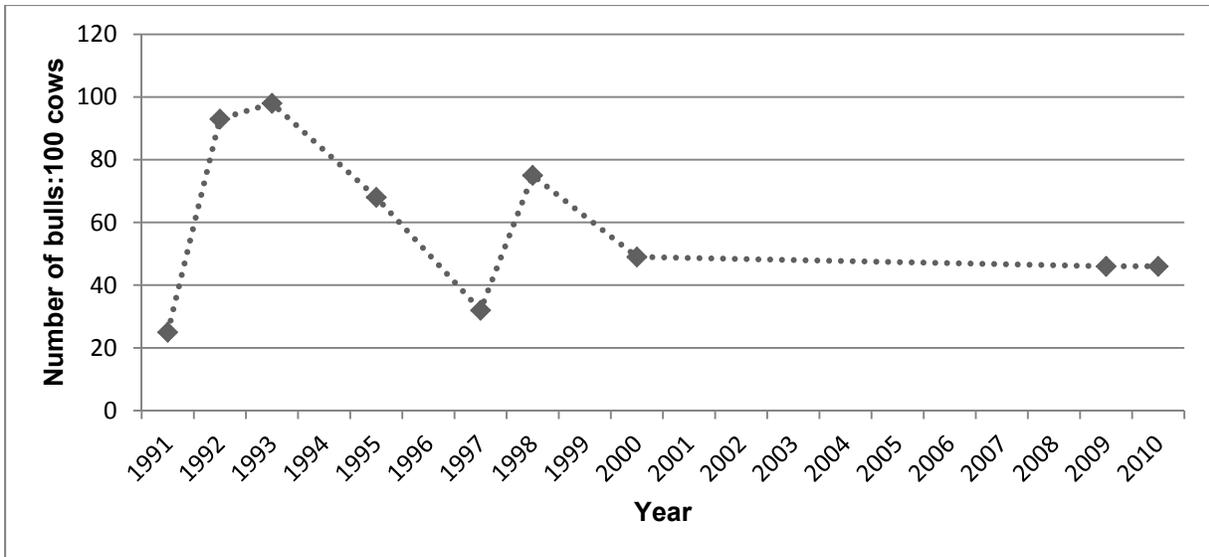


Figure 3. Bull:cow ratios of the Teshekpuk Caribou Herd (Parrett 2013).

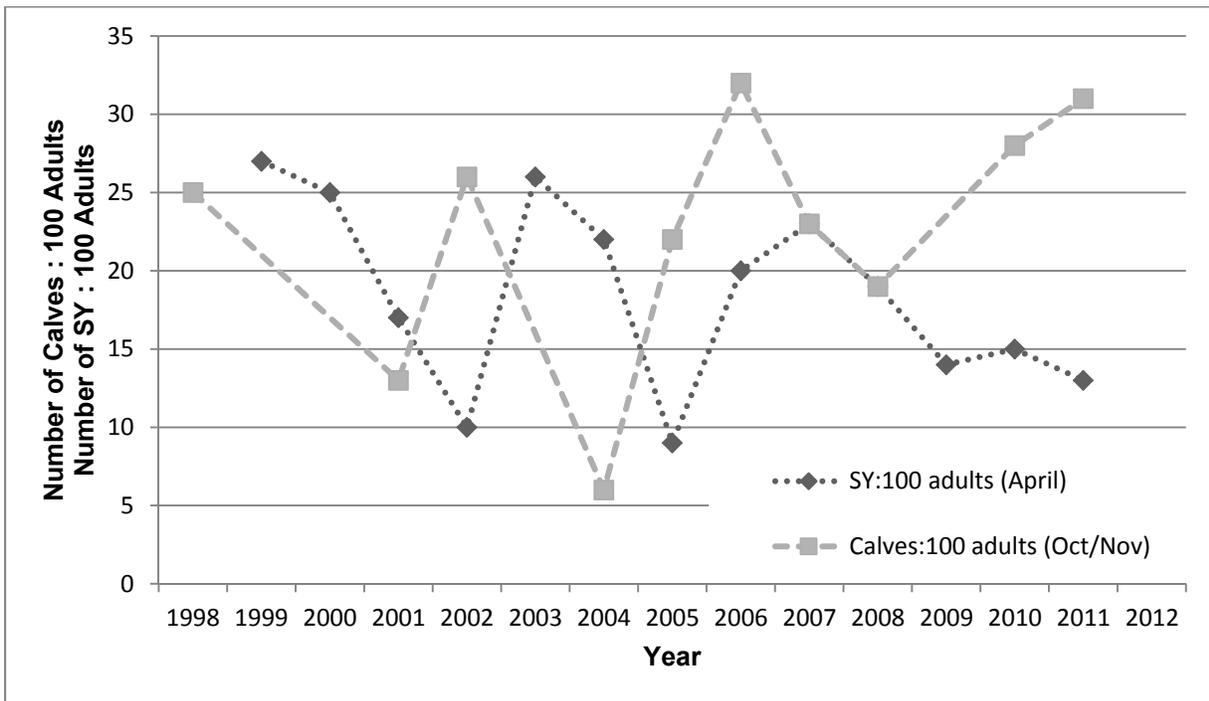


Figure 4. Calf:adult and short yearling (SY):adult ratios for the Teshekpuk Caribou Herd (Parrett 2013). Short yearlings are 10-11 months old caribou.

Western Arctic Caribou Herd

The WACH has historically been the largest caribou herd in Alaska and has a home range of approximately 157,000 mi² in northwestern Alaska (Figure 1). In the spring, most mature cows move north to calving grounds in the Utukok Hills, while bulls and immature cows lag behind and move toward summer range in the Wulik Peaks and Lisburne Hills (Dau 2011, WACH Working Group 2011).

Dau (2013) determined the calving dates for the WACH to be June 9-13. This is based upon long-term movement and distribution data obtained from radio-collared caribou (these are the dates cows ceased movements). After the calving period, cows and calves move west toward the Lisburne Hills where they mix with the remaining bulls and non-maternal cows. During the summer the herd moves rapidly to the Brooks Range.

In the fall, the herd moves south toward wintering grounds in the northern portion of the Nulato Hills. The caribou rut occurs during fall migration (Dau 2011, WACH Working Group 2011). Dau (2013) determined the WACH rut dates to be October 22-26. This is based on back-calculations from calving dates using a 230 day gestation period.

The Western Arctic Caribou Herd Working Group (WACH WG) formed in 1997 to ensure the long-term conservation and traditional use of the WAH. It is comprised of 20 voting chairs, including subsistence hunters from local villages, sport hunters, hunting guides, reindeer herders, and other stakeholders. The WAH WG developed a Western Arctic Caribou Herd Cooperative Management Plan (WACH Management Plan) in 2003, which was revised in 2011 (WACH Working Group 2011).

The Management Plan identifies seven plan elements: cooperation, population management, habitat, regulations, reindeer, knowledge, and education as well as associated goals, strategies, and management actions.

The State manages the WACH to protect the population and its habitat, provide for subsistence and other hunting opportunities on a sustained yield basis, and provide for viewing and other uses of caribou (Dau 2011). State management objectives for the WACH are the same as the goals specified in WACH Management Plan (WACH Working Group 2011, Dau 2011) and include:

- Encourage cooperative management of the WACH and among State, Federal, local entities, and all users of the herd.
- Manage for healthy populations using management strategies adapted to fluctuating population levels and trends.
- Assess and protect important habitats.
- Promote consistent and effective State and Federal regulations for the conservation of the WACH.
- Seek to minimize conflict between reindeer herders and the WACH.
- Integrate scientific information, traditional ecological knowledge of Alaska Native users, and knowledge of all users into management of the herd.
- Increase understanding and appreciation of the WACH through the use of scientific information, traditional ecological knowledge of the Alaska Native users, and knowledge of all other users.

As part of the population management element, the WACH Working Group developed a guide to herd management determined by population size, population trend, and harvest rate (**Table 1**).

The WACH population declined rapidly in the early 1970s and bottomed out at about 75,000 animals in 1976. Aerial photo censuses have been used since 1986 to estimate population size. The WAH popula-

tion increased throughout the 1980s, and 1990s, peaking at 490,000 animals in 2003 (**Figure 5**). Since 2003, the WACH has declined at an average annual rate of 7.1% from approximately 490,000 in 2003 to 234,757 caribou in 2013 (Dau 2011, Caribou Trails 2014, Dau 2014) (**Figure 5**).

Between 1982 and 2011, the WAH population was within the liberal management level prescribed by the WAH Working Group (**Table 1**). In 2013, the WAH population estimate fell below the population threshold for liberal management of a decreasing population (265,000), slipping into the conservative management level (**Table 1, Figure 5**).

Between 1970 and 2012, the bull:cow ratio has exceeded critical management levels (see **Table 1**) in all years, except 1975 and 2001 (**Figure 6**). However, reduced sampling intensity in 2001 likely biased the bull:cow ratio low (Dau 2013). The average annual number of bulls:100 cows were greater during the period of population growth (54:100 between 1976-2001) than during the recent period of decline (45:100 between 2004-2014). Additionally, Dau (2013) states all bull:cow ratios should be interpreted with caution due to sexual segregation during sampling and their inability to sample the entire population.

Table 1. Western Arctic caribou herd management levels using herd size, population trend, and harvest rate (WAH Working Group 2011).

Management Level and Harvest Level	Population Trend		
	Declining Low: 6%	Stable Med: 7%	Increasing High: 8%
Liberal	Pop: 265,000+ Harvest: 18,550-24,850	Pop: 230,000+ Harvest: 16,100-21,700	Pop: 200,000+ Harvest: 16,000-21,600
Conservative	Pop: 200,000-265,000 Harvest: 14,000-18,550	Pop: 170,000-230,000 Harvest: 11,900-16,100	Pop: 150,000-200,000 Harvest: 12,000-16,000
Preservative	Pop: 130,000-200,000 Harvest: 8,000-12,000	Pop: 115,000-170,000 Harvest: 8,000-12,000	Pop: 100,000-150,000 Harvest: 8,000-12,000
Critical Keep Bull:Cow ratio ≥ 40 Bulls:100 Cows	Pop: < 130,000 Harvest: 6,000-8,000	Pop: < 115,000 Harvest: 6,000-8,000	Pop: < 100,000 Harvest: 6,000-8,000

Between 1970 and 2012, the fall calf:cow ratio ranged from 35-59 calves:100 cows/year, averaging 46 calves:100 cows/year (**Table 2, Figure 7**). During periods of rapid population growth (1976–1992), fall calf:cow ratios were generally higher (averaging 54 calves:100 cows/year) than during periods of slow population growth or decline (1993–2013, averaging 43 calves:100 cows/year) (**Table 2, Figure 7**).

Although factors contributing to the decline are not known with certainty, increased adult cow mortality, and decreased calf recruitment and survival played a role (Dau 2011). Since the mid-1980s, adult mortality has slowly increased while recruitments has slowly decreased (Dau 2013, **Figures 7, 8**).

Calf production has likely had little influence on the population trajectory (Dau 2013). Between 1990 and 2003, the June calf:cow averaged 66 calves:100 cows/year. Between 2004 and 2012, the June calf:cow ratio averaged 69 calves:100 cows/year (**Figure 7**).

However, decreased calf survival and recruitment are likely contributing to the current population decline (Dau 2013). Short yearlings (SY) are 10-11 months old caribou. SY:adult ratios indicate overwintering calf survival and recruitment. Between 1990 and 2003, SY:adult ratios averaged 20 SY:100 adults/year. Since the decline began in 2003, SY:adult ratios have averaged 16 SY:100 adults/year (2004-2012, **Figure 7**).

Similarly, fall calf:cow ratios indicate calf survival over summer. Fall calf:cow ratios declined from an average of 46 calves:100 cows/year between 1990-2003 to an average of 39 calves:100 cows/year between 2004-2012 (**Figure 7**).

The annual mortality rate of radio-collared adult cows increased, from an average of 15% between 1987 and 2003, to 25% from 2004–2012 (Dau 2011, 2013, 2014, **Figure 8**). Estimated mortality includes all causes of death including hunting (Dau 2011). Dau (2013) states these mortality rates are biased high due to selection of older caribou to radio-collar. Dau (2013) attributed the high mortality rate for 2011-2012 (33%, **Figure 8**) to a winter with deep snows, which weakened caribou and enabled wolves to predate them more easily. Prior to 2004, estimated adult cow mortality only exceeded 20% twice, but has exceeded 20% in 7 of the last 9 regulatory years between 2004 and 2012 (**Figure 8**).

Far more caribou have died from natural causes than from hunting between 1992 and 2012. Cow mortality remained constant throughout the year. However, natural and harvest mortality for bulls spiked during the fall. Predation, particularly by wolves, accounted for the majority of the natural mortality (Dau 2013).

As the WACH declined, the percentage of mortality due to hunting increased relative to natural mortality. For example, during the period October 1, 2013 to September 30, 2014, estimated hunting mortality was approximately 42% and estimated natural mortality about 56% (estimates from slide 16, Dau 2014). In previous years (1983-2013), the estimated hunting mortality exceeded 30% only once in 1997-1998 (Dau 2013).

Other contributing factors that may be contributing to the current population decline include weather (particularly fall and winter icing events), predation, hunting pressure, deteriorating range condition (including habitat loss and fragmentation), climate change, and disease (Dau 2014).

Joly et al. (2007) documented a decline in lichen cover in portions of the wintering areas of the WACH. Dau (2011, 2014) reported that degradation in range condition is not thought to be a primary factor in the decline of the WACH because animals in the WACH, unlike the TCH, have generally maintained good body condition since the decline began. However, the body condition of the WACH in the spring may be a better indicator of the effects of range condition versus the fall when the body condition of the WACH is routinely assessed and when caribou are in prime condition (July 2015, pers. comm.).

Habitat

Caribou feed on a wide variety of plants including lichens, fungi, sedges, grasses, forbs, and twigs of woody plants. Arctic caribou depend primarily on lichens during the fall and winter, but during summer they feed on leaves, grasses and sedges (Miller 2003). The importance of high use areas for the TCH at Teshekpuk Lake during the summer has been well documented (Person et al. 2007, Carroll 2007, Parrett 2011, Wilson 2012, Smith, Witten, and Loya 2015). Presumably the importance of areas to the north, south, and east of Teshekpuk Lake during calving is due to the high concentration of sedge-grass meadows (Wilson et al. 2012). The areas around Teshekpuk Lake in the NPR–A are currently protected from oil and gas leasing in recognition of the importance of these areas for caribou, waterfowl and shorebirds (BLM 1998, 2008).

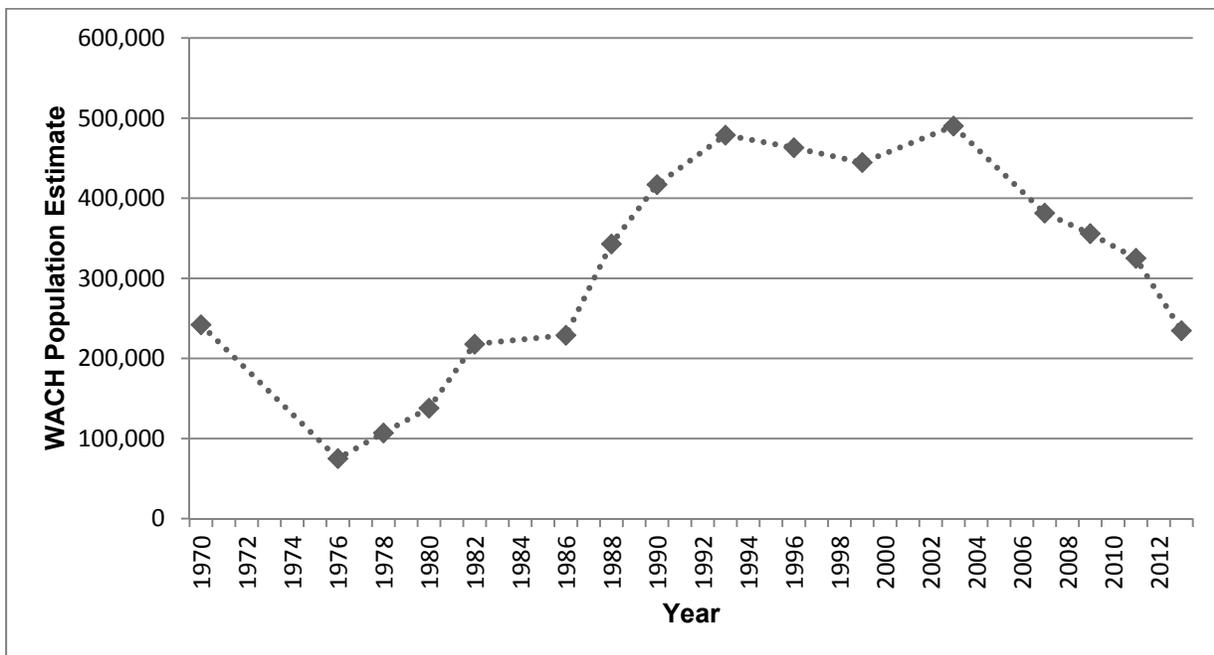


Figure 5. Western Arctic caribou herd population estimates from 1970-2013. Population estimates from 1986-2013 are based on aerial photographs of groups of caribou that contained radio-collared animals (Dau 2011, 2013, 2014).

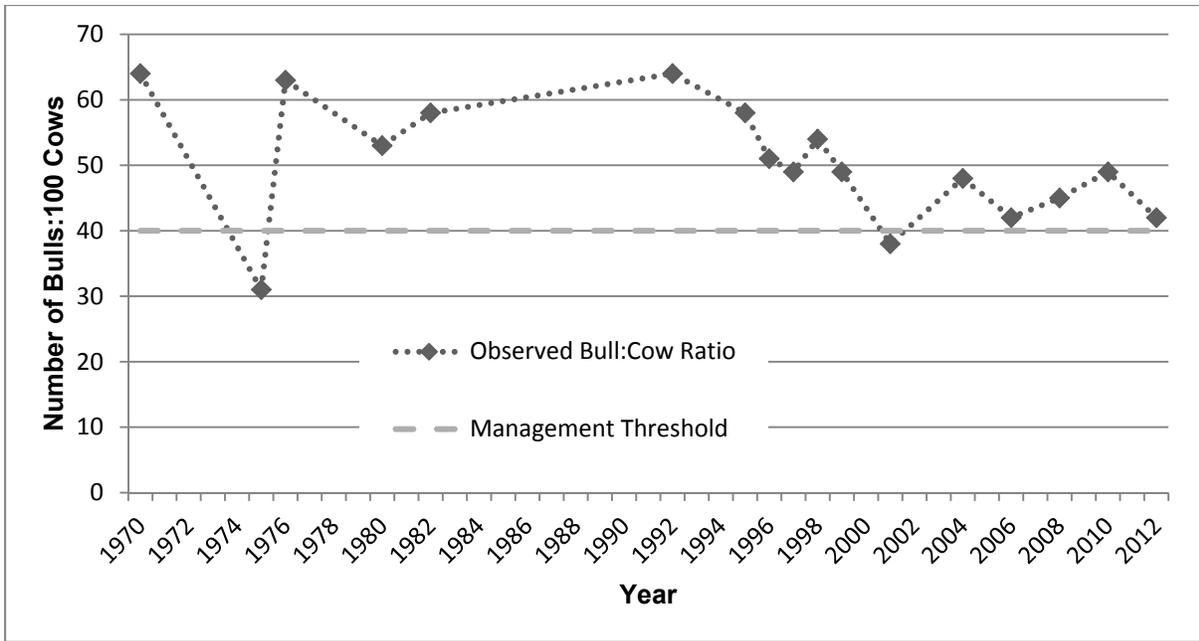


Figure 6. Bull: Cow ratios for the Western Arctic Caribou Herd (Dau 2013).

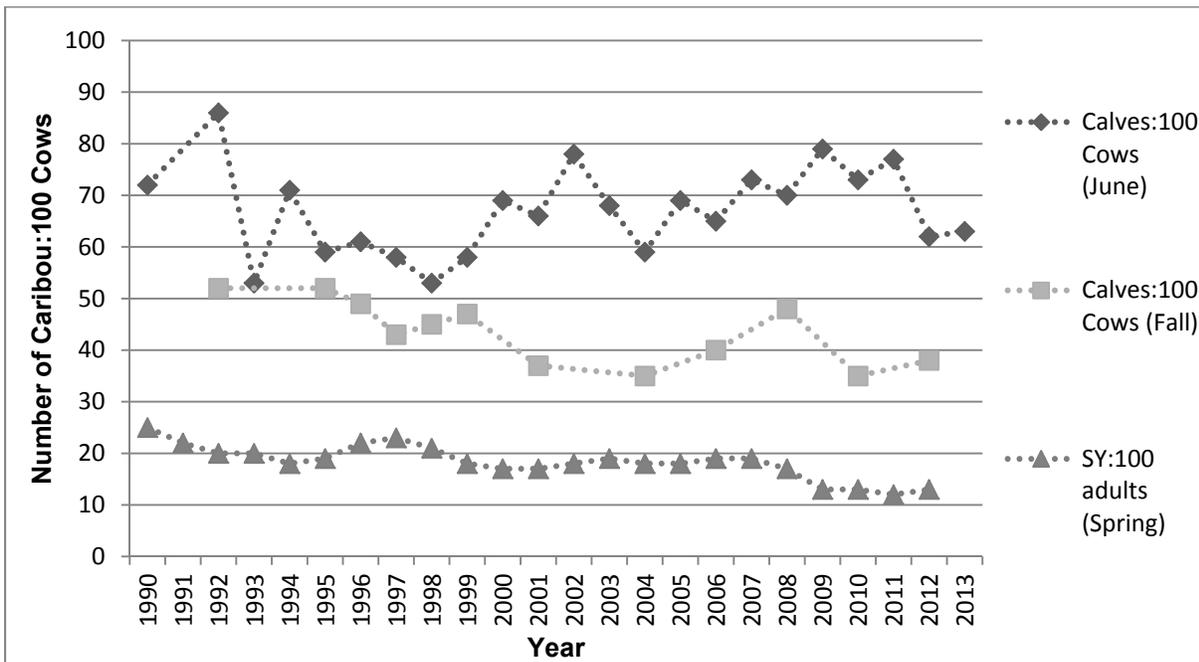


Figure 7. Calf: cow and short yearling (SY): adult ratios for the Western Arctic Caribou Herd (Dau 2013). Short yearlings are 10-11 months old caribou.

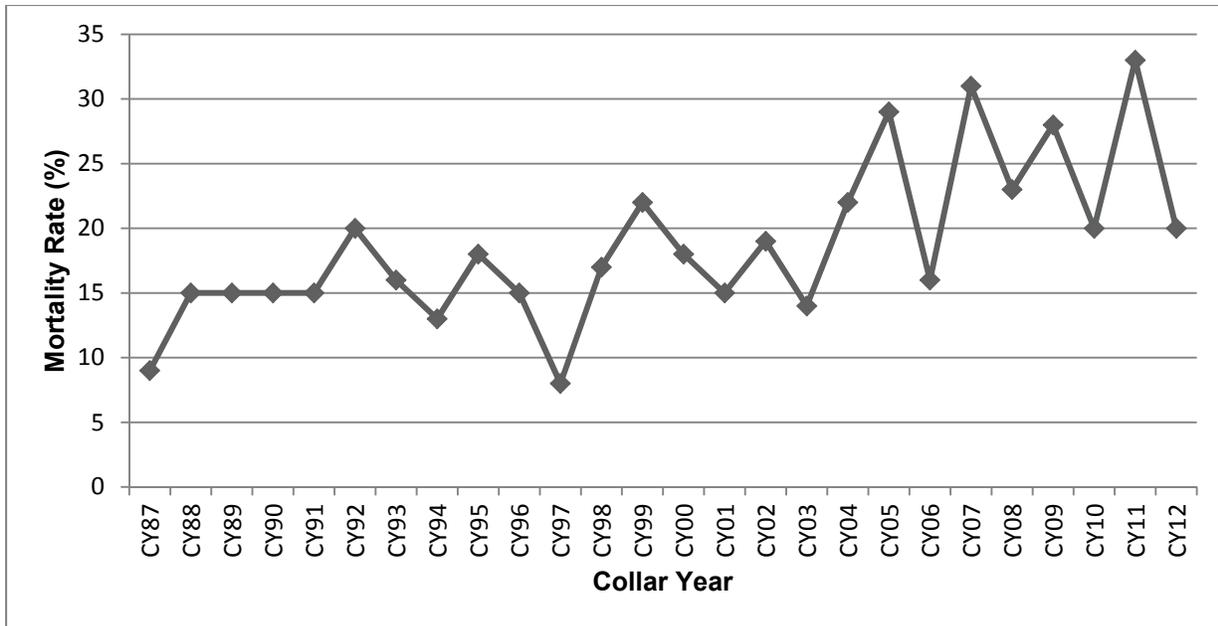


Figure 8. Mortality rate of radio-collared caribou in the Western Arctic caribou herd (Dau 2013). Collar Year = 1 Oct-30 Sept.

Harvest History

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

From 1999–2014, the average annual estimated harvest from the WACH was 13,600 caribou, ranging from 9,500-15,800 caribou/year (Dau 2009, Dau 2014, pers. comm., **Figure 9**). These harvest levels are within the conservative harvest level specified in the WACH Management Plan (**Table 1**). Local residents take approximately 94% of the caribou harvest within the range of the WACH, with residents of Unit 23 accounting for the vast majority of the harvest. From 1999-2011, 66-88% of all WACH caribou were harvested from Unit 23 by residents and non-residents (Dau 2013, **Figure 9**).

The State of Alaska manages the WACH to maximize a harvestable surplus of animals. In recent years, as the WACH population has declined, the State's total harvestable surplus for the WACH, which is estimated as 2% of the cows and 15% of the bulls, has declined (Dau 2011, Dau 2014, pers. comm.). Harvest from the WACH, which has remained fairly consistent since 1990, now represents a larger proportion of the annual mortality. This is one of the factors that prompted the Alaska Board of Game to enact restrictions to WACH and TCH caribou harvest in March 2015.

Table 2. Western Arctic Caribou Herd fall composition 1976 – 2014 (Dau 2011, 2013, 2014).

Regulatory Year	Total bulls: 100 cows ^a	Calves: 100 cows	Calves: 100 adults	Bulls	Cows	Calves	Total
1976/1977	63	52	32	273	431	222	926
1980/1981	53	53	34	715	1,354	711	2,780
1982/1983	58	59	37	1,896	3,285	1,923	7,104
1992/1993	64	52	32	1,600	2,498	1,299	5,397
1995/1996	58	52	33	1,176	2,029	1,057	4,262
1996/1997	51	49	33	2,621	5,119	2,525	10,265
1997/1998	49	43	29	2,588	5,229	2,255	10,072
1998/1999	54	45	29	2,298	4,231	1,909	8,438
1999/2000	49	47	31	2,059	4,191	1,960	8,210
2001/2002	38	37	27	1,117	2,943	1,095	5,155
2004/2005	48	35	24	2,916	6,087	2,154	11,157
2006/2007	42	40	28	1,900	4,501	1,811	8,212
2008/2009	45	48	33	2,981	6,618	3,156	12,755
2010/2011	49	35	23	2,419	4,973	1,735	9,127
2012/2013	42	38	27	2,119	5,082	1,919	9,120
2013/2014							
2014/2015	39						

^a 40 bulls:100 cows is the minimum level recommended in the WACH Cooperative Management Plan (WACH Working Group 2011)

Reliance on caribou from a particular herd varies by community. Residents of Atqasuk, Barrow, Nuiqsut, and Wainwright harvest caribou primarily from the TCH while residents from Anaktuvuk Pass, Point Lay, and Point Hope harvest caribou primarily from the WACH (Dau 2011, Parrett 2011, 2013). Weather, distance of caribou from the community, terrain, and high fuel costs are some of the factors that can affect the availability and accessibility of caribou. Residents of Nuiqsut, which is on the northeast corner of Unit 26A, harvest approximately 11% of their caribou from the CACH (**Table 3**, Parrett 2013).

Range overlap between the three caribou herds, frequent changes in the wintering distribution of the TCH and WACH, and annual variation in the community harvest survey effort and location make it difficult to determine the proportion of the TCH, WACH and CACH in the harvest. Knowledge of caribou distribution at the time of the reported harvest is often used to estimate the proportion of the harvest from each herd. Community harvest surveys continue to be the preferred method to estimate harvest by Federally qualified subsistence users, since previous attempts to conduct registration hunts were not effective (Georgette 1994). However, community surveys are not always reliable due to sampling issues (Braem et al. 2011, Parrett 2011).

For communities where harvest surveys are not conducted or are unreliable, harvest estimates are often based on the current population estimate and previous estimates of the per capita harvest. A general overview of the relative utilization based on estimated harvest of each caribou herd by community for regulatory year 2010/11, is presented in **Table 3** (Parrett 2011, Dau 2011, and Lenart 2011). The percentage of caribou harvested from different herds by community has varied $\leq 2\%$ for all communities between 2008/09, 2009/10, and 2010/11. Total annual estimated caribou harvest by community varied with community population estimates.

The WACH Management Plan recommends harvest strategies at different management and harvest levels (**Table 1**). The harvest recommendations under conservative management include: no harvest of calves, no cow and restricted bull harvest by nonresidents, voluntary reduction of cow harvest by residents, and limiting harvest to maintain a minimum 40:100 bull:cow ratio (WACH Working Group 2011).

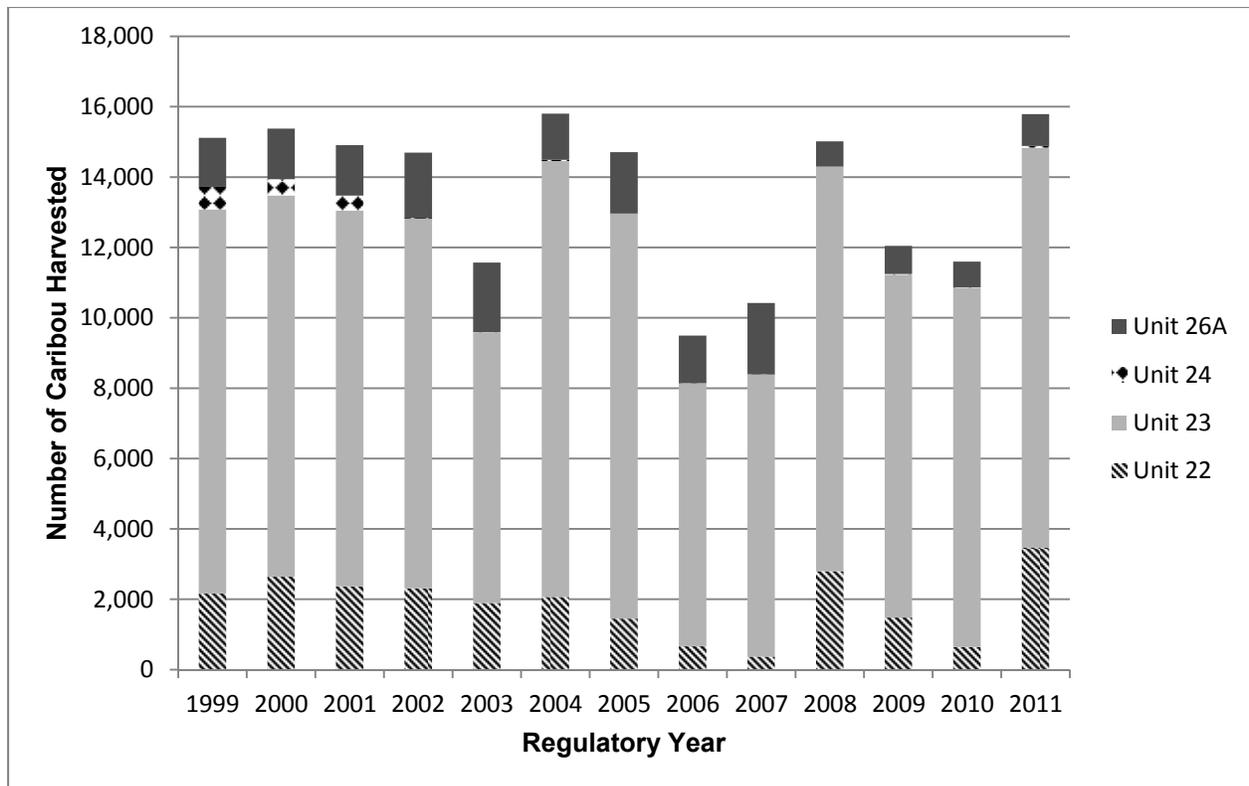


Figure 9. Total (resident and non-resident) estimated annual harvest of Western Arctic caribou by unit (Dau 2009, 2013). Unit 21D not included (average harvest is 0-10 caribou/year).

Other Alternatives Considered

WP16-43 and WP16-45 request changes to hunt area descriptors and areas open to caribou hunting in Unit 22 to mitigate user conflicts and the incidental take of reindeer. One alternative considered was to align the hunt area descriptors proposed in WP16-43 and WP16-45 with this proposal (WP16-37). However, considering the different intents of the proposals and the potential for the exact hunt areas descriptors to change through the review process, it was not deemed prudent at this time to reconcile these proposals. However, integrating the different hunt area descriptors and season dates requested by these proposals will be needed before the Board meets to take action on these proposals.

The North Slope Subsistence Regional Advisory Council (NSRAC) submitted Proposals WP16-63 and WP16-64 concerning caribou in Units 26A and 26B, respectively. The hunt areas identified by the NSRAC in Unit 26 do not align with the hunt areas requested by this proposal (WP16-37). Another alternative considered was to align the hunt areas between WP16-63, WP16-64, and WP16-37. However, alignment of hunt areas between the respective proposals is more appropriate after the affected Councils have had an opportunity to review and comment on proposals.

Table 3. Estimated caribou harvest of the Teshekpuk, Western Arctic and Central Arctic caribou herds during the 2010/2011 regulatory years in Unit 26A by federally qualified users (Parrett 2013, Dau 2013). Note: Due to the mixing of the herds, annual variation in the community harvest surveys and missing data, the percentages for each community do not add up to 100%.

Community	Human population ^a	Per capita caribou harvest ^{bc}	Approximate total community harvest	Estimated annual TCH harvest (%)	Estimated annual WACH harvest (%)	Estimated annual CACH harvest (%)
Anaktuvuk Pass	331	1.8	582	174 (30)	431 (80)	
Atkasuk	234	0.9	215	210 (98)	6 (2)	
Barrow	4,290	0.5	2,145	2,123 (97)	62 (3)	
Nuiqsut	411	1.1	468	403 (86)	3 (1)	36 (11)
Point Lay	191	1.3	247	49 (20)	120 (40)	
Point Hope	704		894	0	894 (100)	
Wainwright	559	1.3	710	426 (60)	48 (15)	
Total Harvest				3,387	1564	36
^a Population estimates averaged from the 2010 U.S. Census and 2012 Alaska Department of Commerce, Division of Community and Regional Affairs data ^b Citations associated with per-capita caribou harvest assessment by community can be found in Table 5 (Parrett 2011). ^c Sutherland (2005)						

Effects of the Proposal

If this proposal is adopted, Federally qualified subsistence users would have less opportunity to harvest caribou on Federal public lands in Units 21D, 22, 23, 24, 26A, and 26B. The caribou harvest limit in Unit 23 would be reduced from 15 per day to 5 per day and in Units 26A and 26B the harvest limit would be reduced from 10 per day to 5 per day. The reductions in the daily harvest limits and more restrictive harvest seasons for bulls and cows could reduce the potential harvest opportunities for Federally qualified subsistence users when caribou are available. The reduction on the take of calves is unlikely to have much effect on Federally qualified subsistence users since they rarely target calves.

Adopting this proposal would align State and Federal regulations, reducing regulatory complexity for users. Minimizing confusion among State and Federal regulations is desirable given the large and overlapping ranges of the WACH and TCH.

The benefits of these proposed regulations for the conservation of the WACH and TCH vary. The reduction in the harvest of cows with calves as recommended in Unit 26A from Jul. 16 to Oct. 15 is likely to increase calf survival. The restriction on the take of calves is likely to have little conservation effect because subsistence users rarely target calves. Efforts to reduce harvest of bulls and cows should help

reduce the overall caribou harvest for the declining TCH and WACH populations. Since cow mortality is one of the major contributing factors to the decline of WACH and TCH, any efforts to reduce cow mortality are recommended.

In Unit 23, that portion north of and including the Singoalik River drainage, the cow season is much longer (July 15-Apr. 30) than the cow season in Unit 23 remainder (Sept. 1-Mar. 31). Federally qualified subsistence users from locations outside of the hunt area may take advantage of this longer season resulting in increased competition for Point Hope subsistence users and disproportionate impacts to the caribou in that area.

OSM PRELIMINARY CONCLUSION

Support Proposal WP16-37 **with modification** to prohibit the harvest of cows with calves in Units 21D, 22, 23, 24, 26A and 26B, prohibit the harvest of calves in Unit 26B, extend the bull season in Units 26A and 26B, modify the cow season in Unit 26B, modify the hunt area descriptor in Unit 24, modify the harvest limit in Unit 26B, simplify and clarify the regulatory language, and delete regulatory language regarding to be announced seasons for Units 21D and 22 and delegate authority to Federal land managers to announce seasons via delegation of authority letters only (**Appendices 1-4**).

The modified regulations should read:

Unit 21D—Caribou

Unit 21D—north of the Yukon River and east of the Koyukuk River—caribou may be taken during a winter season to be announced by the Refuge Manager of the Koyukuk/Nowitna National Wildlife Refuge-Manager and the BLM Central Yukon Field Office Manager, in-consultation with ADF&G and the Chairs of the Western Interior Subsistence Regional Advisory Council, and the Middle Yukon and Ruby Fish and Game Advisory Committees. *Winter season to be announced.*

Unit 21D, remainder—5 caribou per day, as follows: ~~however, cow caribou may not be taken May 16 June 30.~~ *July 1–June 30.*

However, calves may not be taken

Bulls may be harvested

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

Cows may be harvested

However, cows accompanied by calves may not be taken Sept. 1-Oct. 15.

Sept. 1-Mar. 31.

Unit 22—Caribou

Unit 22B, that portion west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage—5 caribou per day, as follows:

However, calves may not be taken

Bulls may be harvested

*Oct. 1-Oct. 14
Feb. 1-Apr. 30.*

Cows may be harvested

However, cows accompanied by calves may not be taken Oct. 1-Oct. 15.

Oct. 1-Mar. 31

5 caribou per day; however, calves may not be taken; Cows may not be taken April 1-Aug. 31; Bulls may not be taken Oct. 15-Jan. 31.

May 1–Sept. 30, a season may be opened by announcement announced by the Anchorage Field Office Manager of the BLM, in consultation with ADF&G.

Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin River drainage (excluding the Pilgrim River drainage), American, and the Agiapuk River Drainages, including the tributaries, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day, as follows: ; however, cow caribou may not be taken May 16–June 30.

July 1–June 30.

However, calves may not be taken

Bulls may be harvested

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

Cows may be harvested

However, cows accompanied by calves may not be taken Sept. 1-Oct. 15.

Sept. 1-Mar. 31.

Unit 22D, that portion in the Pilgrim River Drainage—5 caribou per

day as follows:

However, calves may not be taken

Bulls may be harvested

*Oct. 1-Oct. 14
Feb. 1-Apr. 30*

Cows may be harvested

Oct. 1-Mar. 31

However, cows accompanied by calves may not be taken Oct. 1-Oct. 15.

5 caribou per day; however, cows may not be taken April 1-Aug. 31.

*May 1 – Sept. 30
Season may be announced*

Unit 22 remainder—5 caribou per day; however, calves may not be taken; cows may not be taken Apr. 1-Aug. 31; cows accompanied by calves may not be taken Sept. 1-Oct. 15; bulls may not be taken Oct. 15-Jan. 31.

*~~No Federal open season~~
Season may be announced*

Unit 23—Caribou

Unit 23, that portion north of and including the Singoalik River drainage—155 caribou per day as follows: ; however, cow caribou may not be taken May 16 June 30

~~July 1 June 30.~~

However, calves may not be taken

Bulls may be harvested

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

Cows may be harvested

July 15-Apr. 30

However, cows accompanied by calves may not be taken July 15-Oct. 14.

Unit 23 remainder—5 caribou per day, as follows:

However, calves may not be taken

Bulls may be harvested

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

Cows may be harvested

Sept. 1-Mar. 31.

However, cows accompanied by calves may not be taken Sept. 1-Oct. 14.

Unit 24—Caribou

Unit 24A—south of the south bank of the Kanuti River—1 caribou Aug. 10-Mar. 31

Unit 24B—that portion south of the south bank of the Kanuti River, upstream from and including that portion of the Kanuti-Kilolitna River drainage, bounded by the southeast bank of the Kodosin-Nolitna Creek, then downstream along the east bank of the Kanuti-Kilolitna River to its confluence with the Kanuti River—1 caribou. Aug. 10–Mar. 31.

Unit 24 that portion north of (and including) the Kanuti River in Units 24A and 24B and that portion north of the Koyukuk River downstream from the confluence with the Kanuti River in Unit 24B to the Unit 24C boundary. remainder—5 caribou per day as follows; however, cow-caribou may not be taken May 16–June 30. ~~July 1–June 30.~~

However, calves may not be taken

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

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

Units 24C, 24D—5 caribou per day as follows:

However, calves may not be taken

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

Cows may be harvested Sept. 1-Mar. 31
However, cows accompanied by calves may not be taken Sept. 1-Oct. 14.

Unit 26—Caribou

Unit 26A, that portion of the Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River drainage—~~10~~ 5 caribou per day as follows: ; however, cow-caribou may not be taken May 16–June 30. July 1–June 30.

However, calves may not be taken

Bulls may be harvested

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

Cows may be harvested

July 15-Apr. 30.

However, cows accompanied by calves may not be taken July 15-Oct. 15.

Unit 26A remainder

Calves may not be taken

5 Bulls per day may be harvested

*July 1-Oct. 14
Dec. 6-June 30*

3 cows per day may be harvested

July 16-Mar. 15

However, cows accompanied by calves may not be taken July 16-Oct. 15

Unit 26B, Northwest portion: north of 69° 30' N. lat and west of the east bank of the Kuparuk River to a point at 70° 10' N. lat., 149° 04' W. long, then west approximately 22 miles to 70° 10' N. lat. And 149° 56' W. long., then following the east bank of the Kalubik River to the Arctic Ocean—5 caribou per day; however, cows may not be taken May 16-June 30; Cows accompanied by calves may not be taken July 1-Oct. 15; Calves may not be taken.

July 1-June 30

Unit 26B, that portion south of 69° 30' N. lat. and west of the Dalton Highway—5 caribou per day as follows:

However, calves may not be taken

Bulls may be harvested

*July 1-Oct. 14
Dec. 10-June 30*

Cows may be harvested

Oct. 14-Apr. 30

Unit 26B, that portion south of 69° 30' N. lat. and east of the Dalton Highway—5 caribou per day; however, cows may not be taken from May 16-June 30; Cows accompanied by calves may not be taken July 1-Oct. 15.

July 1-June 30

Unit 26B remainder—105 caribou per day;

*However, calves may not be taken—cow caribou may be taken only from
Oct. 1–Apr. 30.*

Bulls may be harvested

July 1–~~June 30~~ Apr. 30

Cows may be harvested

Oct. 14–Apr. 30

*You may not transport more than 5 caribou per regulatory year from
Unit 26 except to the community of Anaktuvuk Pass.*

Justification

The precipitous decline of the caribou herds in northern and western Alaska warrant strong measures to ensure the conservation of these populations. Since 2008, the Teshekpuk and Western Arctic caribou populations have declined approximately 50%. Low calf survival and recruitment combined with increasing adult mortality are contributing factors to the overall population decline. In addition, current harvest rates including the taking of cows accompanied by calves, if allowed to continue, could prolong or worsen the current decline, and hamper recovery.

The Alaska Board of Game recently responded to these population concerns by passing restrictions to caribou hunting under their regulations for the 2015 regulatory year. General alignment of the State and Federal regulations will provide for a consistent management approach to conservation of these populations. Additionally, it will reduce the regulatory complexity for Federally qualified subsistence users. Minimizing confusion among State and Federal regulations is desirable given the large and overlapping ranges of the WACH and TCH. Overall, coordination of State and Federal conservation efforts will provide an opportunity to evaluate the effectiveness of reducing the caribou harvest in slowing down or reversing the population declines in the TCH and WACH. The restrictions proposed by this proposal for the WACH are also supported by management recommendations outlined in the Western Arctic Herd Management Plan (WACH Working Group 2011).

Two important conservation measures that can be taken to address the declining populations of the WACH and TCH are to increase calf survival and recruitment and reduce adult cow mortality. To address these conservation measures, cow harvest seasons have been shortened and regulations to protect cows with calves during their first six months have been incorporated into this proposal for Units 21D, 22, 23, 24, 26A, and 26B. These measures protect cows with calves while the calves are still nursing as orphaning calves before weaning decreases their chances of survival (Rughetti and Festa-Bianchet 2014, July 2000, Holand et al. 2012). Additionally, over summer calf survival in the WACH has decreased since 2003, ultimately leading to decreased recruitment into the herd. Prohibiting the take of cows with calves during the summer may improve over summer calf survival.

Modification of the hunt area descriptor in Unit 24B clarifies which parts of Unit 24B are included in the

regulations. The State's hunt area descriptor for Unit 24B is incomplete and leaves that portion north of the Koyukuk River downstream from the confluence with the Kanuti River in an ambiguous management unit.

The modified opening date of Dec. 6 for caribou in Unit 26A was specifically requested by the NSRAC as bull caribou are considered edible by then. This modification provides an additional three weeks of harvest opportunity to Federally qualified subsistence users.

The change in the bull season in Unit 26B from the proposed May 16-Oct. 10 (current State regulations) to the modified Dec. 10-Oct. 14 aligns with the bull season requested by the NSRAC in WP16-64. The proposed season dates (current State regulations) prohibited the take of bulls during late winter and early spring, which is unnecessarily restrictive. The modified bull season dates prohibit the take of bulls during rut when their meat is inedible.

The change in the cow season in Unit 26B from the proposed July 1-Oct. 10 (current State regulations) to the modified Oct. 14-Apr. 30 affords better protection for cows and cows with calves than the newly adopted State regulations. The proposed season allowed the take of cows when calves are still less than 6 months old, which may reduce recruitment and prohibited the take of cows in late winter and early spring, which is unnecessarily restrictive.

The change in the harvest limit for portions of Unit 26B from 5 caribou/season (current State regulations) to 5 caribou/day affords more harvest opportunity to Federally qualified subsistence users, aligns with the harvest limit proposed by the NSRAC (WP16-64), and is more consistent with the harvest limits of other units.

Simplifying the regulatory language reduces confusion for users. Creation of a delegation of authority letter for the Federal land manager will simplify regulations and allow for management flexibility through adjustment of in-season hunt parameters.

LITERATURE CITED

Braem, N.M., S. Pedersen, J. Simon, D. Koster, T. Kaleak, P. Leavitt, J. Paktotak, and p. Neakok. 2011. Monitoring of caribou harvests in the National petroleum Reserve in Alaska: Atqusuk, Barrow, and Nuiqsut, 2003-2007. Alaska Department of the Fish and Game, Division of the Subsistence Technical Paper No 361, ADF&G, Fairbanks, AK

Bureau of Land Management. 1998. Northeast National Petroleum Reserve—Alaska: final integrated activity plan/environmental impact statement. Department of Interior, BLM, Anchorage, AK.

Bureau of Land Management. 2008. Northeast National Petroleum Reserve—Alaska: supplemental integrated activity plan/environmental impact statement. Department of Interior, BLM, Anchorage, AK.

Caribou Trails 2014. News from the Western Arctic Caribou Herd Working Goup. Western Arctic Caribou Herd Working Group, Nome, AK. Issue 14.
http://westernarcticcaribou.org/wp-content/uploads/2014/07/CT2014_FINAL_lowres.pdf. Retrieved: June 23, 2015.

- Carroll, G. 2007. Unit 26A, Teshekpuk caribou herd. Pages 262-283 in P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2004–30 June 2006. Alaska Department of Fish and Game. Project 3.0. Juneau, AK.
- Carroll, G. M. 2015. Wildlife Biologist. Personal communication. email, in-person. ADF&G. Barrow, AK.
- Dau, J. 2009. Units 21D, 22A, 22B, 22C, 22D, 22E, 23, 24, and 26A in Caribou survey–inventory management report. Pages 176-239 in P. Harper, editor. Caribou management report of survey and inventory activities July 1, 2006– June 30, 2008. ADF&G. Juneau, AK
- Dau, J. 2011. Units 21D, 22A, 22B, 22C, 22D, 22E, 23, 24, and 26A caribou management report. Pages 187-250 in P. Harper, editor. Caribou management report of survey and inventory activities July 1, 2008–30 June 30, 2010. ADF&G. Juneau, AK.
- Dau, J. 2013. Units 21D, 22A, 22B, 22C, 22D, 22E, 23, 24, and 26A caribou management report. Pages 201-280 in P. Harper, editor. Caribou management report of survey and inventory activities July 1, 2010–30 June 30, 2012. ADF&G. Juneau, AK.
- Dau, J. 2014. Wildlife Biologist. Personal communication. Information, including a power point presentation, presented at the Western Arctic Caribou Herd (WACH) Working Group Meeting, December 17-18, 2014. Anchorage, Alaska. ADF&G. Nome, AK.
- FWS. 1991. Staff analysis P91-132. Pages 67-68 in Federal Subsistence Board Meeting materials March 4-8, 1991. Office of Subsistence Management, USFWS. Anchorage, AK. 246pp.
- FWS. 1992. Staff analysis S92-06. Office of Subsistence Management, USFWS. Anchorage, AK. 246pp.
- FWS. 1994. Staff analysis P94-63A. Pages 519-523 in Federal Subsistence Board Meeting materials April 1994. Office of Subsistence Management, USFWS. Anchorage, AK. 726pp.
- FWS. 1995a. Staff analysis P97–051. Pages 334-339 in Federal Subsistence Board Meeting materials April 10-14, 1995. Office of Subsistence Management, USFWS. Anchorage, AK. 398pp.
- FWS. 1995b. Staff analysis P95–062. Pages 399-404 in Federal Subsistence Board Meeting materials April 10-14, 1995. Office of Subsistence Management, USFWS. Anchorage, AK. 488pp.
- FWS. 1995c. Staff analysis P95–064/065. Pages 411-417 in Federal Subsistence Board Meeting materials April 10-14, 1995. Office of Subsistence Management, USFWS. Anchorage, AK. 488pp.
- FWS. 1996. Staff analysis P96-049. Pages 602-615 in Federal Subsistence Board Meeting materials April 29-May 3, 1996. Office of Subsistence Management, USFWS. Anchorage, AK. 784pp.
- FWS. 1997a. Staff analysis P97–054. Pages 745-754 in Federal Subsistence Board Meeting materials April 7-11, 1997. Office of Subsistence Management, USFWS. Anchorage, AK. 1034pp.
- FWS. 1997b. Staff analysis P97–066. Pages 879-895 in Federal Subsistence Board Meeting materials April 7-11, 1997. Office of Subsistence Management, USFWS. Anchorage, AK. 1034pp.

- FWS. 2000a. Staff analysis P00–053. Pages 563-573 in Federal Subsistence Board Meeting materials May 2-4, 2000. Office of Subsistence Management, USFWS. Anchorage, AK. 661pp.
- FWS. 2000b. Staff analysis P00–044. Pages 466-475 in Federal Subsistence Board Meeting materials May 2-4, 2000. Office of Subsistence Management, USFWS. Anchorage, AK. 661pp.
- FWS. 2003. Staff analysis P03–040. Pages 106-115 in Federal Subsistence Board Meeting materials May 20-22, 2003. Office of Subsistence Management, USFWS. Anchorage, AK. 765pp.
- FWS. 2006a. Staff analysis WP06-37. Pages 368-376 in Federal Subsistence Board Meeting materials May 16-18, 2006. Office of Subsistence Management, USFWS. Anchorage, AK. 579 pp.
- FWS. 2006b. Staff analysis WP06-65. Pages 520-528 in Federal Subsistence Board Meeting materials May 16-18, 2006. Office of Subsistence Management, USFWS. Anchorage, AK. 579 pp.
- FWS. 2007. Staff analysis WP07-33. Pages 363-375 in Federal Subsistence Board Meeting materials April 30-May 2, 2007. Office of Subsistence Management, USFWS. Anchorage, AK. 643 pp.
- Georgette, S. 1994. Summary of Western Arctic Caribou Herd overlays (1984-1992) and comparison with harvest data from other sources. Unpublished manuscript. Alaska Department of Fish and Game, Division of Subsistence, Fairbanks, AK. 26 pp.
- Gunn, A. 2001. Voles, lemmings and caribou – population cycles revisited? *Rangifer*, Special Issue. 14: 105-111.
- Holand, O., R.B. Weladji, A. Mysterud, K. Roed, E. Reimers, M. Nieminen. 2012. Induced orphaning reveals post-weaning maternal care in reindeer. *European Journal of Wildlife Research*. 58: 589-596.
- Jandt, R.R. 1998. Ray Mountain caribou: Distribution, movements, and seasonal use areas, 1994-1997. BLM–Alaska Open File Report 67. Anchorage, AK. 39pp.
- Joly, K. 2000. Orphan Caribou, *Rangifer tarandus*, Calves: A re-evaluation of overwinter survival data. *The Canadian Field Naturalist*. 114: 322-323.
- Joly, K., R.R. Jandt, C.R. Meyers, and J.M. Cole. 2007. Changes in vegetative cover on the Western Arctic herd winter range from 1981–2005: potential effects of grazing and climate change. *Rangifer* Special Issue 17:199-207.
- Joly, K. 2015. Wildlife Biologist, Gates of the Arctic National Park and Preserve. Personal communication. email NPS. Fairbanks, AK.
- Lenart, E. A. 2011. Units 26B and 26C caribou. Pages 315-345 in P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2008–30 June 2010. ADF&G. Project 3.0. Juneau, AK.
- Miller, F.L. 2003. Caribou (*Rangifer tarandus*). Pages 965-997 in Feldhamer, B.C. Thompson, and J.A. Chapman, eds. *Wild Mammals of North America- Biology, Management, and Conservation*. John Hopkins University Press. Baltimore, Maryland.
- Parrett, L.S. 2007. Summer ecology of the Teshekpuk Caribou Herd. M.S. Thesis. University of Alaska, Fairbanks. Fairbanks, AK. 161 pp.

- Parrett, L.S. 2009. Unit 26A, Teshekpuk caribou herd. Pages 246-278 in P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2006–30 June 2008. Alaska Department of Fish and Game, Project 3.0 Juneau, AK.
- Parrett, L.S. 2011. Units 26A, Teshekpuk caribou herd. Pages 283-314 in P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2008–30 June 2010. Alaska Department of Fish and Game. Project 3.0. Juneau, AK.
- Parrett, L.S. 2013. Unit 26A, Teshekpuk caribou herd. Pages 314-355 in P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2006–30 June 2008. Alaska Department of Fish and Game, species management report. ADF&G/DWC/SMR-2013-3, Juneau, AK.
- Parrett, L.S. 2015. Wildlife Biologist. Personal communication. email ADF&G. Fairbanks, AK.
- Person, B.T., A.K. Prichard, G.M. Carroll, D.A. Yokel, R.A. Suydam, and J.C. George. 2007. Distribution and movements of the Teshekpuk Caribou Herd 1990-2005: Prior to oil and gas development. *Arctic* 60(3):238-250.
- Rivest, L.P., S. Couturier, and H. Crepeau. 1998. Statistical methods for estimating caribou abundance using post-calving aggregations detected by radio telemetry. *Biometrics* 54:865-876.
- Russell, D.E., S.G. Fancy, K.R. Whitten, R.G. White. 1991. Overwinter survival of orphan caribou, *Rangifer tarandus*, calves. *Canadian Field Naturalist*. 105: 103-105.
- Rughetti, M., M. Festa-Bianchet. 2014. Effects of selective harvest of non-lactating females on chamois population dynamics. *Journal of Applied Ecology*. 51: 1075-1084.
- Smith, M, E. Witten, and W. Loya. 2015. <http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/alaska/explore/alaska-caribou-herd-analysis.pdf> Accessed April 2, 2015.
- Sutherland, R. 2005. Harvest estimates of the Western Arctic caribou herds, Alaska. Proceedings of the 10th North American Caribou Workshop, May 4-6, 2004. Girdwood, AK. *Rangifer Special Issue*:16:177-184.
- Taillon, J., V. Brodeur, M. Festa-Bianchet, S.D. Cote. 2011. Variation in body condition of migratory caribou at calving and weaning: which measures should we use? *Ecoscience*. 18(3): 295-303.
- Western Arctic Caribou Herd Working Group. 2011. Western Arctic Caribou Herd Cooperative Management Plan – Revised December 2011. Nome, AK 47 pp.
- Wilson, R.R., A.K. Prichard, L.S. Parrett, B.T. Person, G.M. Carroll, M.A. Smith, C.L. Rea, and D.A. Yokel. 2012. Summer resource selection and identification of important habitat prior to industrial development for the Teshekpuk Caribou herd in Northern Alaska. *PLOS ONE* 7(11): e48697.
- Yokel, D.A., A.K. Prichard, G. Carroll, L. Parrett, B. Person, C. Rea. 2009. Teshekpuk Caribou Herd movement through narrow corridors around Teshekpuk Lake, Alaska, *Alaska Park Science* 8(2):64-67.

Appendix 1

Refuge Manager
Koyukuk/Nowitna/Innoko National Wildlife Refuge
101 Front Street 287
Galena, Alaska 99741

Dear Refuge Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the Innoko National Wildlife Refuge Manager 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 Land Conservation Act (ANILCA) Title VIII jurisdiction within Unit 21D north of the Yukon River and east of the Koyukuk River as it applies to 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) and the Chair of the Western Interior Alaska Subsistence Regional Advisory Council (Council) to the extent possible. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair, and applicable Council members to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

DELEGATION OF AUTHORITY

1. Delegation: The Koyukuk/Nowitna/Innoko National Wildlife Refuge Manager is hereby delegated authority to issue emergency or temporary special actions affecting caribou on Federal lands as outlined under the **Scope of Delegation** below. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by regulation at 36 CFR 242.19 and 50 CFR 100.19.

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

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

- Announce season dates for the winter season for caribou on Federal public lands in Unit 21D north of the Yukon River and east of the Koyukuk River in consultation with ADF&G and the Chairs of the Western Interior Subsistence Regional Advisory Council, and the Middle Yukon and Ruby Fish and Game Advisory Committees.

This delegation may be exercised only when necessary to conserve caribou populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the population.

All other proposed changes to codified regulations, such as customary and traditional use determinations, adjustments to methods and means of take, or closures and restriction for take for only non-Federally qualified users shall be directed to the Federal Subsistence Board.

The Federal public lands subject to this delegated authority are those within Unit 21D north of the Yukon River and east of the Koyukuk River.

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

4. 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 review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 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 subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Federal Subsistence 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 the Office of Subsistence Management (OSM) no later than sixty days after development of the document.

You will notify OSM and coordinate with local ADF&G managers and the Chair of the Western Interior Alaska Subsistence Regional Advisory Council regarding special actions under consideration. 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 representatives. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal Managers, and the local Council representatives at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponent of the request immediately. A summary of special action requests and your resultant action must be provided to the coordinator of the appropriate Subsistence Regional Advisory 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 Federal Subsistence 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 Federal Subsistence 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.

5. Support Services: Administrative support for regulatory actions will be provided by the Office of Subsistence Management, U.S. Fish & Wildlife Service, Department of the Interior.

Sincerely,

Tim Towarak
Chair, Federal Subsistence Board

cc: Assistant Regional Director, Office of Subsistence Management
Deputy Assistant Regional Director, Office of Subsistence Management
Subsistence Council Coordinator, Office of Subsistence Management
Chair, Western Interior Alaska Regional Advisory Council
Commissioner, Alaska Department of Fish and Game
Federal Subsistence Liaison Team Leader, Alaska Department of Fish and Game
Federal Subsistence Board
Interagency Staff Committee
Administrative Record

Appendix 2

Field Office Manager
BLM Anchorage Field Office
470 BLM Rd.
Anchorage, Alaska 99507

Dear Field Office Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the BLM Anchorage Field Office Manager 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 Land Conservation Act (ANILCA) Title VIII jurisdiction within Unit 22B west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage as it applies to 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) and the Chair of the Western Interior Alaska Subsistence Regional Advisory Council (Council) to the extent possible. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair, and applicable Council members to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.

DELEGATION OF AUTHORITY

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

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

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

- You may open a season between May 1 and Sept. 3 for caribou on Federal public lands in Unit 22B west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk

River drainage upstream from and including the Libby River drainage in consultation with ADF&G.

This delegation may be exercised only when necessary to conserve caribou populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the population.

All other proposed changes to codified regulations, such as customary and traditional use determinations, adjustments to methods and means of take, or closures and restriction for take for only non-Federally qualified users shall be directed to the Federal Subsistence Board.

The Federal public lands subject to this delegated authority are those within Unit 22B west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage.

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

4. 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 review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 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 subsistence users and non-Federally qualified users. Requests not within your delegated authority will be forwarded to the Federal Subsistence 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 the Office of Subsistence Management (OSM) no later than sixty days after development of the document.

You will notify OSM and coordinate with local ADF&G managers and the Chair of the Western Interior Alaska Subsistence Regional Advisory Council regarding special actions under consideration. 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 representatives. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal Managers, and the local Council representatives at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponent of the request immediately. A summary of special action requests and your resultant action must be provided to the coordinator of the appropriate Subsistence Regional Advisory 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 Federal Subsistence 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 Federal Subsistence 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.

5. Support Services: Administrative support for regulatory actions will be provided by the Office of Subsistence Management, U.S. Fish & Wildlife Service, Department of the Interior.

Sincerely,

Tim Towarak
Chair, Federal Subsistence Board

cc: Assistant Regional Director, Office of Subsistence Management
Deputy Assistant Regional Director, Office of Subsistence Management
Subsistence Council Coordinator, Office of Subsistence Management
Chair, Seward Peninsula Regional Advisory Council
Commissioner, Alaska Department of Fish and Game
Federal Subsistence Liaison Team Leader, Alaska Department of Fish and Game
Federal Subsistence Board
Interagency Staff Committee
Administrative Record

FISHERIES RESOURCE MONITORING PROGRAM

BACKGROUND

Beginning in 1999, the Federal government assumed expanded management responsibility for subsistence fisheries on Federal public lands in Alaska under the authority of Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA). Expanded subsistence fisheries management introduced substantial new informational needs for the Federal system. Section 812 of ANILCA directs the Departments of the Interior and Agriculture, cooperating with the State of Alaska and other Federal agencies, to undertake research on fish and wildlife and subsistence uses on Federal public lands. To increase the quantity and quality of information available for management of subsistence fisheries, the Fisheries Resource Monitoring Program (Monitoring Program) was established within the Office of Subsistence Management (OSM). The Monitoring Program was envisioned as a collaborative interagency, interdisciplinary approach to enhance existing fisheries research, and effectively communicate information needed for subsistence fisheries management on Federal public lands.

Biennially, the Office of Subsistence Management announces a funding opportunity for investigation plans addressing subsistence fisheries on Federal public lands. The 2016 Notice of Funding Availability focused on priority information needs developed either by strategic planning efforts or subject matter specialist input, followed by review and comment by the Subsistence Regional Advisory Councils. The Monitoring Program is administered through regions, which were developed to match subsistence management regulations, as well as stock, harvest, and community issues common to a geographic area. The six Monitoring Program regions are shown in **Figure 1**.

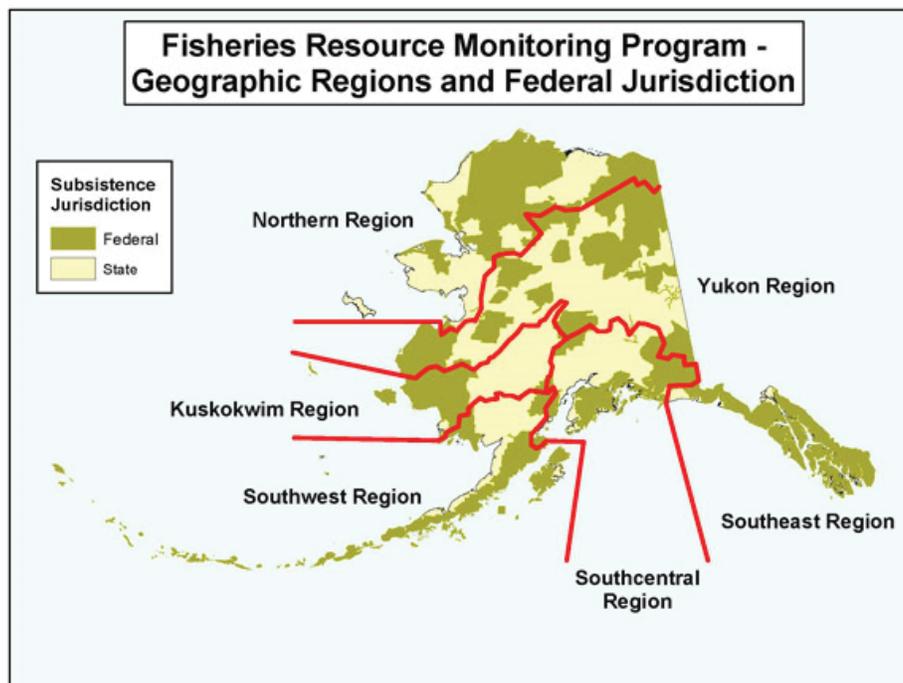


Figure 1. Geographic Regions for the Fisheries Resource Monitoring Program.

To implement the Monitoring Program, a collaborative approach is utilized in which five Federal agencies (U.S. Fish and Wildlife Service, Bureau of Land Management, National Park Service, Bureau of Indian Affairs, and U.S. Forest Service) work with the Alaska Department of Fish and Game, Regional Advisory Councils, Alaska Native Organizations, and other organizations. An interagency Technical Review Committee provides scientific evaluation of investigation plans submitted for funding consideration. The Regional Advisory Councils provide review and recommendations, and public comment is invited. The Interagency Staff Committee also provides recommendations. The Federal Subsistence Board takes into consideration recommendations and comments from the process, and forwards a Monitoring Plan to the Assistant Regional Director of OSM for final approval.

Strategic plans sponsored by the Monitoring Program have been developed by workgroups of fisheries managers, researchers, Federal Subsistence Regional Advisory Councils, and by other stakeholders for three of the six regions: Southeast, Southcentral (excluding Cook Inlet Area), and Southwest Alaska. These plans identify prioritized information needs for each major subsistence fishery and are available for viewing on the Federal Subsistence Management, Fisheries Resource Monitoring Program website (<http://www.doi.gov/subsistence/index.cfm>). Individual copies of plans are available by placing a request to the Office of Subsistence Management. Independent strategic plans were completed for the Yukon and Kuskokwim regions for salmon in 2005. For the Northern Region and the Cook Inlet Area, assessments of priority information needs were developed from experts on the Regional Advisory Councils, the Technical Review Committee, Federal and State managers, and staff from the Office of Subsistence Management. Finally, a strategic plan specifically for research on whitefish species in the Yukon and Kuskokwim River drainages was completed in spring 2011 as a result of efforts supported through Monitoring Program project 08-206 (Yukon and Kuskokwim Coregonid Strategic Plan). Currently, all regional strategic plans need to be updated. The OSM, in collaboration with Regional Advisory Councils and agency partners, will be exploring methods to update these plans, develop a schedule into the future and ensure they are current and represent the most up-to-date information about subsistence needs and concerns throughout the state.

HISTORICAL OVERVIEW

The Monitoring Program was first implemented in 2000, with an initial allocation of \$5 million. Since 2001, a total of \$103.6 million has been allocated for the Monitoring Program to fund a total of 431 projects (**Figure 2; Figure 3**).

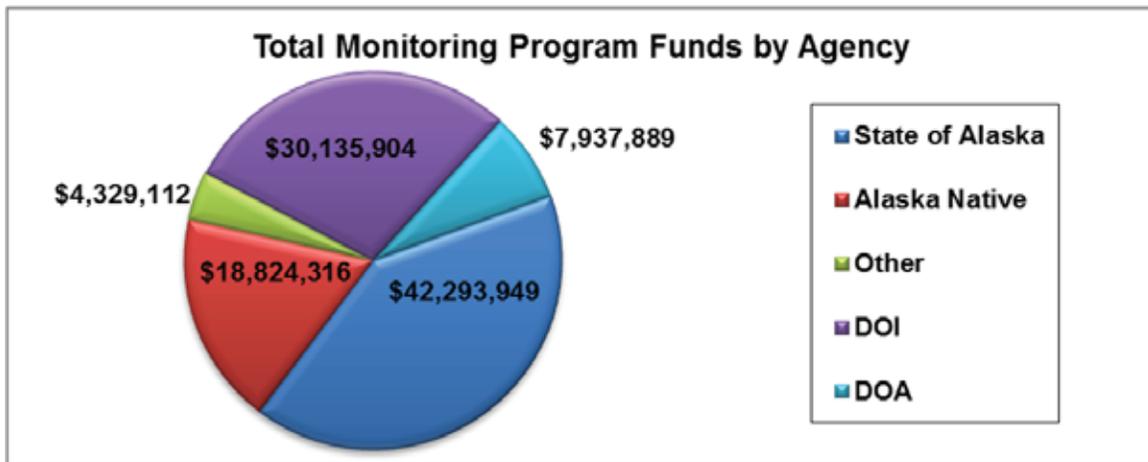


Figure 2. Total Project funds through the Monitoring Program from 2000 through 2014 listed by the organization of the Principal Investigator for projects funded. The funds listed are the total approved funds from 2000 to 2014. DOI = Department of Interior and DOA = Department of Agriculture.

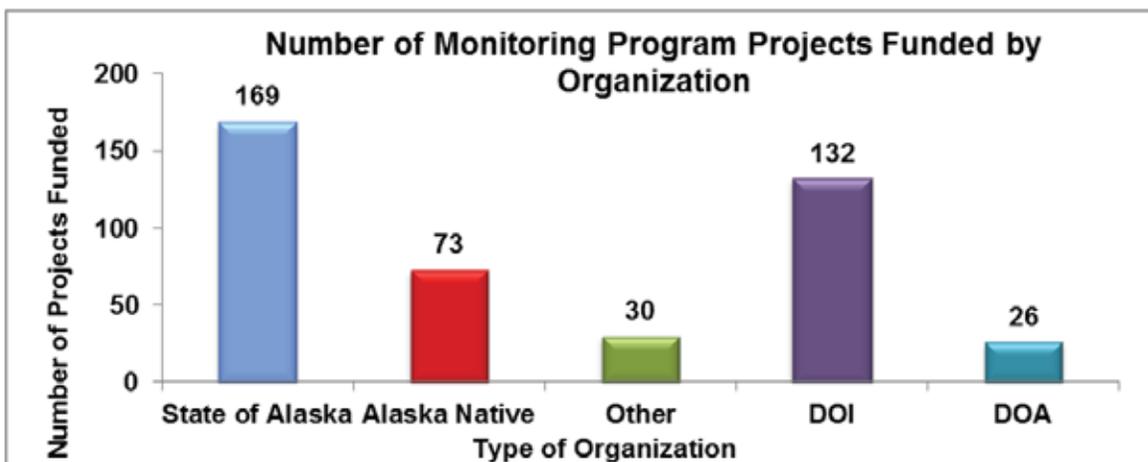


Figure 3. The total number of projects funded through the Monitoring Program from 2000 through 2014 listed by the organization of Principal Investigator. DOI = Department of Interior and DOA = Department of Agriculture.

During each biennial 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**) and data type. 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 with subsistence harvest. Budget guidelines provide an initial target for planning; however they are not final allocations and will be adjusted annually as needed (**Figure 5**; **Figure 6**).

Table 1. Regional allocation guideline for Fisheries Resource Monitoring Funds.

Region	Department of Interior	Department of Agriculture
	Funds	Funds
Northern	17%	0%
Yukon	29%	0%
Kuskokwim	29%	0%
Southwest	15%	0%
Southcentral	5%	33%
Southeast	0%	67%
Inter-regional	5%	0%

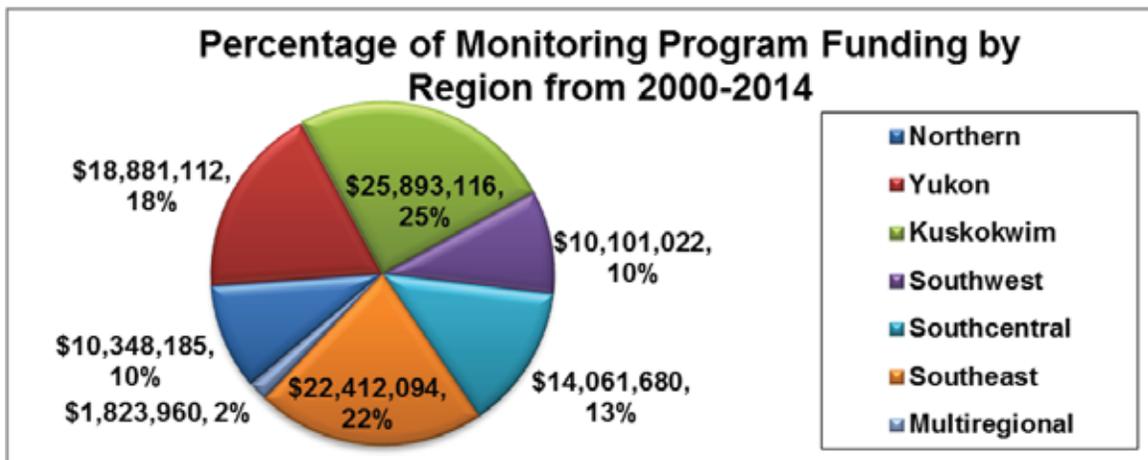


Figure 4. Total Project funding by Geographic Region from 2000 through 2014.

Two primary types of research projects are solicited for the Monitoring Program including Harvest Monitoring/Traditional Ecological Knowledge (HMTEK) and Stock, Status and Trends (SST), although projects that combine these approaches are also encouraged. Project funding by type is shown in **Figure 5**. Definitions of the two project types are listed below:

- **Stock Status and Trends Studies (SST)** - These projects address abundance, composition, timing, behavior, or status of fish populations that sustain subsistence fisheries with linkage to Federal public lands.
- **Harvest Monitoring and Traditional Ecological Knowledge (HMTEK)** -These projects address assessment of subsistence fisheries including quantification of harvest and effort, and description and assessment of fishing and use patterns.

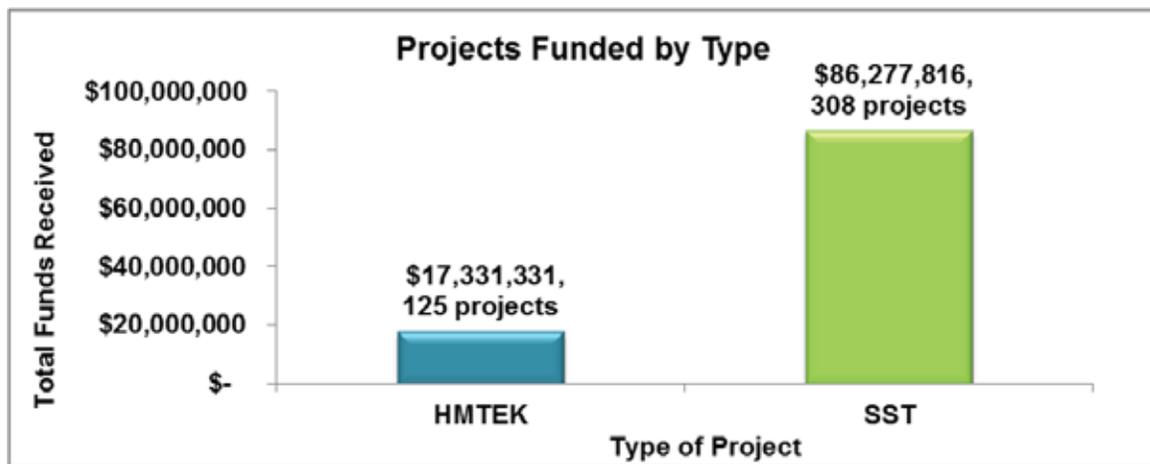


Figure 5. Total Project funding by type from 2000 through 2014. HMTEK = Harvest Monitoring/Traditional Ecological Knowledge and SST = Stock, Status and Trends.

PROJECT EVALUATION PROCESS

In the current climate of increasing conservation concerns and subsistence needs, it is imperative that the Monitoring Program prioritizes high quality projects that address critical subsistence questions. Several changes were implemented in the 2016 Monitoring Program to address the challenges facing Federal subsistence users across the state. These changes will enhance the Monitoring Program by increasing overall program transparency, identifying and funding high quality and high priority research projects and maximizing funding opportunities. This will allow the Monitoring Program to make substantial contributions to Federal subsistence users and to the Federal Subsistence Management Program.

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 Program, technically sound, administratively competent, promote partnerships and capacity building, and are cost effective. Projects are evaluated by a panel called the Technical Review Committee (TRC). This committee is a standing interagency committee of senior technical experts that is foundational to the credibility and scientific integrity of the evaluation process for projects funded by the Monitoring Program. The TRC reviews, evaluates, and make recommendations about proposed projects, consistent with the mission of the Monitoring Program. Fisheries and Anthropology staff from the OSM provide support for the TRC. Recommendations from the TRC provide the basis for further comments from Councils, the public, the Interagency Staff Committee (ISC), and the Federal Subsistence Board, with final approval of the Monitoring Plan by the Assistant Regional Director of OSM.

The 2016 Monitoring Program changes involve how projects are submitted and also how they are reviewed. To be considered for funding under the Monitoring Program, a proposed project must have a linkage to Federal subsistence fishery management. This means that a proposed project must have a direct association to a Federal subsistence fishery, and that either the subsistence fishery or fish stocks in question must occur in or pass through waters within or adjacent to Federal public lands. Complete project packages need to be submitted on time and must address five specific criteria (see below) in order to be considered a high quality project. Addressing only some of the criteria will not guarantee a

successful project submission. Additionally, project review has been changed to aid transparency and consistency throughout the process. Key modifications include specific guidelines for assessing how and whether a proposed project has addressed each of the five criteria, receiving a single consolidated review from each participating agency, and requiring that agencies recuse themselves from providing reviews for projects involving their agency.

Five criteria are used to evaluate project proposals:

1. **Strategic Priority** - Studies must be responsive to identified issues and priority information needs. 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 include a synthesis of project findings in their investigation plans. This synthesis should clearly and concisely document project performance, key findings, and uses of collected information for Federal subsistence management.
 - a. *Federal linkage* – Study must have a direct association to a subsistence fishery within Federal Subsistence Management Program jurisdiction. That is, the subsistence fishery or stocks in question must occur in waters within or adjacent to Federal public lands (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).
 - b. *Conservation Mandate* – Risk to the conservation of species and populations that support subsistence fisheries and risk to public lands purposes.
 - c. *Allocation Priority* – Risk of failure to provide for Federal subsistence uses.
 - d. *Data Gaps* – Amount of information available to support Federal subsistence management. A higher priority is given where a lack of information exists.
 - e. *Management Application* – The application of proposed project data must be clearly explained and linked to current Federal management strategies and needs.
 - f. *Role of Resource* – Importance of a species or a population to a Federal subsistence harvest (e.g. number of subsistence users affected, quantity of subsistence harvest), and qualitative significance (e.g. cultural value, unique seasonal role).
 - g. *Local Concern* – Level of user concern over Federal subsistence harvests (e.g., allocation, competing uses, changes in populations).
2. **Technical-Scientific Merit** - Technical quality of the study design must meet accepted standards for information collection, compilation, analysis, and reporting. Studies must have clear

objectives, appropriate sampling design, correct analytical procedures, and specified progress, annual and final reports.

3. **Investigator Ability and Resources** - Investigators must demonstrate that they are capable of successfully completing the proposed study by providing information on the ability (training, education, and experience) and resources (technical and administrative) they possess to conduct the work. Applicants who have received funding in the past will be evaluated and ranked on their past performance, including meeting deliverable 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-Capacity Building** - Partnerships and capacity building are priorities of the Monitoring Program. ANILCA mandates that rural residents be afforded a meaningful role in the management of Federal subsistence fisheries, and the Monitoring Program offers opportunities for partnerships and participation to local residents in monitoring and research. Investigators are requested to include a strategy for integrating local capacity development in their investigation plans. Investigators must not only inform communities and regional organizations in the area where work is to be conducted about their project plans, but must also consult and communicate with local communities to ensure that local knowledge is utilized and concerns are addressed. Letters of support from local organizations add to the strength of a proposal. 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.

Investigators are encouraged to develop the highest level of tribal, community and regional involvement that is practical. Investigators must demonstrate that capacity building has already reached the communication or partnership development stage during proposal development. Ideally, a strategy to increase capacity to higher levels will be provided in the project proposal, recognizing, however, that in some situations sustainable or higher level involvement may not be desired or feasible by the local organizations. Successful capacity building requires developing trust and dialogue among investigators, tribes, 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 should emphasize reciprocity and sharing of knowledge and information.

5. **Cost Benefit**

Cost/Price Factors – Applicant’s cost/price proposal will be evaluated for reasonableness. For a price to be reasonable, it must represent a price to the government that a prudent person would pay when consideration is given to prices in the market. Normally, price reasonableness is

established through adequate price competition, but may also be determined through cost and price analysis techniques.

Selection for Award – Applicant 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, taking into consideration the technical factors listed above and the total proposed price across all agreement periods. Matching funds will be factored into the review process based on overall value to the government.

POLICY AND FUNDING GUIDELINES

Several policies have been developed to aid in implementing funding. These policies include:

1. Projects of up to four years duration may be considered in any year’s monitoring plan.
2. Studies must not duplicate existing projects.
3. A majority of Monitoring Program funding will be dedicated to non-Federal agencies.
4. Long term projects will be considered on a case by case basis.
5. Activities that are not eligible for funding include:
 - a) habitat protection, mitigation, restoration, and enhancement;
 - b) hatchery propagation, restoration, enhancement, and supplementation;
 - c) contaminant assessment, evaluation, and monitoring; and
 - d) projects where the primary or only objective is outreach and education (for example, science camps, technician training, and intern programs), rather than information collection, are not eligible for funding under the Monitoring Program.

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.

2016 FISHERIES RESOURCE MONITORING PLAN

For 2016, a total of 46 investigation plans were received and 45 are considered eligible for funding (**Table 1**). One project was not eligible for funding because the project falls under habitat mitigation, restoration, and enhancement. Of the projects that are considered for funding, 33 are SST projects and 13 are HMTEK projects.

In 2016, the Department of the Interior, through the U.S. Fish and Wildlife Service, will provide up to \$2.0 million in funding and up to \$2.7 million for ongoing projects that were initially funded in 2014. The Department of Agriculture, through the U.S. Forest Service, has historically provided \$1.8 million annually, but the amount of 2016 funds available projects is uncertain. If the Department of Agriculture funding is not provided, none of the proposed projects submitted for the Southeast Region will be funded.

2016 DRAFT FISHERIES RESOURCE MONITORING PLAN YUKON REGION OVERVIEW

History of Projects Funded Under the Fisheries Resource Monitoring Program

Since the inception of the Monitoring Program in 2000, 106 projects have been undertaken in the Yukon Region for a total of \$18.7 million (**Figure 1**). Of these, the State of Alaska conducted 20 projects, the Department of the Interior conducted 51 projects, Alaska Native organizations conducted 10 projects, and other organizations conducted 25 projects (**Figure 2**). Seventy-one projects were Stock, Status, and Trends (SST), and 35 projects were Harvest Monitoring and Traditional Ecological Knowledge (HMTEK).

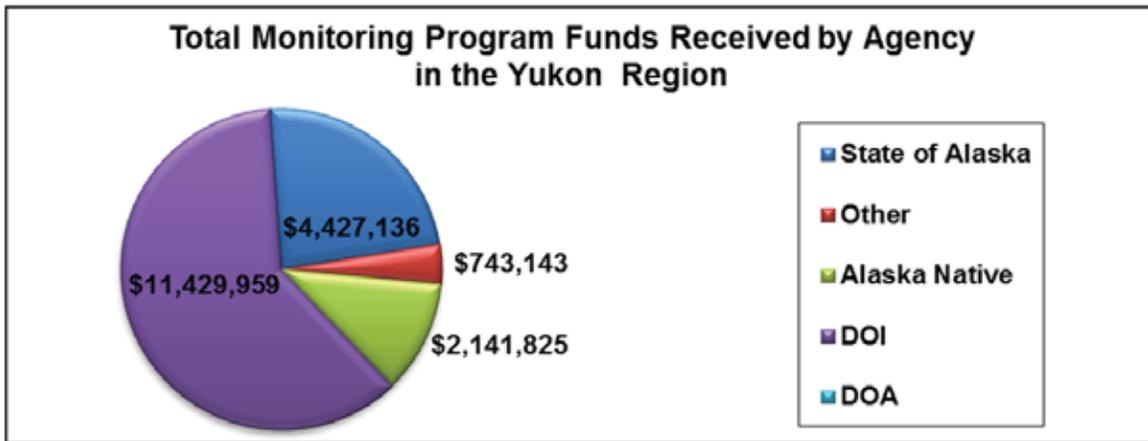


Figure 1. Monitoring Program funds received by agencies for projects in the Yukon Region. The funds listed are the total approved funds from 2000 to 2014. DOI = Department of Interior and DOA = Department of Agriculture.

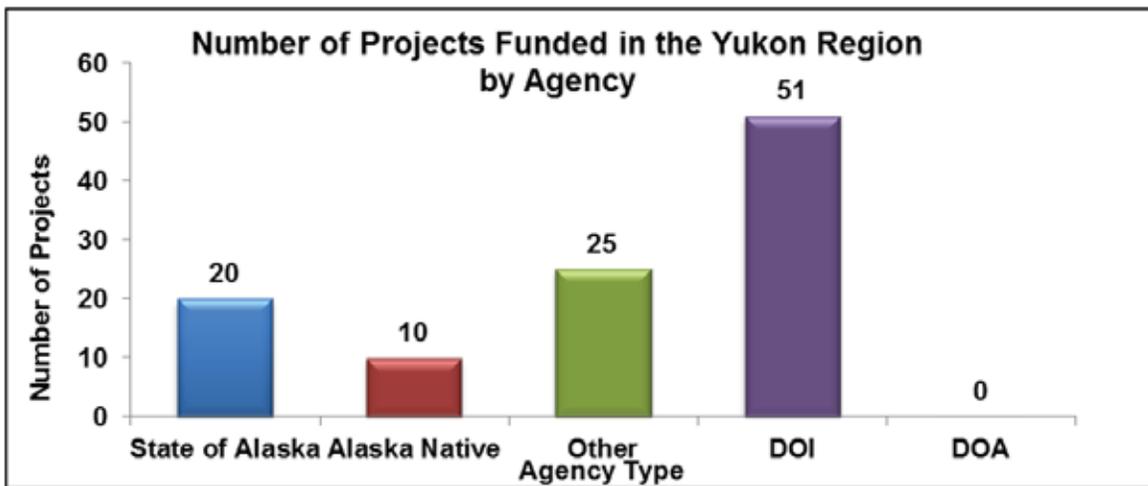


Figure 2. Total number of Monitoring Program projects funded, by agency, in the Yukon Region from 2000 to 2014. DOI = Department of Interior and DOA = Department of Agriculture.

2016 DRAFT YUKON REGION FISHERIES RESOURCE MONITORING PLAN

Priority Information Needs

The 2016 Notice of Funding Opportunity for the Yukon Region identified the following priority information needs:

- Reliable estimates of salmon escapements (for example, projects using weir, sonar, or mark-recapture methods).
- Geographic distribution of salmon and whitefish species. Of specific interest are the Nulato River, Salmon Fork of the Black River, Porcupine River and Chandalar River.
- An indexing method for estimating species-specific whitefish harvests on an annual basis for the Yukon drainage. Researchers should explore and evaluate an approach where sub-regional clusters of community harvests can be evaluated for regular surveying, with results being extrapolated to the rest of the cluster, contributing to drainage-wide harvest estimates.
- Methods for including “quality of escapement” measures (for example, potential egg deposition, sex and size composition of spawners, spawning habitat utilization) in establishing Chinook Salmon spawning goals and determining the reproductive potential and genetic diversity of spawning escapements.
- A review of escapement data collection methods throughout the Yukon drainage to ensure that test fisheries are accurately accounting for size distribution and abundance of fishes (e.g., are smaller Chinook Salmon being counted accurately).
- Assessment of incidental mortality with gillnets, with particular consideration for delayed mortality from entanglement or direct mortality from drop-outs (e.g. loss of Chinook salmon from 6” mesh chum fisheries).
- Harvest and spawning escapement changes through time in relation to changes in gillnet construction and use (for example, set versus drift fishing, mesh size changes) for Chinook Salmon subsistence harvests in the mainstem Yukon River.
- Bering cisco population assessment and monitoring.
- Burbot population assessments in lakes and rivers known to support subsistence fisheries.

Available Funds

Federal Subsistence Board guidelines direct initial distribution of funds among regions and data types. While regional budget guidelines provide an initial target for planning, they are not final allocations. Prior commitments to the 2014 Monitoring Program are up to \$2.7 million. The anticipated funding available for the 2016 Monitoring Program is up to \$2.0 million.

Technical Review Committee Proposal Ranking

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 2016 Monitoring Program, nine 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. The final score determined the ranking of each proposal within the region (**Table 1**). Projects that rate higher comprise a strong Monitoring Plan for the region by addressing strategically important information needs based on sound science and promote cooperative partnerships and capacity building. The projects listed are currently being considered for Funding in the 2016 Fisheries Resource Monitoring Program. Projects which were not eligible due to the nature of the activity are not included. For more information on projects submitted to the 2016 Fisheries Resource Monitoring Program please see the Executive Summaries in **Appendix A**.

Table 1. Technical Review Committee (TRC) Ranking for projects in the Yukon Region. Projects are listed by TRC Ranking and include the total matching funds, total funds requested, and the average annual request for each project submitted for 2016 Monitoring Program within the Yukon Region. The projects listed are currently being considered for Funding in the 2016 Fisheries Resource Monitoring Program. Projects which were not eligible due to the nature of the activity are not included.

Project Ranking	Project Number	Title	Total Matching Funds	Total Project Request	Average Annual Request
1	16-256	In-Season Salmon Management Teleconferences	\$0	\$74,015	\$18,504
2	16-255	Yukon River In-Season Community Surveyor Program	\$0	\$282,661	\$70,665
3	16-204	Abundance and Run Timing of Adult Salmon in Henshaw Creek, Kanuti National Wildlife Refuge, Alaska	\$48,800	\$637,035	\$212,345
4	16-205	Burbot Population Assessments in lakes of the Upper Tanana and Upper Yukon River Drainages, within the Boundaries of Wrangell-St. Elias National Park and Preserve	\$39,500	\$103,947	\$25,987
5	16-251	Characterization of seasonal habitats, migratory timing and spawning populations of mainstem Yukon River burbot and their subsistence use in the communities of Pilot Station, Galena and Fort Yukon Alaska	\$158,200	\$387,850	\$96,963
6	16-203	Estimation of Bering Cisco Spawning Abundance in the Upper Yukon Flats using a 2-Sample Mark-Recapture Experiment, 2016-2017	\$247,380	\$361,930	\$120,643
7	16-206	Abundance and Run Timing of Adult Salmon in Nulato River, Alaska.	\$75,040	\$888,224	\$222,056
8	16-201	Yukon Drainage Coho Radio Telemetry	\$40,000	\$327,183	\$81,796
9	16-202	Spatial and temporal variability in thermal refugia for fall chum salmon in Yukon River tributary streams: development of an integrated spawner and habitat monitoring program	\$0	\$1,012,676	\$253,169
Total			\$608,920	\$4,075,521	\$1,102,127

2016 PROJECT SUMMARY AND TRC JUSTIFICATION FOR PROJECT RANKING TRC

Ranking: 1
Project Number: 16-256
Project Title: In-Season Salmon Management Teleconferences

Project Summary: The principal investigator is requesting four years of funding for continuing the weekly teleconferences conducted during the salmon fisheries season, June – August. This project addresses a listed priority need by providing a forum for subsistence users in the Yukon River drainage in the United States and Canada to come together once a week and provide information concerning the state of the salmon fisheries in their area, with special emphasis on the Chinook salmon fishery. The Yukon River drainage area includes a nexus to Federal lands where salmon is an important resource for subsistence users. This teleconference has been in existence for 15 years and subsistence users, Tribal entities, processors, and resource managers who participate in the call can find out from others in the group how the salmon stocks are doing as they enter the river and migrate up to Canada. Information gained helps fisheries managers manage the salmon fisheries by providing current information on a time critical basis so adjustments can be made if necessary to harvest levels or allocation priorities. This project will help to incorporate local knowledge into fisheries management decisions.

TRC Justification: This project hosts weekly teleconferences, bringing people together from remote and rural villages that share salmon resources. They share information with each other, and also share firsthand knowledge about what is happening on the fishing grounds with the fisheries managers of the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service. The project has operated for 15 years and has become a fixture of in-season salmon management along the Yukon River. Study design is appropriate for involving local subsistence users and providing them a voice to participate in the management of the Chinook fishery. The budget and project duration are reasonable for the proposed work and to accomplish project objectives. Investigators are highly qualified and fully capable of addressing and achieving the objectives, and reporting results in a timely manner.

TRC Ranking: 2
Project Number: 16-255
Project Title: Yukon River In-Season Community Surveyor Program

Project Summary: The principal investigator is requesting four years of funding to conduct in-season surveys in ten rural villages which harvest fish in Federal waters under the subsistence priority. This project addresses the need to monitor the harvest of Chinook in the Yukon Region and the priority information need of the Multi-Regional Priority Information Need “*changes in subsistence fishery resources and uses in the context of climate change, where relevant, including, but not limited to, fishing seasons, species targeted, fishing locations, fish quality, harvest methods and means, and methods of preservation. Information gathered will help with in-season management of the Chinook fishery.*” This project will address these priority information needs by documenting subsistence fisher observations, and

their customary and traditional ecological knowledge related to their decreasing harvests of Chinook salmon and increasing harvests of other available species. The ten villages chosen for the project are spread out over a large area of the Alaskan Yukon drainage area.

TRC Justification: This project addresses the need for inclusive in-season management for Chinook salmon fisheries on the Yukon River. During the Chinook salmon season, YRDFA will hire community surveyors in 10 villages who will expand communication with fishers in their communities about important fishery information and will gather information from their fishermen that will provide managers with weekly information about fishers' concerns, observations, and ability to harvest salmon throughout the Alaskan portion of the Yukon River drainage. This project will encourage community members, from the ten villages to be surveyed, to become involved with the in-season teleconferences focused on gathering information in-season about the Chinook fishery. This project has the potential to involve many subsistence users at a minimal cost. Objectives are clear, measurable, and achievable.

TRC Ranking: 3

Project Number: 16-204

Project Title: Abundance and Run Timing of Adult Salmon in Henshaw Creek, Alaska

Project Summary: The principal investigator is requesting three years of funding, starting in 2017, for continuing the operation of the Henshaw Creek weir to monitor salmon escapement. Project 14-209 funds the project through 2016. This weir will be operated to determine daily escapement, run timing, and age, sex, and length composition of adult salmon. This project would also determine the number of resident fish passing the weir during the study period and serve as an outreach platform for Kanuti National Wildlife Refuge Staff and Tanana Chiefs Conference Partners Program fisheries biologists in the form of an onsite science camp.

TRC Justification: The proposal addresses one of the Yukon Region priority information needs listed in the 2016 Notice of Funding Availability. Information and data collected from the project will be applied to management of important subsistence salmon fisheries resources. The proposed investigation plan is technically sound and the project objectives are clear, measurable, and achievable. The TCC investigator has successfully led and managed this weir project funded by OSM under projects 12-202 and 14-209 within the past four years. The principal investigator is an Alaska Native organization. The cost of the project is somewhat high to achieve objectives comparable to the cost of other OSM-funded weirs in the Yukon Region. However, the TRC recognizes that the higher budget is due to the negotiated overhead rate of the TCC, considered as part of the price of capacity building.

This project is an example of how a rural Alaskan Native organization has increased its capacity in subsistence management. The Tanana Chiefs Conference serves as the primary investigator and hires and trains local residents as technicians on the project. Both of these actions have allowed rural residents and local communities a continued role in the management of important subsistence fisheries resources. The cost of operating the weir is high, with much of the budget attributed to staffing. It seems there are more technicians than necessary for just one weir. If the cost of weir operation continues to rise, additional sources of funding (cost sharing) may need to be identified in future years.

TRC Ranking: 4
Project Number: 16-205
Project Title: Burbot Population Assessments in Lakes of Upper Yukon River Drainage

Project Summary: The principal investigator is requesting four years of funding to acquire baseline Burbot abundance and population characteristics data for lakes of the Upper Tanana River and Upper Yukon River Drainages that lie within the northeastern portion of Wrangell-St. Elias National Park and Preserve and are known to support, or have the potential of supporting, subsistence Burbot fisheries. These lakes include, but not limited to, Grizzly, Beaver, Ptarmigan, Rock, Braye, and Carden Lakes. There is currently no baseline data of Burbot populations in any of these lakes, except for Grizzly Lake, where population assessments were performed in 2011 and 2014. The only other data available on fish in the other lakes is from a freshwater fish inventory from 2001. This project addresses one of the Yukon Region priority information needs listed in the 2016 Notice of Funding Availability, namely: “*Burbot population assessments in lakes and rivers known to support subsistence fisheries.*”

TRC Justification: This project directly addresses one of the Yukon Region priority information needs listed in the 2016 Notice of Funding Availability and an immediate conservation concern. The objectives are clear, measurable, and achievable. The methods have a rigorous sampling design that includes clear data collection, compilation, analysis and reporting procedures. These methods and have been successfully utilized for other Burbot abundance projects in the area. The cost of the project is reasonable to accomplish the objectives.

The TRC questioned the 2015 and 2016 assessments that are already planned; is it still a strategic priority in light of SAC funding? The investigation plan should have a better description of what lakes will be investigated and when. The plan is written loosely in this aspect and should have more detail.

TRC Ranking: 5
Project Number: 16-251
Project Title: Characterization of seasonal habitats, migratory timing and spawning populations of mainstem Yukon River burbot and their subsistence use in the communities of Pilot Station, Galena and Fort Yukon Alaska

Project Summary: The principal investigator is requesting four years of funding to characterize the scale of burbot migrations for those fish captured and tagged from the lower and middle Yukon River. In addition, this project will document TEK of burbot life history, and harvest and use practices in three mainstem Yukon River communities, Pilot Station, Galena, and Fort Yukon. This project has linkage to Federal public land and waters through the Yukon Delta and Yukon Flats National Wildlife Refuges and directly addresses the Yukon Region Priority Information Need for *burbot population assessments in lakes and rivers known to support subsistence fisheries*. Burbot are harvested for subsistence use throughout the Yukon drainage and their value for Federally-qualified subsistence users may increase as salmon runs decline.

TRC Justification: The project directly addresses priority information needs and involves a documented subsistence resource utilized by Federally-qualified subsistence users. The interdisciplinary nature of this

project is notable and the technical and scientific merit is high, as is principal investigator capacity. In addition, while not required, there is significant match in funding and existing resources that improves the cost/benefit of the project. The partnership and capacity building portion of the project is low to middling, and there are no other partners listed in the investigation plan. The project will contract local research assistants and proposes the hire of an ANSEP or college intern.

TRC Ranking: 6
Project Number: 16-203
Project Title: Bering Cisco Spawning Abundance in the Upper Yukon Flats

Project Summary: The principal investigator is requesting funding to conduct a two-year study to estimate abundance, and sex, age and length compositions of Bering Cisco in the Upper Yukon Flats area of the Yukon River, utilizing two-event Petersen mark-recapture techniques for a closed population. This project addresses 1) a specific recommendation for Bering cisco research outlined in the OSM whitefish strategic plan: priority #6, “*Quantitative spawning population abundance estimates with mark and recapture or DIDSON sonar projects,*” and 2) a priority information need for the Yukon Area in the 2016 Monitoring Program Notice of Funding Availability: “*Bering cisco population assessment and monitoring.*”

TRC Justification: This project addresses both a specific recommendation for Bering cisco research listed in the OSM whitefish strategic plan and a priority information need for the Yukon Area in the 2016 Notice of Funding Availability. The objectives are clear, measurable and achievable. The proposed mark-recapture methods have a proved ability to achieve the expected technical results. There is a rigorous sampling design. The project addresses important Bering Cisco subsistence and conservation issues and is responsive to past TRC recommendations. The cost appears appropriate to achieve project objectives.

The project has opportunities to strengthen capacity building and partnership – it ranked lower because opportunities to work with local, rural communities were not (fully) developed.

TRC Ranking: 7
Project Number: 16-206
Project Title: Abundance and Run Timing of Adult Salmon in the Nulato River

Project Summary: The principal investigator is requesting four years of funding for the purchase, delivery and operation a resistance board weir to monitor salmon escapement in the Nulato River. The weir will be operated to determine daily escapement, run timing, and age, sex, and length composition of adult salmon.

This project addresses two of the Yukon Region priority information needs listed in the 2016 Notice of Funding Availability, namely: “*Reliable estimates of salmon escapements (for example, projects using weir, sonar, or mark-recapture methods)*”, AND “*Geographic distribution of salmon and whitefish*”

species. Of specific interest are the Nulato River, Salmon Fork of the Black River, Porcupine River and Chandalar River.”

TRC Justification: The proposal addresses two Yukon Region priority information needs. Information and data collected from the project will be applied to management of important subsistence salmon fisheries resources. The proposed investigation plan is technically sound and the project objectives are clear, measurable, and achievable. The TCC investigator has successfully led and managed a similar salmon weir project funded by OSM within the past four years. The principal investigator and co-investigator are from Alaska Native organizations. The cost of the project is reasonable to achieve the objectives and comparable to the cost of other OSM-funded weirs project in the Yukon Region. The investigation plan does not address the selected type of weir and the justification for its use, which is contrary to the recommendation from the 2010 feasibility study (project 10-206).

This is a new weir project with a high startup cost requiring extended funding for return in investment. The project is not using the correct type of weir; the TRC recommends a more efficient weir for the project’s needs.

TRC Ranking: 8

Project Number: 16-201

Project Title: Assisting a Radio Telemetry Investigation of the Distribution of Coho Salmon in the Yukon River Drainage.

Project Summary: The Principal investigator from the U.S. Fish and Wildlife Service is requesting four years of funding to assist the Alaska Department of Fish and Game in a drainage-wide, Coho Salmon radio telemetry project. Staff from the Fairbanks Fish and Wildlife Field Office would participate in the radio tagging operations in the lower Yukon River, as well as, logistical and telemetry flight support in the upper Yukon River. The project’s main focus will be to identify drainage-wide migratory distribution patterns, run timing, and spawning areas of Yukon River Coho Salmon.

TRC Justification: The proposal appeared to be incomplete and in draft form, and not ready to rate. The proposal is tied to, and dependent on, the results of an ADF&G funding proposal to the AKSSF. The principal investigator should have included a copy of the 2015 ADF&G proposal to the AKSSF, but was unable to do so because the ADF&G proposal was not fully written at the time of submission of the investigation plan. The principal investigator provided project methods listed in a draft 2009 ADF&G proposal, with an implied assumption that the methods will be the same in the 2015 ADF&G proposal.

The TRC believes the investigators have the capacity to conduct (their proposed portion of) the project. However, there are no immediate subsistence or conservation concerns regarding Coho Salmon in the Yukon River drainage. The ADF&G is currently conducting a Yukon River summer Chum Salmon radio telemetry project without USFWS participation.

TRC Ranking: 9

Project Number: 16-202

Project Title: Fall Chum Spawner and Habitat Monitoring

Project Summary: The principal investigator is requesting four years of funding to accomplish the following: 1) map historic and current thermal refugia within core Fall Chum Salmon spawning areas in three Yukon River tributaries (Chandalar, Sheenjek, Tanana), 2) validate and calibrate Forward-Looking Infrared (FLIR) remote sensing imagery through measurement of in situ physicochemical conditions within core salmon spawning areas, 3) quantify spatiotemporal relationships between salmon spawning locations and thermal refugia/upwellings, and 4) develop an integrated adult salmon and spawning habitat monitoring plan to detect changes in the number of spawners and distribution of spawning habitats through time.

TRC Justification: This project was ranked low due primarily to a lack of partnerships and capacity building and high cost of operation. In addition, the investigator ability was difficult to fully assess because the PhD candidate was not identified. The investigators have no track record with the Monitoring Program, although other principal investigator expertise was evident and easy to assess. The hourly charge for aircraft and affiliated costs seemed high. The project could have been strengthened with the addition of local knowledge. The TRC agreed that there was value in mapping the upwellings, but to add detailed habitat and spawning abundance assessment seems to be taking on too much. The mapping of upwellings would be enough value. This is a bloated project, budget wise, with no capacity building. The costs are unreasonable.

APPENDIX A

The following Executive Summaries were written by the Principle Investigators and submitted to the Office of Subsistence Management as part of the proposal package. The statements and information contained in the Executive Summaries were not altered and they may not reflect the opinions of the Office of Subsistence Management or the Technical Review Committee. The Executive Summaries listed are for projects that are currently being considered for Funding the 2016 Fisheries Resource Monitoring Program. Projects which were not considered for funding were not eligible due to the nature of the activity and are not included in this appendix.

Project Number: 16-201
Project Title: Assisting a Radio Telemetry Investigation of the Distribution of Coho Salmon in the Yukon River Drainage
Geographic Region: Yukon Region
Data Type: Stock Status and Trends
Principal Investigator: Raymond Hander
 U.S. Fish and Wildlife Service (USFWS), Fairbanks
Co-Investigator: Randy J. Brown, USFWS

Project Cost:	2016: \$62,525	2017: \$126,155	2018: \$104,320	2019: \$34,183
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Total Cost: \$327,183

Issue Addressed: Federal conservation system units adjacent to and within the Yukon River drainage are mandated by the Alaska National Interest Lands Conservation Act to conserve fish and wildlife populations and habitat in their natural diversity and provide opportunity for continued subsistence uses by local residents. This project addresses the priority information need of determining the geographic distribution of salmon species and more specifically, Coho Salmon *Oncorhynchus kisutch* in the Yukon River drainage. The U.S. Fish and Wildlife Service seeks to partner and assist the Alaska Department of Fish and Game (ADF&G) in conducting a Coho Salmon radio telemetry project to investigate their distribution in U.S. waters of the Yukon River drainage. This project will benefit from information provided by previous FRMP projects 04-231 and 05-203.

This project is needed to identify drainage-wide migratory distribution patterns, run timing, and spawning areas of Yukon River Coho Salmon. This information is critical to both habitat protection and sustainability of Coho Salmon in the Yukon River drainage for subsistence use. Currently the most basic information needed for fisheries and land management is lacking or incomplete. An issue of particular concern is the urbanization and associated resource development occurring in the Tanana River drainage, which is thought to provide the largest contributions of Coho Salmon to the Yukon River drainage. Also, with poor returns of Chinook Salmon in the Yukon River, subsistence, commercial, and sport users may become more reliant on other species, such as Coho Salmon.

Objectives:

1. Assist in locating migration routes of Coho Salmon in the Yukon River using radio telemetry;
2. Assist in locating important spawning areas of Coho Salmon in the upper Yukon River;
3. Assist in identifying areas to add to the genetic baseline;
4. Assist in estimating stock specific run timing, migration rate, and movement patterns;
5. Assist in determining the relative contributions of spawners to the overall Yukon River Coho Salmon population.

Methods: The Fairbanks Fish and Wildlife Field Office (FFWFO) will assist ADF&G in a drainage-wide Coho Salmon radio telemetry project. The project will follow methods based on a 2009 ADF&G Alaska Sustainable Salmon Fund (AKSSF) proposal and Eiler (1995 and 2014).

Fairbanks Fish and Wildlife Field Office Participation

FFWFO is requesting funds to participate in the radio tagging operations in the lower Yukon River, as well as, logistical and telemetry flight support in the upper Yukon River.

Personnel—One fisheries biologist and two fisheries technicians (one will be a local hire) will participate in the radio tagging operations in the lower river from approximately 1 August–15 September of 2017 and 2018.

Remote tracking stations—During 2016-18 the FFWFO will repair and maintain RTS located at Circle, Porcupine River, and Black River in the upper Yukon River. These stations require repair and testing in preparation for the ADF&G's Coho Salmon telemetry trial (n=100 radio tags) in 2016 and will need additional maintenance in the summers of 2017 and 2018 prior to the larger scale radio tagging efforts. Each RTS is accessible by boat and foot travel. Funds for 2019 will be used to deactivate the RTS.

Telemetry flight support—During 2016-18 the FFWFO will coordinate with USFWS fixed-wing aircraft based from National Wildlife Refuges in Fairbanks and Galena to conduct telemetry flights in the upper Yukon River. Fishery biologists will conduct the telemetry flights in coordination with ADF&G for the most efficient survey coverage. Search areas will be refined based on the most recent timing of Coho Salmon moving past RTS sites.

Materials and Supplies—During 2016-18, the FFWFO will supply gill nets, food, fuel, and freight for lower river radio tagging operations, as well as, fuel for RTS repair and maintenance in the upper river.

Partnerships and Capacity Building: Both Mr. Hander and Mr. Brown have considerable experience working with village local hires. Mr. Hander has worked with residents of St. Mary's on the East Fork Andreafsky River weir (FRMP 03-034) and with Selawik residents on the Selawik River Inconnu Spawning Population Abundance (FRMP 04-104 and 12-100). Similarly, Mr. Brown worked closely with local residents on his Yukon and Kuskokwim Coregonid Strategic Plan (FRMP 08-206), as well as conducting field work with local fishers on FRMP 12-207 (Yukon River Bering Cisco Spawning Origins Telemetry Investigation). For the proposed Yukon River Coho Salmon telemetry project, Mr. Hander will

partner with FFWFO's Subsistence Fisheries Branch to extend the employment season of local hires from St. Mary's, who currently work on the East Fork Andrafsky River weir, to assist with the radio tagging portion of the project. Safety and technical training to address agency requirements, boat operations, and sampling procedures will be conducted for individuals prior to initiating sampling.

Project No: 16-202
Project Title: Spatial and temporal variability in thermal refugia for fall chum salmon in Yukon River tributary streams: development of an integrated spawner and habitat monitoring program
Geographic Region: Yukon
Data Type: Stock Status and Trends

Principal Investigator Jeffrey A. Falke, U.S. Geological Survey, Alaska Cooperative Fish and Wildlife Research Unit, University of Alaska Fairbanks (UAF)

Co-Investigators: Jessica Cherry, International Arctic Research Center, UAF
 Lisa Wirth, Geographic Information Network of Alaska, UAF

Project Cost:	2016: \$216,439	2017: \$269,354	2018: \$263,604	2019: \$263,279
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Total Cost: \$1,012,676

Issue: Salmon are a vital subsistence resource for residents throughout the Yukon River Basin. However, mechanisms behind variable fall chum salmon recruitment are currently poorly understood but knowledge regarding these factors is crucial for efficient management of this important subsistence resource. For example, limited information is available on the size, magnitude, distribution and temporal variation of critical thermal habitats (e.g., upwellings), and importantly, the relationship between spawning locations and upwellings across spatial scales and through time. Gaining a better understanding of the relationship between upwellings and salmon spawning in this region will provide significant insight into future effects of natural and anthropogenic change in these northern latitudes. Along with our agency collaborators, we believe there is a need to develop a long-term monitoring plan of spawning and rearing habitat (i.e., thermal refugia, upwellings) for Yukon River tributaries which will allow resource managers to detect and better understand potential effects of future climate change in the region.

Objectives: Our main goal is to better understand multi-scale relationships between spawning salmon and thermal refugia in the Yukon River basin. Based on rigorously-collected, continuous salmon habitat and spawner surveys across space and through time we will develop a peer reviewed long-term, multi-agency monitoring plan for these essential salmon spawning/rearing habitats in Yukon River tributaries. The specific objectives for this proposal are to: 1) map historic and current thermal refugia within core fall chum salmon spawning areas in three Yukon River tributaries (Chandalar, Sheenjek, Tanana), 2) validate and calibrate FLIR imagery through measurement of in situ physicochemical conditions within core salmon spawning areas, 3) quantify spatiotemporal relationships between salmon spawning locations and thermal refugia/upwellings, and 4) develop an integrated adult salmon and spawning habitat monitoring plan able to detect changes in the number of spawners and distribution of spawning habitats through time.

Methods: We will use a combination of remote sensing technology and traditional on-the-ground fish and water quality sampling to meet our objectives. Historic patterns in thermal refugia will be assessed using Landsat and SAR imagery. Current patterns within and among rivers will be quantified using FLIR and orthoimagery, over 2-3 years per river. Location and abundance of spawners will be assessed across 3 years for each river. We will use a dynamic multi-state occupancy model to quantify the relationship between fall chum salmon and the presence of groundwater discharge zones across the three study years for each of the three study rivers.

Partnerships and Capacity Building: We will work directly with state and federal agencies, as well as local organizations, to plan and carry out this project. Specifically, this proposed research will support Region 7 USFWS ability to plan proactively and maintain the resilience and adaptive capacity of Tier 1 Priority Species and their habitats across interior Alaska. We have and continue to work closely with USFWS on the Chandalar River project (see above for details) and we expect them to remain highly involved with the proposed work should it be funded. We will work directly with USFWS to provide outreach and engagement activities to local communities such as the Village of Venetie. By working closely with USFWS on this project the resulting monitoring plan will be tailored to their specification. As a result, we fully expect that the monitoring plan, or some aspects of it, will be implemented. We will also work with Alaska Department of Fish and Game. They have conducted aerial surveys of spawning fall chum on the Sheenjek River. They would like to collaborate through this project to identify upwelling areas by using FLIR imagery and to identify the stability of the areas through time using a satellite platform. ADFG will direct collaboration for data collection for the Sheenjek River study site and the acquisition of previously collected radio-telemetry tagging data throughout the Yukon River drainage. We will work with ADFG to provide outreach and engagement activities to local communities such as Fort Yukon.

Project Number: 16-203
Title: Estimation of Bering Cisco Spawning Abundance in the Upper Yukon Flats using a 2-Sample Mark-Recapture Experiment, 2016-2017.
Geographic Region: Yukon Region
Data Type: Stock Status and Trends
Principal Investigator: Klaus Wuttig, Alaska Department of Fish and Game, Division of Sport Fish, Fairbanks, AK
Co-Investigator: Randy J. Brown, U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office, Fairbanks, AK

Project Cost:	2016: \$169,166	2017: \$169,166	2018: \$23,598	2019: \$0
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Total Cost: \$361,930

Issue Addressed: Bering cisco *Coregonus laurettae* are anadromous salmonids with three known spawning populations, one each in the Yukon, Kuskokwim, and Susitna rivers. The Yukon River population is known to spawn in main-stem reaches of the upper Yukon Flats and rear in coastal habitats in western Alaska. Annual subsistence harvest data for Bering cisco have not been collected, however, harvest is assumed to be substantial. Bering cisco are specifically targeted in many coastal communities in western Alaska, are incidentally harvested in fish wheel salmon fisheries in the Yukon and Kuskokwim River drainages, and are the primary non-salmon species taken in a commercial gillnet fishery at the mouth of the Yukon River. The Yukon Delta commercial Bering cisco fishery is growing and has reported annual catches averaging more than 12,900 fish since its inception in 2005. The commercial fishery provides an important and developing economic opportunity; however some coastal subsistence users are concerned about its potential impact on their harvests, particularly as the fishery expands. A recent telemetry project provided substantial new information on the run timing and spawning distribution of Bering cisco in the Yukon River, and moreover, it identified an exceptional opportunity to cost effectively estimate spawning abundance for a large majority (i.e. 80%) of the entire Yukon River spawning population between Circle and Fort Yukon. The opportunity to assess such a high proportion of a fish population is a rare circumstance for any species and could provide an excellent and repeatable index of population health, especially in a river as large as the Yukon River. The road to Circle affords easy access for a capture gear, boat electrofishing, that has proven to be very effective in assessing whitefish populations in the Tanana and Chatanika rivers, and a high probability of success. This proposal addresses a specific recommendation for Bering cisco research outlined in the whitefish strategic plan (Brown et al. 2012a): priority #5, development of Bering cisco population monitoring programs in the Yukon and Kuskokwim Rivers, and is specifically identified as a priority information need for the Yukon River in the current FRMP call for proposals: Bering cisco population assessment and monitoring.

Objectives:

The research objectives for this study will be to:

- 1) estimate the abundance of spawning Bering cisco in a 125-km reach of the Upper Yukon Flats in early October of 2016 and 2017; and,
- 2) Estimate length, sex and age compositions of spawning Bering cisco in a 125-km reach of the Upper Yukon Flats such that all proportion estimates are within 5 percentage points of the true proportion values 95% of the time.

Methods:

Study area

The study area, approximately 125 km in length, extends from a point approximately 10 km upstream of Circle to Fort Yukon at the mouth of the Porcupine River, which is functionally the entire Upper Yukon Flats. Abundance, sex, age and length compositions of Bering cisco in the defined 125-km sampling area will be estimated using two-event Petersen mark-recapture (M-R) techniques for a closed population. Achieving a true random sample of fish is difficult, even with the best sampling strategy. Generally a combination of mixing and systematic sampling is required to satisfy the assumptions of the M-R experiment. The approach will be for the first event to occur during early to mid-September when most (i.e. >80%) BC have entered the study area but are still moving upstream, and for the second event to occur during early October when fish are at their spawning areas and just beginning to spawn. The hiatus (~10 days) will greatly help to promote partial mixing and help to ensure the assumptions are satisfied. The first sampling event will occur during ~September 8-18, and the second event will occur during ~September 28-October 8. The second event will occur prior to any emigration of any radio tagged BC observed in 2012-2013 (~range = Oct. 15 – Nov 1). Delaying the second event any later also runs the risk of encountering weather conditions cold enough to prevent boat operation. Sampling dates will be adjusted slightly (e.g. ± 3 days) to accommodate personnel scheduling.

Two boats equipped with electrofishing gear will be used to capture Bering cisco. Each boat will have a three-person crew; two to capture fish with dip nets, and one to pilot the boat and operate the electrofishing gear. Bering cisco are known to aggregate near shore and in slack water areas of the primary channel, which corresponds to those areas most effectively sample by an electrofishing boat. In the large, braided Tanana River, humpback whitefish, broad whitefish, and sheefish have all been effectively sampled by fishing the slackwater areas with electrofishing boats in the fall. Sampling will progress downstream sampling cover 12.5 km of river per day. Because workdays will be long, and daylight will be relatively short, a third crew will be tasked with erecting and dismantling camp, cooking meals, hauling camping gear to maximize sampling time.

Consultations: We have spoken with numerous individuals and organizations about this project and have received only favorable responses. Letters of support have been written by The Yukon Flats and Yukon Delta Wildlife refuges, CATG, and Gwichyaa Zhee Gwich'in Government. Regional Advisory Councils and Advisory Councils within the geographic scope of the project have been notified during meetings the week of March 9-13 where the project was favorably received.

Partnerships and Capacity Building: ADF&G and USFWS will be working closely on this project, including reviews of all planning documents, sharing sampling strategies, and reporting. In Fort Yukon, CATG will be contracted to periodically deliver fuel to the sampling crew, which will provide excellent logistical support. The Yukon Flats wildlife refuge will coordinate this effort. We have been in discussion with Beth Spangler and an ANSEP intern will be recruited for field sampling with this project and will be assigned to work on other projects funded by ADF&G and OSM in an effort to provide a full season of work. Progress reports will be presented and distributed to fisheries managers, researchers, local community groups and other interested parties. A presentation of the study finding will be presented in Fort Yukon at the completion of the field work.

Project Number: 16-204
Title: Abundance and Run Timing of Adult Salmon in Henshaw Creek, Kanuti National Wildlife Refuge, Alaska.
Geographic Region: Yukon Region
Data Type: Stock Status Trends (SST)
Principal Investigator: Brian McKenna, Tanana Chiefs Conference (TCC)
Co-Investigator: Aaron Martin, U.S. Fish & Wildlife Fairbanks Field Office (USFWS-FFWFO)

Project Cost:	2016: \$0	2017: \$202,556	2018: \$212,186	2019: \$222,293
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Total Cost: \$637,035

Issue: Management of the Koyukuk River salmon fishery is complex. The Alaska Department of Fish and Game, Division of Commercial Fisheries (ADF&G-DFC) has conducted aerial surveys within this drainage since 1960, but the usefulness and reliability of that information is limited. This project addresses the priority information needs outlined for Yukon River salmon, including maintaining reliable estimates of Chinook and chum salmon escapement over time, and assessment of trends in Chinook age, sex and length.

Both Chinook *Oncorhynchus tshawytscha* and chum *O. keta* salmon from Henshaw Creek contribute to the harvests of subsistence and commercial fisheries occurring in the Yukon River. Information collected at Henshaw Creek weir is important to fisheries managers who possess the difficult task in managing the complex mixed stock subsistence and commercial salmon fisheries in the Yukon River. In-season management and post season evaluations of management actions are enhanced by the data from this project. Further, the Henshaw Creek weir is the only Upper Koyukuk River drainage salmon escapement monitoring project and its information can facilitate comparisons with lower drainage escapement projects (Berkbigler and Elkin 2006). In more recent years, subsistence and commercial harvesters have identified a concern with the apparent decrease in the size of Chinook salmon (JTC 2013). The continuation of reliable escapement estimates and the collection of age, sex, and length data at Henshaw Creek will assist in future analyses of trends in Chinook salmon and summer chum salmon run timing, escapements, gender composition, and size and age structure over time. In addition, this project aids the Kanuti National Wildlife Refuge (KNWR) in meeting objectives outlined in the 1993 KNWR Fishery Management Plan, and addresses the priority information needs outlined for Yukon Region salmon by providing reliable estimates of Chinook and chum escapements. With the Tanana Chiefs Conference (TCC) as the primary investigator and through the hire of local residents, this project will enhance capacity building to allow local communities a continued role in the management of the resources.

Objectives:

- 1) Determine daily escapement and run timing of adult salmon;
- 2) Determine age, sex and length (ASL) composition of adult salmon;
- 3) Determine the number of resident fish species passing through the weir;
- 4) Consult with and provide outreach and communication for the village of Allakaket; and

- 5) Serve as an outreach platform for KNWR staff and TCC staff to conduct an on-site science camp.

Methods: A resistance board weir will be installed and operated on Henshaw Creek located 721 km upriver from the mouth of the Koyukuk River in north central Alaska. A live trap, installed near mid-channel, will allow salmon and resident species to move through the weir. Their passage will be enumerated daily and will provide an area where fish will be sampled to collect biological information. The daily counting period will begin at midnight and end at midnight the following day. Sampling will begin at the beginning of each week and will be conducted over a 3-4 day period to collect 160 fish per week for each species. Sample size goals were established so that simultaneous 90% interval estimates of the sex and age composition for each week have maximum widths of 0.20 (Bromaghin 1993). The sample size obtained using this method was increased to account for the expected number of unreadable scales. Lengths of Chinook salmon will be measured to the nearest 1 mm and chum measured to the nearest 5mm from mid-eye to fork of the caudal fin (MEFL). Sex ratios will be determined by visual inspection of secondary sexual characteristics. Scales will be used for aging salmon, with ages being reported using the European technique (Foerster 1968). Three scales will be collected from Chinook salmon and one scale will be collected from summer chum salmon. Scales will be taken from the area located on the left side of the fish, two rows above the lateral line on a diagonal line from the posterior insertion of the dorsal fin to the anterior insertion of the anal fin (Price, ADF&G, personal communication). Once the scales are removed, they will be placed on scale gum cards for later analysis with ADF&G.

The staff at KNWR and TCC will continue to work with the local schools to identify students from each of the four villages, Bettles/Evansville, Allakaket, Alatna, and Hughes to be participants in the Henshaw Creek science camp. Students will be exposed to the operations of a weir and will receive lessons in fisheries management, stream ecology, aquatic invertebrates, fish identifications, natural resources career opportunities, the plants and wildlife in the KNWR, and traditional and cultural knowledge.

Partnerships/Capacity Building: The partnerships the TCC has developed with the USFWS, KNWR, ADF&G and local tribal councils presents a great opportunity to build capacity within the TCC and the local communities of the Upper Koyukuk River. The relationships TCC already has with Federal and state resource management agencies will continue to be strengthened through the continuation of this project and will be an important asset to the fishery program at TCC. The local communities of the Upper Koyukuk River will be strengthened through this project as well. TCC plans to continue to hire weir staff within these communities, which will provide much needed employment opportunities and will expose people to the project and different aspects of fishery management. Additionally, the annual science camp will engage local youth with the issues facing fishery resource managers and will provide elders a chance to interact with the students and teach them traditional skills. TCC is also in the process of developing a partnership with ANSEP to hire ANSEP students as a technician on the project. TCC will have their first ANSEP student during the 2015 field season.

Project Number: 16-205
Title: Burbot Population Assessments in lakes of the Upper Tanana and Upper Yukon River Drainages, within the Boundaries of Wrangell-St. Elias National Park and Preserve.
Geographic Region: Yukon Region
Data Type: Stock Status and Trends
Principal Investigator: Dave Sarafin, Wrangell-St. Elias National Park and Preserve

Project Cost:	2016: \$25,884	2017: \$26,038	2018: \$25,679	2019: \$26,346
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Total Cost: \$103,947

Issue Addressed: Several lakes of the Upper Tanana and Upper Yukon River Drainages that lie within the northeastern portion of Wrangell-St. Elias National Park and Preserve (WRST) are known to support, or have the potential of supporting subsistence burbot (*Lota lota*) fisheries. These lakes include: Grizzly, Beaver, Ptarmigan, Rock, Braye, and Carden Lakes (additional burbot fisheries that staff are presently unaware of, may exist). There is currently no baseline data of burbot populations in any of these lakes, except for Grizzly Lake where population assessments were performed in both 2011 and 2014. WRST managers have conservation concerns for the burbot population in the relatively small Grizzly Lake. Results of the population assessments performed, as well as reports of recent large increases in harvests support these concerns. We have extremely limited information on fishing pressure, user types (sport or subsistence), or harvests on the other lakes mentioned above. Establishing baseline data for the populations in these lakes is a necessary initial step required for responsible future management.

Objectives:

1. Estimate abundance of fully recruited adult burbot (≥ 450 mm TL) in each lake with mark-recapture techniques, utilizing at least 25 baited hoop traps (aircraft cargo capacity limited) for 48 hour fishing periods.
2. Estimate mean catch per unit effort (CPUE) of fully recruited adult burbot (≥ 450 mm TL) in each lake.
3. Establish baseline length-frequency data for all burbot handled in each lake.

Methods: The lakes involved in this study are extremely remote with difficult summertime accessibility. To keep the project within a minimal budget, methods are designed in a manner limited by the payload capacity of a single Beaver floatplane flight; 2 person crew, 11 ft. inflatable boat, 6 hp outboard, 25-30 hoop traps, and misc. camp gear and supplies.

For this proposed project, we will perform two-event mark-recapture investigations to establish baseline data of the burbot populations of one lake each field season. The initial capture/tagging events will be scheduled in mid-June to mid-July, or soon after ice out of the lake. A subsequent recapture event will occur later in the season (mid-August to early-September) to allow dispersal of marked fish throughout the population. Twenty-five or more (up to cargo capacity of air charter) baited hoop traps will be set dispersed across the bottom of the lake and allowed to fish for approximately 48 hours. During the

tagging event, all captured fish will be tagged with a numbered floy tag, fin clipped as a secondary mark, measured, and released. In the recapture event, all fish will be inspected for tags (new tags will be deployed on unmarked fish), measured, and released.

Statistical analysis will include a Lincoln-Petersen ($N=(K \times n) / k$) estimate for abundance, length-frequency histogram, and basic Catch per Unit Effort (CPUE) for the baited hoop traps fished for the standard 48 hour period.

Partnerships and Capacity Building: All WRST staff involved in this project will be of Local Hire designation. The Park has and will continue to consult with local staff of ADFG regarding this project. Presently, an offer to Co-Investigate on this project has been extended to local staff of ADFG. In 2014, staff of ADFG directly participated in the re-assessment study conducted in Grizzly Lake.

Project Number: 16-206
Title: Abundance and Run Timing of Adult Salmon in Nulato River, Alaska.
Geographic Area: Yukon River
Information Type: Stock Status and Trends (SST).
Principal Investigator: Brian McKenna, Tanana Chiefs Conference (TCC)
Co-Investigator: Arnold Demoski, Nulato Tribal Council (NTC)

Project Cost:	2016: \$375,270	2017: \$163,146	2018: \$170,858	2019: \$178,950
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Total: \$888,224

Issue: Chinook salmon *Oncorhynchus tshawytscha* and summer chum salmon *O. keta* returns in the Yukon River Basin have demonstrated an overall decline in productivity since 1997 (Bergstrom et al. 2001; JTC 2013). These declines have led to harvest restrictions, fishery closures, and spawning escapements below management goals (Kruse 1998; JTC 2013). In 2014 Native Alaskan communities and subsistence fishers passed a moratorium on the harvest of Chinook salmon in an attempt to conserve and protect their salmon resources (TCC 2014). These conservative management actions coupled with the user imposed Chinook moratorium have resulted in increased hardships for Native Alaskans who rely heavily upon salmon as a subsistence food resource as well as a means to continue to practice their ancestral, cultural, and traditional way of life. Because of the state of the Yukon River Chinook salmon and the complexity of mixed stock fisheries for both Chinook salmon and chum salmon, responsible management of these resources is paramount. To ensure proper management strategies are enacted, fishery managers need high quality data describing Chinook and chum salmon escapements and demographic data including age, sex, and length data (ASL). This project directly addresses two priority information needs for the Yukon River region set forth by the Office of Subsistence Management (OSM) Fisheries Resource Monitoring Program (FRMP) call for proposals: 1) to obtain reliable estimates of salmon escapements, and 2) to determine quality of escapement such as sex and size composition of spawners.

Both Chinook and chum salmon from the Nulato River contribute to the subsistence and commercial harvests of Yukon River communities between the mouth of the Yukon River and the mouth of the Nulato River, as they migrate through the Yukon Delta and Innoko National Wildlife Refuges (INWR), as well as state management areas. The escapement information collected from the Nulato River Weir has been and will continue to be an important assessment tool that assists fisheries managers with making difficult management decisions regarding the mixed stock subsistence and commercial fisheries in the Yukon River. Lastly, with the TCC serving as primary investigator, the NTC serving as co-investigator, and through the hiring of local resident technicians, this project will enhance capacity building and strengthen the local community's involvement in the management of these salmon resources.

Objectives 2016-2019:

- 1) Consult with the Nulato Tribal Council prior to each season;
- 2) Provide outreach for community members informing them on the project prior to each season;
- 3) Hire local fish technicians from Nulato to accomplish objectives 4, 5, 6, and 7;
- 4) Install and operate a resistance board weir to achieve objectives 5, 6, and 7;

- 5) Determine daily escapement and run timing of adult salmon;
- 6) Determine age, sex and length (ASL) composition of adult salmon;
- 7) Determine the number of resident fish species passing through the weir;
- 8) Consult with the Nulato Tribal Council after completion of each season; and
- 9) Provide outreach for community members informing them on project results each post season.

Methods: A resistance board weir will be installed and operated on the main stem Nulato River, located approximately 7 km upriver from the its confluence with the Yukon River. A live trap, installed near mid-channel, will allow salmon and resident species to move through the weir. Their passage will be enumerated daily and will provide an area where fish will be sampled to collect biological information. The daily counting period will begin at midnight and end at midnight the following day. Sampling will begin at the beginning of each week and will be conducted over a 3-4 day period to collect 160 fish per week for each species. Sample size goals were established so that simultaneous 90% interval estimates of the sex and age composition for each week have maximum widths of 0.20. The sample size obtained using this method was increased to account for the expected number of unreadable scales. Lengths of Chinook salmon will be measured to the nearest 1 mm and chum measured to the nearest 5mm from mid-eye to fork of the caudal fin (MEFL). Sex ratios will be determined by visual inspection of secondary sexual characteristics. Scales will be used for aging salmon, with ages being reported using the European technique (Foerster 1968). Three scales will be collected from Chinook salmon and one scale will be collected from summer chum salmon. Scales will be taken from the area located on the left side of the fish, two rows above the lateral line on a diagonal line from the posterior insertion of the dorsal fin to the anterior insertion of the anal fin. Once the scales are removed, they will be placed on scale gum cards for later analysis with the Alaska Department of Fish and Game.

Partnerships and Capacity Building: This project will allow the Nulato Tribal Council and local community members to participate in a meaningful salmon fisheries monitoring and abundance project that will directly benefit the management and conservation of their salmon resources. This project will provide employment opportunities for local residents from Nulato to work as seasonal fishery technicians. These positions will introduce the necessary skills and experience required salmon escapement monitoring projects. Additionally, this project will allow the NTC to further develop the skills of Tribal members through local training and project participation. Furthermore, community involvement with this project will expose local youth residents to fisheries management, and encourage their engagement with fisheries and natural resource management. This project will serve to further develop and foster existing working relationships between a regional non-profit organization, the TCC, a tribal government, the NTC, and the federal and state resource management agencies, the U. S. Fish and Wildlife Service (USFWS) and the ADF&G. Additionally, this project will help to build capacity within the NTC and promote active and long term engagement of the NTC into fisheries management within their region.

Project Number: 16-251
Title: Characterization of seasonal habitats, migratory timing and spawning populations of mainstem Yukon River burbot and their subsistence use in the communities of Pilot Station, Galena and Fort Yukon Alaska.
Geographic Region: Yukon Region (Yukon Delta to Yukon Flats)
Information Type: Stock Status and Trends (SST), TEK and Harvest Monitoring (HM)
Principal Investigator: Klaus Wuttig, Alaska Department of Fish and Game
Co-investigator: Caroline Brown, Alaska Department of Fish and Game

Project Cost:

2016: \$32, 339 **2017:** \$145,657 **2018:** \$106,262 **2019:** \$103,592

Total Cost: \$387,850

Issue Addressed: This study addresses the Yukon Region Priority Information Need: burbot population assessments known to support subsistence. Burbot *Lota Lota* are an important subsistence resource along the length of the Yukon River and are an essential source of fresh meat. Comprehensive harvest estimates for the Yukon River are lacking, but recent harvest surveys indicate that harvests between ~500 and 4,500 lbs per community are common. No biological information on these mainstem burbot has been collected aside from sampling a few catches for length. A basic understanding of fish population characteristics, such as migration timing, seasonal habitats, home ranges and spawning areas is essential for management. For example, a recent telemetric study on the Kuskokwim River demonstrated that these mainstem burbot can undertake extensive (i.e. >1,300 km) upstream migrations from the mouth to a relatively few upriver spawning areas near McGrath, and may in fact constitute a single stock. In the Yukon River, the geographic scale at which fish populations are defined can be considerable, such as the sheefish *Stenodus leucichthys* populations migrating between the Yukon Delta and the Yukon Flats. Yukon River burbot may have similar ranges despite their eel-like body form. Defining population characteristic would be essential for evaluating sustainable harvest levels, protection of critical habitats, and designing any future stock assessments. With increasingly poor runs of salmon and low salmon harvests, it is likely that harvests of important non-salmon species will increase. In light of this, and because there exists little biological or ethnographic data on Yukon River burbot populations, this work is timely.

Objectives:

1. Describe the seasonal distributions and their overlap for burbot radiotagged during fall of 2017 within the Galena and Dalton study section, and in the spring near pilot station;
2. Identify probable spawning areas of burbot in the mainstem of the Yukon River during late January;
3. Describe run-timing past stationary tracking stations positioned at Galena and Rapids when operable;
4. Determine travel distances between aerial surveys and the range of distances traveled between seasonal habitats;

5. For each aerial tracking survey, estimate the proportion of radiotagged burbot from each tagging section that have overlapping ranges;
6. Describe the length composition of all burbot captured;
7. Document traditional ecological knowledge related to traditional and contemporary patterns of subsistence harvest including methods and timing of harvest, gear types used, spatial mapping of harvest areas and other important habitats, and documenting fish-related placenames and taxonomic lexicon; and
8. Estimate the subsistence harvest of burbot for the calendar year 2017 by season by Pilot Station, Galena, and Fort Yukon residents.

Methods:

During the fall of 2017 and spring of 2018, 240 burbot will be radiotagged to collect spatial data: 80 tags will be deployed in the Galena section, 80 in the Dalton section, and 80 near Pilot Station. Radio tags will be monitored over a 2-year period using a combination of 8 aerial tracking surveys and 3 tracking stations. Within the middle Yukon River, fish will be tagged during late September and early October. Near Pilot Station, fish will be captured in spring utilizing community/private fish traps fished through the ice. In the Middle Yukon, one 3-person crew will travel by boat from the Dalton Highway to the community of Galena and base operations there. Another 3-person crew will be based near the Dalton Highway crossing. Burbot will be captured in commercially available hoop traps. In the Pilot Station section crews will arrive in spring when subsistence fishers plan and utilize these subsistence traps. Radio tags will be surgically implanted into all burbot.

During these telemetric activities, PIs will also describe the human dimensions of Yukon River burbot fisheries using standard anthropological methods of ethnographic interviews, participant-observation, and surveys. Traditional Ecological Knowledge will be documented in several ways. The primary data collection method will be through interviews with key respondents. The primary harvest data collection method will be systematic household surveys. Local research assistants will administer these with assistance from ADF&G staff. Participation in the survey will be voluntary and household information will remain confidential.

Consultations/Capacity Building: This project has received favorable responses. We are in the process of soliciting letters of support for this project from the Yukon Delta NWR, Yukon Flats NWR, and Regional Advisory Councils within the geographic scope of the project. Capacity building for this project will occur in 3 primary ways. First, PIs will hire a college intern with the ANSEP program to assist with telemetry sampling. In the event this cannot occur, a local resident will be hired for this work. Secondly, local fishers will be contracted to operate fish traps in Pilot Station. Lastly, PIs will build on earlier research efforts to contribute capacity building in study communities through research partnerships with local tribal or village councils in the identified study communities and will seek to hire local project assistants or community partners to help select key respondents, assist the investigators in all aspects of fieldwork, and administer the short harvest survey.

Project Number: 16-255
Title: Yukon River In-Season Community Surveyor Program
Geographic Region: Yukon Region
Information Type: Customary Knowledge and traditional ecological knowledge (CK/TEK)
Principal Investigator: Catherine Moncrieff, Yukon River Drainage Fisheries Association
Co-Investigator: Gerald Maschmann, U.S. Fish and Wildlife Service, Fairbanks Field Office

Project Cost:

2016: \$69,741 **2017:** \$71,908 **2018:** \$70,853 **2019:** \$70,429

Total Cost: \$ 282,661

Issue Addressed: This project addresses the need for inclusive in-season management for Chinook salmon fisheries on the Yukon River. Salmon are a critical resource for subsistence and commercial users in this region, which includes numerous Federal conservation units, and fisheries managers must have a means to gather input, assess harvests, and share information with these fishermen and fisheries stakeholders throughout the fishing season. The community surveyor reports address the need to have consistent reporting to fisheries managers and the public about subsistence harvests, run strength, fishing conditions, and fishermen’s concerns. The in-season community surveyor program is an important communication tool in that it qualitatively informs managers how fishers in key locations throughout the drainage are doing in-season, enabling managers to make timely decisions allowing the maximum number of fishers to meet their subsistence needs. This project addresses the priority information need of the Multi-Regional Priority Information Need changes in subsistence fishery resources and uses in the context of climate change by documenting subsistence fisher observations, and their customary and traditional ecological knowledge related to their decreasing harvests of Chinook salmon and increasing harvests of other available species. The information collected will be applied to in-season fisheries management by the Alaska Department of Fish and Game (ADF&G) and the U.S. Fish and Wildlife Service (USFWS) federal fisheries managers.

Project Goal: To contribute local information into fisheries management discussions and build capacity along the river to participate in fisheries management.

Objectives:

1. Hire 10 community surveyors in 10 Yukon River drainage villages to work in-season to gather fisheries information on an annual basis;
2. Build capacity of community surveyors in 10 Yukon River villages to participate in inseason fisheries management;
3. Conduct annual reviews pre-season and post-season to evaluate community surveyor program and design for next season to maximize effectiveness of program.

Project Activities: During the Chinook salmon season, YR DFA will hire community surveyors in 10 villages who will expand communication with fishers in their communities about important fishery information and gather information from their fishermen that will provide managers weekly with information about fishers' concerns, observations, and ability to harvest salmon throughout the Alaskan portion of the Yukon River drainage. These reports will be sent to fisheries managers for their review and use in decision-making and also shared on the teleconferences for the benefit of managers and other fishermen.

Anticipated Outcomes: The community surveyor program outcomes will include enhanced communication for the in-season salmon management teleconferences and capacity building in 10 Yukon River communities. Other outcomes include weekly surveys, annual Interim Performance reports, and a final report.

Project Number: 16-256
Title: In-Season Salmon Management Teleconferences
Geographic Region: Yukon Region
Information Type: Harvest Monitoring and Traditional Ecological Knowledge
Principal Investigator: Jill Klein, Yukon River Drainage Fisheries Association
Co-Investigator: Wayne Jenkins, Yukon River Drainage Fisheries Association

Project Cost:

2016: \$19,914 **2017:** \$17,800 **2018:** \$18,031 **2019:** \$18,270

Total Cost: \$74,015

Overview of the need for the project: The Yukon River is the longest river in Alaska, stretching from the western coast of the Bering Sea through interior Alaska and into the Canadian headwaters. There are approximately 45 Tribal Councils and 10 First Nations in Canada that harvest salmon along the Yukon River. This project brings together these remote and rural villages that share the salmon resource. They share information with each other and also share firsthand knowledge about what is happening on the fishing grounds with the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service that manage the fisheries. This project is a cost-effective method of bringing people together on a regular and consistent basis to speak together weekly via teleconference. The project is long-standing for 15 years now and has become a fixture of in-season salmon management along the Yukon River. Changes are taking place along the Yukon River due to environmental conditions and management actions. This project is needed to continue to gather information related to these changes. To specifically address the multi-regional priority needs, this project will focus on learning about changes taking place in the subsistence fishery resources and uses during the summer and fall fishing seasons. Fishermen will be asked all along the river to discuss the species they are targeting, their fishing locations, the fish quality, their harvest methods and means and methods of preservation. The Yukon River Panel, a non-federal funding source has funded this project for over ten years. We have applied for additional funding this year, but it is not yet committed and not entered as a match in the budget. People from the Yukon River join the call each week in a non-paid capacity that can be considered an in-kind match but again is not entered officially into the budget as a match.

Goal : The goal is to provide a forum for people from the Yukon River to engage with fisheries managers on sharing information about subsistence harvests in-season.

Objectives:

1. Host in-season salmon management teleconferences during the salmon fishing season;
2. Attend federal regional advisory council meetings to report on the teleconferences.

Project activities: The project activities include planning for and hosting weekly teleconferences for people who live along the Yukon River to participate in. Data will be collected from fishermen participating in the calls and reporting at federal regional advisory council (RAC) meetings will take place.

Anticipated outputs and outcomes: Data collected on the changes taking place in the subsistence fishery resources and uses during the summer and fall fishing seasons. Fishermen will be asked all along the river to discuss the species they are targeting, their fishing locations, the fish quality, their harvest methods and means and methods of preservation. Reporting on these outcomes will be done at RAC meetings, one in-person and two via teleconference, will take place in the fall after each fishing season.

APPENDIX B

Table B.1. Fisheries Resource Monitoring Program projects funded in the Yukon Region from 2000 to 2014.

Project Number	Project Title	Investigators
<i>Yukon River Salmon Projects</i>		
00-003	Effects of Ichthyophonus 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
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 Ichthyophonus 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

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Table B.1 continued

Project Number	Project Title	Investigators
<i>Yukon River Salmon Projects (continued)</i>		
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
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

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Table B.1 continued

Project Number	Project Title	Investigators
Yukon River Salmon Projects (continued)		
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 ^b	Gisasa R Salmon Video	USFWS
14-202 ^b	E Fork Andreafsky Salmon	USFWS
14-203 ^b	Gisasa R Salmon	USFWS
14-206 ^b	Yukon R Coho Salmon	USFWS
14-207 ^b	Yukon R Chum Salmon	USFWS
14-208 ^b	Koyukuk R Chum Salmon	USFWS
14-209 ^b	Henshaw Crk Salmon	TCC
Yukon River Non-Salmon 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

Continued on next page

Table B.1 continued

Project Number	Project Title	Investigators
<i>Yukon River Non-Salmon Projects (continued)</i>		
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 ^a	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
08-300	Aniak River Rainbow Trout Seasonal Distribution	ADF&G
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 ^b	Lower Yukon Whitefish	ADF&G
14-253 ^b	Upper Yukon Customary Trade	YRDFA

^a = Final Report in Preparation.

^b = On-going projects during 2016.

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 Athabascan 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 Associates, **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.

FISHERIES RESOURCE MONITORING PROGRAM MULTI-REGIONAL OVERVIEW

Since the inception of the Monitoring Program in 2000, 16 projects have been undertaken in the Multi-regional category for a total of \$1.7 million (**Figure 1**). Of these, the State of Alaska conducted 10 projects, the Department of Interior conducted three projects, the Department of Agriculture conducted one project, and other organizations conducted two projects (**Figure 2**). Nine projects were Stock, Status, and Trends (SST), and seven projects were Harvest Monitoring and Traditional Ecological Knowledge (HMTEK). For more information on Multi-Regional projects completed from 2000 to 2014, please see appendix 1.

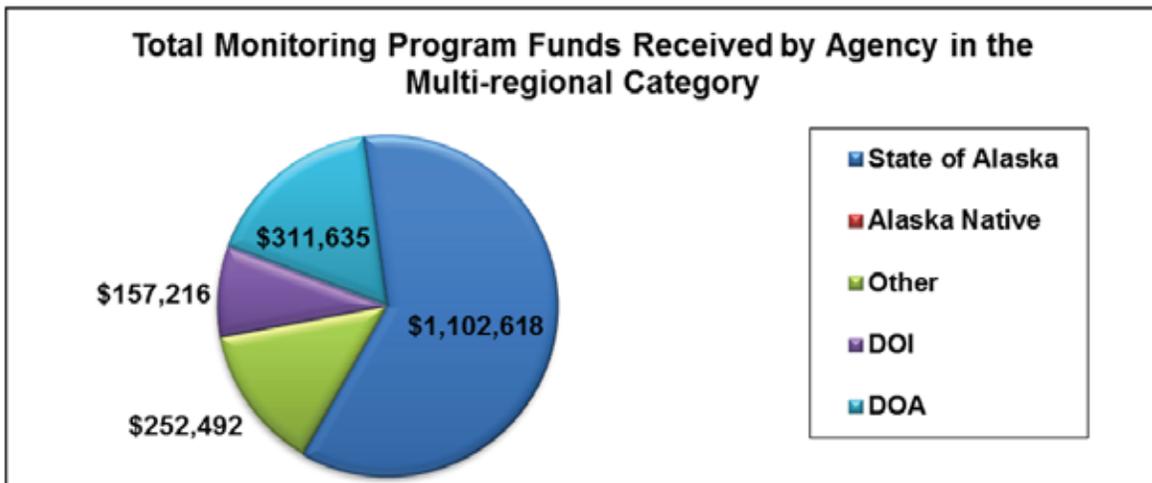


Figure 1. Monitoring Program funds received by agencies for projects in the Multi-regional category. The funds listed are the total approved funds from 2000 to 2014. DOI = Department of Interior and DOA = Department of Agriculture.

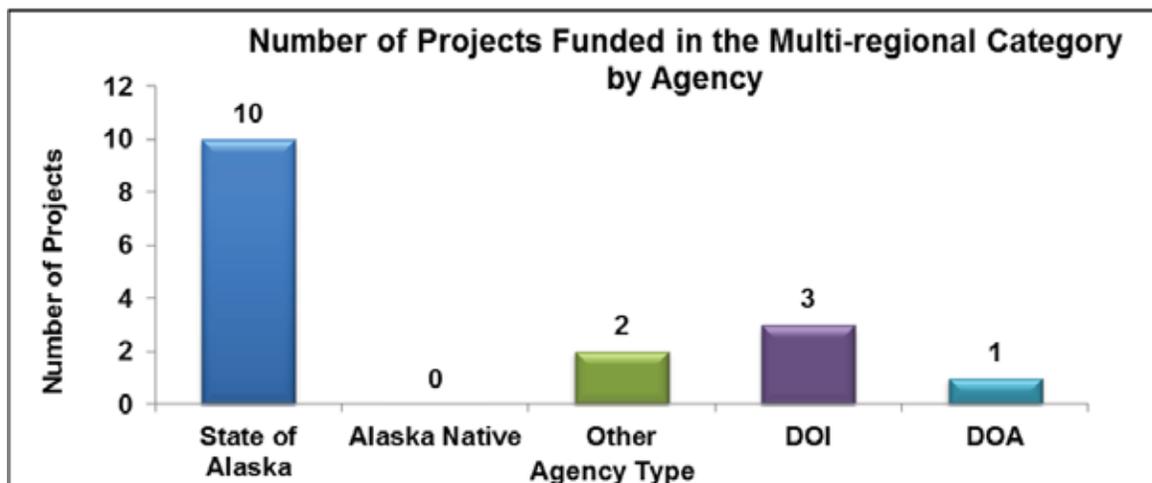


Figure 2. Total number of Monitoring Program projects funded, by agency, in the Multi-regional category from 2000 to 2014. DOI = Department of Interior and DOA = Department of Agriculture

2016 DRAFT MULTI-REGIONAL FISHERIES RESOURCE MONITORING PLAN

OVERVIEW

Priority Information Needs

The Multi-regional category is for projects that are applicable in more than one region. For the Multi-regional category, the 2016 Notice of Funding Availability is focused on the following priority information needs:

- Changes in subsistence fishery resources and uses, in the context of climate change where relevant, including, but not limited to, fishing seasons, species targeted, fishing locations, fish quality, harvest methods and means, and methods of preservation. Include management implications.
- Effects of the Bering Sea and Gulf of Alaska Pollock fishery on Federal Chinook and Chum Salmon subsistence resources throughout Alaska.
- Changes in subsistence fishery resources, in the context of climate change, including but not limited to fish movement and barriers including permafrost slump, water quality and temperature, draining of tundra lakes, changing patterns of precipitation both snow and rain, changing freeze-up and break-up.

Available Funds

Federal Subsistence Board guidelines direct initial distribution of funds among regions and data types. While regional budget guidelines provide an initial target for planning, they are not final allocations. Prior commitments to the 2014 Monitoring Program are up to \$2.7 million. The anticipated funding available for the 2016 Monitoring Program is up to \$2.0 million.

Technical Review Committee Proposal Ranking

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, 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 2016 Monitoring Program, two proposals were submitted in the Multi-regional category. The Technical Review Committee evaluated and scored each proposal for Strategic Priority, Technical and Scientific Merit, Investigator Ability and Resources, Partnership and Capacity Building, and Cost/Benefit. The final score determined the ranking of each proposal within the region (**Table 1**). Projects that rate higher comprise a strong Monitoring Plan for the region by addressing strategically important information needs based on sound science and promote cooperative partnerships and capacity building. The projects

listed are currently being considered for Funding in the 2016 Fisheries Resource Monitoring Program. Projects which were not eligible due to the nature of the activity are not included. For more information on projects submitted to the 2016 Fisheries Resource Monitoring Program please see the Executive Summaries in **Appendix A**.

Table 1. Technical Review Committee (TRC) ranking for projects in the Multi-regional category. Projects are listed by TRC ranking and include the total matching funds, total funds requested, and the average annual request for each project submitted to the 2016 Monitoring Program within the Multi-regional category. The projects listed are currently being considered for Funding in the 2016 Fisheries Resource Monitoring Program. Projects which were not eligible due to the nature of the activity are not included.

TRC Ranking	Project Number	Title	Total Matching Funds	Total Project Request	Average Annual Request
1	16-752	YK Delta Coastal Communities Non-Salmon Harvest and Use Pattern	\$0	\$445,216	\$148,405
2	16-751	Kuskokwim and Yukon the Meaning and Context of Sharing within the Subsistence Fisheries	\$0	\$549,672	\$183,224
Total			\$0	\$994,888	\$331,629

**2016 PROJECT SUMMARY AND TRC JUSTIFICATION
FOR PROJECT RANKING**

TRC Ranking: 1
Project Number: 16-752
Project Title: Subsistence Harvest and Use Patterns of Nonsalmon Fishes by Yukon-Kuskokwim Delta Region Coastal Communities

Project Summary: During the three-year project, investigators will collaborate with five study communities to document their harvests and uses of nonsalmon fishes for subsistence. The nonsalmon subsistence fisheries in coastal communities of the Yukon-Kuskokwim delta are among the least documented subsistence fisheries in the state. Limited harvest data and ethnographic information indicate that regional harvest and use patterns have changed dramatically in recent years in response to factors that include changing weather patterns. Lack of harvest and use information precludes a meaningful analysis of changes in the fisheries over time and prevents an understanding of the potential future and ongoing impacts of climate change. The study will update information collected during previous studies that include Nunivak Island in 2008 (Project OSM05-353), Scammon Bay in 2011, Nelson Island in the 1980s and early 1990s, and Hooper Bay and Kwigillingok in 1983. The study communities are Scammon Bay, Mekoryuk, Tooksook Bay, Kipnuk, and Quinhagak.

TRC Justification: Over three years, investigators will document the harvest and use of nonsalmon fishes in five coastal communities in the Yukon-Kuskokwim delta. The project addresses priority information needs, the Federal linkage is clear, investigators are qualified to conduct the work, and the budget is reasonable. Partnership and capacity building will be collaborating with five participating communities and hiring five to ten local assistants to help with the research and provide Yup'ik-English language interpretation. Investigators do not describe mapping protocols such as the specific information they are seeking and how it will be analyzed. Also, investigators do not explain why a statistical design requiring a 60% random sample of households in communities with over 100 households is being used, but the omissions do not significantly take away from the overall completeness and quality of the investigation plan.

TRC Ranking: 2
Project Number: 16-751
Project Title: The Meaning and Context of Sharing within the Subsistence Fisheries of the Kuskokwim and Yukon River Drainages.

Project Summary: Through this three-year study investigators will document traditional and contemporary practices of sharing and other forms of exchange in seven Kuskokwim and Yukon river communities with particular attention to understanding the nature and scope of sharing and its role in a larger continuum of exchange practices and how they relate to the harvest of salmon. The proposed project builds on earlier sharing network research in the region. For 2009–2013, ADF&G Division of Subsistence conducted subsistence harvest and use surveys of all fish and wildlife, including a sharing and exchange network analysis, in 21 Kuskokwim River communities and 10 Yukon River communities.

Comparing the two regions may yield insights into how resources are exchanged considering socio-cultural and economic factors that differ between the two river systems. The proposed project will address data gaps in previous research by examining factors such as the ceremonial context of exchange, perceptions of change, and the role of obligation in harvest and sharing relationships. Investigators will collaborate in research with seven communities and Tribes, four situated along the Kuskokwim River and three along the Yukon River.

TRC Justification: The three-year study aims to address data gaps in previous sharing network research by collecting data on social dimensions of salmon production in communities along the Yukon and Kuskokwim rivers. Comparing communities from different parts of each river will strengthen the potential for understanding variable responses to changing salmon abundance and regulatory actions. The Federal linkage is clear, the study is well thought out, and the objectives are clear, measurable, and achievable. Investigator ability and resources are highly rated. Proposed partnership and capacity building are appropriate for the type of research. The cost is reasonable for the work being proposed.

APPENDIX A

Project Number: 16-751
Title: The Meaning and Context of Sharing Within the Subsistence Fisheries of the Kuskokwim and Yukon River Drainage
Geographic Region: Multi-Regional: Kuskokwim River and Yukon River Drainages
Data Type: Harvest Monitoring and Traditional Ecological Knowledge
Principal Investigator: Hiroko Ikuta, Ph.D., Division of Subsistence, Alaska Department of Fish and Game
Co-Investigator: Caroline Brown, Division of Subsistence, Alaska Department of Fish and Game

Project Cost:	2016: \$277,314	2017: \$185,828	2018: \$86,530	2019: \$0
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Total Cost: \$549,672

Issue: This proposal addresses a Kuskokwim Region Priority Information Need: an understanding of the meaning and significance of sharing in the context of the social, cultural, and economic life of people in the lower Kuskokwim Area. Sharing subsistence-caught fish and wildlife is a fundamental characteristic of subsistence based communities in Alaska as a means of distributing food and other resources between households and communities. Subsistence activities are highly cooperative endeavors that few individuals undertake alone. The food and materials gained through a person’s efforts are usually distributed along kinship lines or through other social relationships. Forms of exchange, including sharing, barter, and customary trade, can be understood as occupying a single continuum of subsistence activities rather than as discreet fundamentally separate activities. Between 2010 and 2013 (study years 2009–2012), the Alaska Department of Fish and Game (ADF&G), Division of Subsistence conducted comprehensive subsistence harvest and use surveys in 21 Kuskokwim River communities. Results indicated that 92% of households received wild resources from other households, and 74% of households gave wild resources to other households. The proposed project builds on earlier research on sharing networks in the region, focusing on an ethnographic understanding of the social, cultural, and economic significance of exchange practices, especially regarding salmon, in Kuskokwim River communities. It will also compare results to similar analyses of exchange in Yukon River communities. This comparison may yield insights into how resources are exchanged based on cultural, political-legal, environmental, and economic factors that differ between the two river systems. This project will document traditional and contemporary practices of sharing and other forms of exchange in Kuskokwim and Yukon river communities with particular attention to understanding the nature and scope of sharing and its role in a larger continuum of exchange practices.

Objectives: This three-year study will develop case studies, addressing the following objectives:

1. Using the existing social network data as an empirical framework, conduct indepth ethnographic interviews about exchange practices. Interviews will include questions about a) the amounts and types of fish or other resources shared; b) the relationships between people who shared wild food; c) decision making factors that structure sharing; d) the ceremonial context of exchange; e) forms of exchange, such as sharing, barter, and customary trade; and f) perceptions of change in

exchange practices in order to describe how these practices fit within the overall social, cultural, and economic life in the Kuskokwim and Yukon river areas.

2. Using a short network survey, update the existing network data and document the scope of and local characteristics of exchange in 7 Kuskokwim and Yukon river communities. Surveys will investigate both a) distribution of resources between households and b) relative exchange levels of resources in relation to each other; and
3. Contribute to local capacity building by utilizing a framework of community involvement in research.

Methods: This study will take place in 4 communities along the Kuskokwim River and 3 communities along the Yukon River. The tribal councils of each community will be approached in summer 2016 to participate in the research. ADF&G staff will provide a presentation of the proposed research to each tribal council and be available to answer questions. The ethnographic research for this project will include anthropological methods of semi-structured key respondent interviews and surveys. Researchers will attempt to interview 5-10 individuals per community, a sample size based on researchers' previous research experience with the proposed communities and residents' collective subsistence use practices. PIs will also use a short, confidential survey to describe exchange networks. The survey will have 2 basic parts. The first part of the survey will update the network data from earlier research. For the top 5-10 resources ranked by estimated edible pounds for each community, every respondent will be asked if they exchanged the resources with another household (including those in other communities or in non-rural areas outside of the region) in 2016 using questions in both the harvest/use format and the network format described in the Background section of the full proposal. The second part of the survey will record different types of exchanges (barter and customary trade). These questions will be directed toward both individual household activities (recorded as "actual" exchanges), as well as the community in general (recorded as "typical" exchanges).

Partnerships/Capacity Building: The principal investigators will work with tribal councils in the study communities to hire local project assistants, to select key respondents, and facilitate community meetings. The local research assistants will be trained in anthropological sampling methods. 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.

Project Number: 16-751
Title: Subsistence Harvest and Use Patterns of Nonsalmon Fishes by Yukon-Kuskokwim Delta Region Coastal Communities
Geographic Region: Multi-Regional: Kuskokwim River and Yukon River Drainages
Data Type: Harvest Monitoring and Traditional Ecological Knowledge
Principal Investigator: Andrew Brenner, Division of Subsistence, Alaska Department of Fish and Game
Co-Investigator(s): David Runfola, Division of Subsistence, Alaska Department of Fish and Game,

Project Cost:	2016: \$137,548	2017: \$189,787	2018: \$117,881	2019: \$0
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Total Cost: \$445,216

Issue: This project will address the multiregional priority need for more information on changes in subsistence fishery harvests and uses in the context of climate change. The nonsalmon subsistence fisheries in coastal communities of the Yukon Kuskokwim Delta and vicinity (hereafter YKD) are among the least documented subsistence fisheries in the state. Limited harvest data and ethnographic information indicate that regional harvest and use patterns have changed dramatically in recent years in response to factors that include changing climate conditions and weather patterns. The lack of nonsalmon subsistence fisheries harvest and use information for this area precludes a meaningful analysis of changes in the fisheries over time, prevents an understanding of the potential future and ongoing impacts of climate change, and likewise impedes effective management decisions related to these fisheries. Although the importance of Pacific salmon is often emphasized in Western Alaska subsistence fisheries, for YKD coastal communities, nonsalmon fish species are often of equal or greater importance in terms of their edible weight contribution to subsistence harvests. This importance may increase during periods of weakened salmon returns and associated declines in harvests and sharing networks. Given the paucity of subsistence harvest and stock assessment data for nonsalmon fish species that are used by YKD coastal communities, it is unwise to assume that nonsalmon fish populations in the region will remain healthy and sustain current and future harvest levels.

In this data limited environment, it is of critical importance to develop a baseline understanding of harvest and use patterns as well as local knowledge of fish stocks. Without this information, it is not possible to assess whether management of subsistence fisheries in these refuges adequately provides for subsistence needs, conservation of fish populations, conservation of wildlife resources that have dietary overlap with subsistence users, and priority consumptive use of fisheries resources for qualified subsistence users. This is particularly relevant for fish species that may be vulnerable to overharvest, the potential effects of future climate change, and that are desirable for sport harvest by non-federally qualified fishers. To address these information needs, this project will collaborate with YKD coastal communities to develop an overview of area nonsalmon fisheries. This overview will provide updated information on harvest quantities and use patterns, local and traditional knowledge related to the various nonsalmon fisheries and the surrounding environment, and documentation of

local observations of change in these fisheries over respondents' lifetimes in the context of climate change.

Objectives: Collect updated qualitative information on subsistence harvest and use patterns for nonsalmon fish by species for 5 YKD Coastal subregions (Nunivak Island, Nelson Island, North Kuskokwim Bay, North Central Bering Sea Coast, South Central Bering Sea Coast) in 2016.

- a. Document key aspects of nonsalmon fishing patterns for Yukon Kuskokwim Coastal Communities including harvest areas, gear types used, harvest methods, processing methods, local terminology, influence of weather, and seasonality of harvests through key respondent interviews and participant observation.
- b. Record key respondent observations of changes in subsistence harvest and use patterns over time in the context of climate change.
- c. Collect information on local nonsalmon fish taxonomies and use this information to develop an identification guide that will be used in harvest surveys (objective 2).
- d. Strengthen relationships between agencies and local governments. Specifically, identify and address community concerns related to subsistence harvest surveys and other aspects of fisheries management.

Collect updated quantitative subsistence harvest and use information (during 2017) for nonsalmon fish by species for one community in each of 5 Y-K Delta Coastal subregions.

- a. Estimate annual community harvest use levels of nonsalmon fish by species for Scammon Bay, Quinhagak, Mekoryuk, Toksook Bay, and Kipnuk. Assess whether subsistence needs for nonsalmon fish species are being met and impacts to households when needs are not met.
- b. Systematically record household estimates of changes in subsistence harvest and use patterns over time for nonsalmon fisheries by species in study communities listed above. Collect contextual information on factors that have influenced changes in harvest and use patterns, including climate change, resource population levels, health of resources, and changing food preferences.

Methods: This study will take place in 5 communities within the YKD Region: Quinhagak, Kipnuk, Mekoryuk, Toksook Bay, and Scammon Bay. These communities were selected to provide a representative sample of 5 YKD coastal subregions. Objective 1 (Updating qualitative information) will be completed through consultations with local governments, key respondent interviews, and participant observation. In summer 2016, an ADF&G investigator will travel to each community to consult with local tribal governments and to seek community research approval and feedback. Following tribal consultation, one investigator and one fish and wildlife technician will return to each community at times identified as ideal for participating in a key nonsalmon fishery. Accompanied by local research assistants, ADF&G staff will complete 5-10 semi-structured interviews during year 1 with local residents knowledgeable about past and more recent nonsalmon fishing practices in the community. Investigators will participate in key fishing activities with the goal of gaining a better understanding of how fishing occurs in each region and community, specifically harvest areas, gear types used, harvest and processing methods, local fisheries terminology, and influence of weather patterns on harvests.

Objective 2 (collecting updated quantitative subsistence harvest and use information for nonsalmon fish by species), will be completed through standard Division of Subsistence household surveys that record harvest numbers, locations, and harvest timing of nonsalmon fish by species. Surveys will additionally include several sections specific to this project, including questions designed to assess whether subsistence needs are being met, household descriptions of changes that have occurred in subsistence harvest and use patterns over time, and factors identified as influencing such changes (including climate change, resource population levels, health of resources, changing food preferences, and effects of current management or resource allocation practices). Surveys will be completed in each community in the second year of research.

Partnerships and Capacity Development: The principal investigators will work with tribal councils in the study communities to hire local project assistants to select key respondents and facilitate community meetings. The local research assistants will be trained in sampling methods. This adds to local involvement in and local capacity for participating in federal fisheries management.

APPENDIX B

Table B.1. Fisheries Resource Monitoring Program projects funded in the Multi-regional category from 2000 to 2014.

Project Number	Project Title	Investigators
00-016	Information Access of AYK Fish Data	ADF&G
00-017	Statewide Subsistence Harvest Strategy	ADF&G, AITC
01-010	Regulatory History of Alaska Salmon Regulations	ADF&G, EA
01-106	Validity and Reliability of Fisheries Harvest	ADF&G, AITC, NPS
01-107	Implementation of Statewide Fisheries Harvest Strategy	ADF&G, AITC
01-154	Project Information and Access System	ADF&G
02-043	Alaska Subsistence Fisheries Database GIS Integration	ADF&G
02-069	Shared Fishery Database	ADF&G
04-701	Develop Shared Fishery Database	ADF&G
04-703 ^a	Hatching Success of Eulachon Eggs	USFS
04-751	Subsistence Harvest Database Update and Report	ADF&G
05-702	Whitefish Genetic Species Markers	USFWS
06-701	Dolly Varden Stock Composition	USFWS
08-701	Stream Temperature Monitoring	ARRI
12-700	Genetic Baseline for Inconnu from the Yukon and Kuskokwim Rivers	USFWS
14-701 ^b	Stream Temperature Monitoring	ARRI

^a = Final Report in preparation.

^b = On-going projects during 2016.

Abbreviations used: ADF&G=Alaska Department of Fish and Game, AITC=Alaska Inter-Tribal Council, ARRI=Aquatic Restoration and Research Institute, EA=Elizabeth Andrews, NPS=National Park Service, USFWS=U.S. Fish and Wildlife Service.

Backcountry and Wilderness Stewardship Plan

Wrangell-St. Elias National Park & Preserve

National Park Service
U.S. Department of the Interior



Public involvement information • Summer 2015



Purpose of the plan

This Backcountry and Wilderness Stewardship Plan is being developed to guide the preservation, management, and use of the largest designated wilderness in the National Wilderness Preservation System into the future. The purpose of this plan is to preserve the area's backcountry and wilderness character while allowing for exceptions provided under the Alaska National Interest Lands Conservation Act of 1980 (ANILCA).

Need for the plan

Since the park and preserve were established in 1980 and the original General Management Plan completed in 1986, much has changed. The General Management Plan is now outdated and does not adequately address the protection and stewardship of backcountry and wilderness. There is a need to develop the plan to accomplish the following:

- Identify actions that will enable us to continue to provide an outstanding visitor experience in the face of increasing backcountry and wilderness use in some areas.
- Provide consistent guidance for dealing with difficult backcountry and wilderness issues such as cabin and airstrip management and appropriate levels of commercial use.

Scope of the plan

This plan will identify desired future conditions for the backcountry and wilderness, provide management actions that work towards desired conditions, identify management tools to address recreational and commercial uses, and provide for customary and traditional subsistence activities. This plan is not a wilderness eligibility assessment and will not evaluate additional lands to be recommended or designated as wilderness.

9.4 million acres of Wrangell-St. Elias National Park & Preserve is managed as "wilderness" under the Wilderness Act of 1964 and as provided under ANILCA. As a congressionally designated wilderness area, the Wrangell-St. Elias Wilderness is managed to preserve its wilderness character and maintains some restrictions over what uses can, and cannot, occur there. Uses provided for under ANILCA include provisions relating to subsistence use, cabins and other structures, certain means of motorized access, among others. More information on the Wilderness Act and ANILCA can be found at: <http://nps.gov/wrst/>

Anticipated management challenges

The management framework of Wrangell-St. Elias is complex. As a result, this plan will address a number of issues with the goal of providing long-term guidance to preserve backcountry and wilderness resources and character while providing for uses allowed under ANILCA. A few of the management challenges that have already been identified and will be addressed within this plan are:

- Visitor use and impacts
- Motorized use (including snowmachines and off-road vehicles)
- Cabin management
- Airstrip management and maintenance
- Commercial use and services
- Cumulative effects of use

One of the purposes of public scoping is to identify additional issues and challenges the park can address in this plan. We invite you to share your thoughts about these issues or other topics that you feel should be considered as part of this planning effort.

Share your thoughts

Public scoping for the Backcountry and Wilderness Stewardship Plan will extend through November 2015. This is an ideal time for you to share your thoughts, concerns, and vision for the future of Wrangell-St. Elias National Park & Preserve's wilderness and backcountry areas. Your input will help guide the planning team in developing the Backcountry and Wilderness Stewardship Plan, including the consideration of various alternatives for managing the park's backcountry and wilderness into the future. Additional opportunities for public input will be announced as the planning process progresses. We look forward to hearing from you.

Questions to consider

1. When you visit the Wrangell-St. Elias backcountry and wilderness, what activities and experiences are most important to you?
2. What factors have influenced your backcountry and wilderness experience here?
3. What issues in the Wrangell-St. Elias backcountry and wilderness are concerning to you, and what do you see as possible avenues to resolve them?
4. What do you value about this backcountry and wilderness?
5. Imagine you are visiting the Wrangell-St. Elias National Park & Preserve backcountry and wilderness area 20 years from now. What conditions, experiences, visitor services, and facilities would you like to see?

How to comment

Comment online at:
<http://parkplanning.nps.gov/projectHome.cfm?projectID=44299>

Mail comments to:
Wrangell-St. Elias National Park & Preserve
ATTN: Bruce Rogers
P.O. Box 439
Copper Center, AK 99573

Call us at: (907) 822-7213 or (907) 822-7240

Office of Subsistence Management

Fall 2015 Regional Advisory Council Report

Staffing Update

Robbin La Vine joined the Office of Subsistence Management (OSM) in October 2014. She is an anthropologist with extensive experience conducting subsistence research and building collaborative partnerships with Alaska Tribal, State, and Federal entities since 2002. Before joining OSM, she worked as a researcher for the Togiak National Wildlife Refuge, served as Social Scientist for the Bristol Bay Native Association Partners Program in Dillingham, and was a Subsistence Resource Specialist for the Alaska Department of Fish and Game, Division of Subsistence. Robbin is delighted to serve rural Alaskans while strengthening partnerships to ensure the continuation of the subsistence way of life.

Amee Howard joined OSM as the new Subsistence Policy Coordinator in July 2015. Prior to OSM, she worked as an Environmental Protection Specialist for the Pacific West Region of the National Park Service in Boulder City, Nevada. Previously, she worked for the Alaska Department of Fish and Game, Division of Commercial Fisheries, as a Fish and Game Program Technician in Sitka. Ameen also spent time working as the Coastal Monitoring Coordinator for the Sitka Tribe of Alaska. She earned her Bachelors of Science in Natural Sciences, with minors in Environmental Studies and Geology, from the University of Alaska, Anchorage. Ameen possesses a well-rounded background gained from previous work experience and is a valuable addition to the OSM team.

Efforts are currently underway to hire the following positions: Council Coordinator, Anthropologist, Anthropologist (Pathways), Fisheries Biometrician, Fisheries Biologist (2), Fisheries (Pathways) Grants Management Specialist, IT Specialist, and Administrative Assistant.

The North Pacific Fishery Management Council adopts measures to reduce Chinook Salmon bycatch in the Bering Sea Pollock fishery

At its April 2015 meeting in Anchorage, the North Pacific Fishery Management Council (NPFMC) took action to reduce bycatch of both Chinook and Chum Salmon in the Bering Sea commercial Pollock fishery. Recognizing the precarious state of Western Alaska's Chinook Salmon stocks, the NPFMC took a combination of actions which lower the caps in times of low abundance, combine Chinook and Chum Salmon bycatch management, place additional requirements on industry incentive plans and reapportion the Pollock catch between seasons. Taken together, these actions are anticipated to reduce bycatch of both Chinook and Chum Salmon, and ensure that additional measures, including lower caps, are in place in years of low Chinook Salmon abundance.

Much of the attention from stakeholders from both Western Alaska and the Pollock fishery focused on the option of lowering the Chinook Salmon bycatch hard cap and the performance standard, currently 60,000 and 47,591 fish, respectively. Western Alaskan stakeholders asked for a 60% reduction in both the hard cap and performance standard during testimony at the meeting and in several hundred letters and resolutions submitted prior to the meeting. The

Pollock industry advocated that no reductions be enacted. The State of Alaska led the effort to provide protections for Western Alaska Salmon stocks. Newly-appointed Alaska Department of Fish and Game Commissioner Sam Cotten introduced a motion calling for a 35% reduction in the performance standard and a 33% reduction in the hard cap. Commissioner Cotten's motion was amended by the Bill Tweit, NPFMC representative from Washington State, to a 25% reduction in the hard cap and a 30% reduction in the performance standard. This lesser reduction was passed by the NPFMC unanimously (10-0).

The results of the NPFMC action are as follows: In years of low Chinook Salmon abundance (defined as years in which the cumulative total Chinook Salmon runs of the Kuskokwim, Upper Yukon and Unalakleet Rivers is at or below 250,000 fish), the hard cap will be 45,000 and the performance standard will be 33,318 Chinook Salmon. The Pollock fishery manages to the performance standard, so the reduction in this number is important. The Council also made it very clear that they expect bycatch to remain well below the caps, and would take additional action if warranted. It should be noted that, in recent years, bycatch has averaged around 15,000 Chinook Salmon.

In addition to the reductions in the cap levels, the NPFMC's action contains several other, important measures. The other pieces of the motion apply in all years – not just when Salmon abundance is low. Alternative 2 combines Chinook and Chum Salmon bycatch management programs, ensuring a coordinated approach. It also requires information sharing with Western Alaska groups. Alternative 3 adds five new requirements for the industry Incentive Plan Agreements (IPA) to meet, including requiring Salmon excluders, restrictions on bycatch rates in October (a time of historically high bycatch) and significant penalties (no fishing) for boats with repeatedly bad bycatch performance. The options the Council selected under Alternative 4 provide the Pollock fishery with the flexibility to catch more of its harvest in the late A season, potentially shifting harvest effort away from the high bycatch times later in the year.

In summary, the NPFMC's action puts in place measures to further reduce bycatch in all times of abundance, and to ensure that in periods of low Chinook Salmon abundance the Pollock fishery would be limited to a lower level of bycatch.

Bridging the Gap between Native Communities, Conservation, and Natural Resource Management: Grant Update

The U.S. Fish and Wildlife Service and the Alaska Native Science and Engineering Program (ANSEP) were awarded a National Fish and Wildlife Foundation grant to help re-establish a lost connection between Federal resource managers and rural communities in the Yukon-Kuskokwim and Doyon Regions. Members of these communities rely on subsistence resources within six National Wildlife Refuges for both cultural and nutritional needs. Continued resource declines in both the Yukon and Kuskokwim River drainages have led to immense hardships for local residents as well as numerous challenges for resource managers to provide sufficient subsistence harvest opportunities, while ensuring adequate conservation efforts.

Funds from this grant are used to increase outreach opportunities and foster collaborative solutions by expanding the Refuge Information Technician (RIT) Program. Outreach and education contribute significantly to the overall success of resource management. Language barriers and cultural obstacles often stand in the way of achieving effective communication. The RIT program employs Alaska Native residents to serve as liaisons between the Yukon Delta National Wildlife Refuge and local communities. The RITs' regional experience, traditional ecological knowledge, Yup'ik language skills, and cultural sensitivity enhance their role as intermediaries. Expanding the capabilities of the RIT program will significantly increase and improve important connections between the Yukon Delta National Wildlife Refuge and local communities. These relationships are fundamental for local residents to become more involved in the management and conservation of the resources on which they depend.

Funds from this grant are also supporting ANSEP students participating in biological internships within the Yukon-Kuskokwim and Doyon Regions. ANSEP strives to increase the number of Alaska Natives employed in the fields of science, technology, engineering and mathematics (STEM) by increasing the number of individuals on a career path to leadership in STEM fields. The U.S. Fish and Wildlife Service is partnering with ANSEP to provide meaningful summer internships that expose students to careers in resources management. These internships provide an opportunity for students to experience resource monitoring and management while developing knowledge and skills allowing them to succeed in professional resource management positions.

Changes to Council Member Appointment Process

The Office of Subsistence Management has submitted requests to the Secretary of the Interior to make the following changes to the Council member appointment process: shift from 3-year to 4-year appointment terms, allow for appointment of alternates, and provide for a 120-day carryover term for incumbents in the event that appointment letters are not timely issued. Dan Ashe, Director, U.S. Fish and Wildlife Service, has provided his support of these changes. As of the writing of this report, OSM is waiting to hear back from the Secretary's office to initiate the direct final rule making that would be necessary to change the appointment terms to 4 years. The new Senior Advisor for Alaska Affairs, Michael Johnson, will be assisting in moving this through the Secretary's office. OSM is moving ahead with plans to implement all changes for the current appointment cycle.

In order to switch from 3-year to 4-year appointment terms, as well as switch from having one-third of Council seats up for appointment each year to one-fourth of the seats being up for appointment, appointment terms will be staggered in order to complete the transition by the 2019 appointment cycle. This means that some Council members, even incumbents, may receive 2, 3 or 4-year appointments in the next few years. By 2019, however, all Council appointments will be for 4-year terms. If you have any questions, contact Carl Johnson, Council Coordination Division Chief, at (907) 786-3676 or carl_johnson@fws.gov.

All-Council Meeting
Anchorage, Alaska – Location TBD
March 7-11, 2016

Meeting Committee: RAC Chairs, Council Coordinators, Orville Lind (Native Liaison), Deborah Coble (Subsistence Outreach Specialist)

Joint Session

Monday, March 7, 2015

Invocation

Keynote Speaker:

Joint Agenda Items: Common issues from annual reports (i.e., bycatch, budget, other agency actions that impact subsistence, food security, climate change)

Concurrent Sessions

One full day for each of the Councils to address their regional issues

Tuesday – three Councils

Wednesday – three Councils

Thursday – three Councils

Friday – one Council

Training

Sessions repeat throughout the week to allow all Council members opportunity to attend.

- Title VIII of ANILCA
- Robert's Rules of Order
- Federal Indian Law (with ANCSA implications)
- Cross-Cultural communication
- C&T versus 804
- Regulatory Process (State and Federal)

Reports and Panels

- Western Arctic Caribou Herd
- Yukon River salmon
- Kuskokwim River salmon
- Public Processes for Fish & Wildlife Management (RAC, SRC, AC, AMBCC)
- Holistic management – discussion and explanation of how agencies manage resources (BLM, USFWS, NPS, USFS)
- Tribal Consultation
- Different Federal Subsistence Programs (Migratory Birds, Marine Mammals, Halibut)
- Understanding Dual Management

Important to note: this one meeting will encompass the entire meeting cycle for winter 2016

JOINT FEDERAL SUBSISTENCE REGIONAL ADVISORY COUNCILS

Venue TBD
Anchorage, Alaska
March 7, 2016
8:30 a.m.

TELECONFERENCE: call the toll free number: 1-866-[number], then when prompted enter the passcode: [number]

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

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

AGENDA

*Asterisk identifies action item.

- 1. **Invocation**
- 2. **Keynote Address**
- 3. **Roll Call and Establish Quorum** *(Council Coordination Division Chief)*.....
- 4. **Call to Order** *(Chair)*
- 5. **Welcome and Introductions** *(Chair)*
- 6. **Review and Adopt Agenda*** *(Chair)*
- 7. **Regional Reports**
- 8. **Business** *(Chair)*
 - a. Climate Change
 - b. Food Security
 - c. Federal Subsistence Budget.....
 - d. Revisions to FRMP
 - e. Hunter Education.....
 - f. Youth Engagement.....
- 9. **Agency Reports**

- a. **NPFMC** – Pollock Bycatch Update.....
- b. Status on Magnuson-Stevens Act Renewal.....
- c. Fisheries Management Overview
- d. **OSM** – Processes

Closing Comments

10. Adjourn (Chair)

To teleconference into the meeting, call the toll free number: 1-866-[number], then when prompted enter the passcode: [number]

Reasonable Accommodations

The Federal Subsistence Board is committed to providing access to this meeting for all participants. Please direct all requests for sign language interpreting services, closed captioning, or other accommodation needs to [name], 907-786-XXXX, [email], or 800-877-8339 (TTY), by close of business on [date].

DRAFT

All-Council Meeting Schedule

	Monday 3/7	Tuesday 3/8	Wednesday 3/9	Thursday 3/10	Friday 3/11
Main Room	All day Joint Session of the Councils	Morning Training: Title VIII of ANILCA Afternoon Training: Cross-cultural communication	Morning Training: Regulatory Process Afternoon: Training: Federal Indian Law	Morning Report: Yukon River Salmon Afternoon Panel: Tribal Consultation	Morning Training: Robert's Rules of Order Afternoon Panel: Understanding Dual Management
Small Room 1		All day RAC 1 – Concurrent Session YKDRAC	All day RAC 4 – Concurrent Session EIRAC	All day RAC 7 – Concurrent Session SERAC	All day RAC 10 – Concurrent Session KARAC
Small Room 2		All day RAC 2 – Concurrent Session WIRAC	All day RAC 5 – Concurrent Session SCRAC	All day RAC 8 – Concurrent Session BBRAC	Morning Afternoon Panel: Tribal Consultation
Small Room 3		All day RAC 3 – Concurrent Session SPRAC	All day RAC 6 – Concurrent Session NWARAC	All day RAC 9 – Concurrent Session NSRAC	All day SERAC Day 2 (if needed)
Small Room 4		Morning Training: Robert's Rules of Order Afternoon Panel: Public Processes for Fish & Wildlife Management	Morning Training: C&T versus Section 804 Afternoon Training: Cross-Cultural Communication	Morning Panel: Understanding Dual Management Afternoon Training: C&T versus Section 804	Morning Training: C&T versus Section 804 Afternoon Panel: Public Processes for Fish & Wildlife Management
Small Room 5		Morning Afternoon Panel: Holistic management	Morning Training: Title VIII of ANILCA Afternoon Panel: Public Processes for Fish & Wildlife Management	Morning Training: Cross-Cultural Communication Afternoon Panel: Holistic management	Morning Report: WACH Afternoon Training: Title VIII of ANILCA
Small Room 6		Morning Training: Regulatory Process Afternoon Panel: Different Federal Subsistence Programs	Morning Training: Robert's Rules of Order Afternoon Panel: Different Federal Subsistence Programs	Morning Training: Federal Indian Law Afternoon Report: Kuskokwim Salmon	Morning Training: Regulatory Process Afternoon

TRAINING	PANELS	REPORTS (ONCE EACH)
<p>Title VIII of ANILCA (x3) Provide an overview of Title VIII and key provisions that govern Federal subsistence management.</p>	<p>Public Process for Fish & Wildlife Management (AC, RAC, SRC, AMBCC) (x3) Panel consisting of one member of an AC, RAC, SRC and AMBCC to explain how each of their processes work and how public can participate.</p>	<p>Western Arctic Caribou Herd Report from State and Federal managers on status of herd and current management objectives and approaches.</p>
<p>Cross-Cultural Communication (x3) Training to help State and Federal staff improve communication with Alaska Natives.</p>	<p>Holistic Management (x2) Conceptual panel to discuss how fish and wildlife among various agencies can be managed in a more holistic way.</p>	<p>Yukon Salmon Report from State and Federal managers on status of salmon stocks and current management objectives and approaches.</p>
<p>Robert's Rules of Order (x3) Training to benefit RAC members in the conduct of their meetings under Robert's Rules.</p>	<p>Tribal Consultation (x2) Panel consisting of Native Liaisons from R7 and OSM and Tribal leaders to discuss current consultation process and how it should work. Emphasis on what consultation means from Tribal perspective.</p>	<p>Kuskokwim Salmon Report from State and Federal managers on status of salmon stocks and current management objectives and approaches.</p>
<p>Regulatory Process (x3) Explain the regulatory process under both State and Federal systems and provide information on how to submit proposals.</p>	<p>Different Federal Subsistence Programs (Halibut, Marine Mammals, Mig Birds, OSM) (x2) Panel consisting of representatives from the various Federal programs that regulate certain subsistence activities to discuss their jurisdiction, legal authority, and approach to management.</p>	
<p>Federal Indian Law (x2) Basic principles of Federal Indian law including how it is affected by the Alaska Native Claims Settlement Act and related case law in State and Federal courts.</p>	<p>Understanding Dual Management (x2) State and Federal managers explain their jurisdictional role in managing fish and wildlife resources, how the two sometimes work together and sometimes separately.</p>	
<p>C&T versus Section 804 (x3) Provide instruction on how C&T determinations and Section 804 determinations are made, how applied, where they differ.</p>		

Winter 2016 Regional Advisory Council Meeting Calendar

March 2016 current as of 3/24/2015

Meeting dates and locations are subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<i>Feb. 7</i>	<i>Feb. 8</i> <i>Window Opens</i>	<i>Feb. 9</i>	<i>Feb. 10</i>	<i>Feb. 11</i>	<i>Feb. 12</i>	<i>Feb. 13</i>
<i>Feb. 14</i>	<i>Feb. 15</i> PRESIDENT'S DAY HOLIDAY	<i>Feb. 16</i>	<i>Feb. 17</i>	<i>Feb. 18</i>	<i>Feb. 19</i>	<i>Feb. 20</i>
<i>Feb. 21</i>	<i>Feb. 22</i>	<i>Feb. 23</i>	<i>Feb. 24</i>	<i>Feb. 25</i>	<i>Feb. 26</i>	<i>Feb. 27</i>
<i>Feb. 28</i>	<i>Feb. 29</i>	<i>Mar. 1</i>	<i>Mar. 2</i>	<i>Mar. 3</i>	<i>Mar. 4</i>	<i>Mar. 5</i>
<i>Mar. 6</i>	<i>Mar. 7</i>	<i>Mar. 8</i>	<i>Mar. 9</i>	<i>Mar. 10</i>	<i>Mar. 11</i>	<i>Mar. 12</i>
All Council Meeting - Anchorage						
<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>Window Closes</i>	<i>Mar. 20</i>

Fall 2016 Regional Advisory Council Meeting Calendar

August–November 2016

Meeting dates and locations are subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<i>Aug. 21</i>	<i>Aug. 22</i> WINDOW OPENS	<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>Sept. 1</i>	<i>Sept. 2</i>	<i>Sept. 3</i>
<i>Sept. 4</i>	<i>Sept. 5</i> HOLIDAY	<i>Sept. 6</i>	<i>Sept. 7</i>	<i>Sept. 8</i>	<i>Sept. 9</i>	<i>Sept. 10</i>
<i>Sept. 11</i>	<i>Sept. 12</i>	<i>Sept. 13</i>	<i>Sept. 14</i>	<i>Sept. 15</i>	<i>Sept. 16</i>	<i>Sept. 17</i>
<i>Sept. 18</i>	<i>Sept. 19</i>	<i>Sept. 20</i>	<i>Sept. 21</i>	<i>Sept. 22</i>	<i>Sept. 23</i>	<i>Sept. 24</i>
<i>Sept. 25</i>	<i>Sept. 26</i>	<i>Sept. 27</i>	<i>Sept. 28</i>	<i>Sept. 29</i>	<i>Sept. 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</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</i> WINDOW CLOSES	<i>Nov. 5</i>

**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 reestablished by virtue of the authority set out in the Alaska National Interest Lands Conservation Act (16 U.S.C. 3115 (1988)) Title VIII, and under the authority of the Secretary of the Interior, in furtherance of 16 U.S.C. 410hh-2. The Council is established in accordance with the provisions of 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.** The Council possesses the authority to perform the following duties:
 - a. Recommend the initiation of, review, and evaluate 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 decisionmaking 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 Alaska National Interest Lands Conservation Act (ANILCA).
 - f. Make recommendations on determinations of customary and traditional use of subsistence resources.
 - g. Make recommendations on determinations of rural status.
 - h. Provide recommendations on the establishment and membership of Federal local advisory committees.
5. **Agency or Official to Whom the Council Reports.** The Council reports to the Federal Subsistence Board Chair, who is appointed by the Secretary of the Interior with the concurrence of the Secretary of Agriculture.
6. **Support.** The U.S. Fish and Wildlife Service will provide administrative support for the activities of the Council through the Office of Subsistence Management.
7. **Estimated Annual Operating Costs and Staff Years.** The annual operating costs associated with supporting the Council's functions are estimated to be \$160,000, including all direct and indirect expenses and 1.15 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 7, U.S. Fish and Wildlife Service. The DFO is a full-time Federal employee appointed in accordance with Agency procedures. The DFO will:
 - Approve or call all of the advisory committee's and subcommittees' meetings,
 - Prepare and approve all meeting agendas,
 - Attend all committee and subcommittee meetings,
 - Adjourn any meeting when the DFO determines adjournment to be in the public interest, and
 - 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 terminate 2 years from the date the Charter is filed, unless, prior to that date, it 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. A vacancy on the Council will be filled in the same manner in which the original appointment was made. Members serve at the discretion of the Secretary.

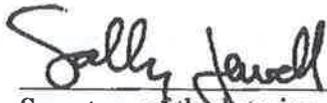
Council members will elect a Chair, a Vice-Chair, and a Secretary for a 1-year term.

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 specific party matter in which the member has a direct financial interest in a lease, license, permit, contract, claim, agreement, or related litigation with the Department.

14. **Subcommittees.** Subject to the DFO's 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. The Council Chair, with the approval of the DFO, will appoint subcommittee members. 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, shall be handled in accordance with General Records Schedule 26, Item 2, and other approved Agency records disposition schedule. These records shall be available for public inspection and copying, subject to the Freedom of Information Act, 5 U.S.C. 552.


Secretary of the Interior

NOV 25 2013

Date Signed

DEC 03 2013

Date Filed



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