SEWARD PENINSULA
Federal Subsistence
Regional Advisory Council

Shoreline near Nome, Alaska.

Meeting Materials

September 21–22, 2011

Nome, Alaska

What's Inside

Page

1	Agenda
4	Roster
5	February 15–16 Meeting Minutes
17	Unit Maps
22	WP12-01
36	WP10-02 (Deferred WP08-05)
50	WP12-02
65	WP12-03
72	WP12-61
78	WP12-42
85	WP12-45/49
96	WP12-47
111	WP12-52
114	WP12-53
122	Draft 2012 Fisheries Resource Monitoring Plan
151	Briefing on Tribal Consultation
155	Status Report on the Secretarial Recommendations to the Federal Subsistence Management Program
162	Tri-RAC Customary Trade Subcommittee Status Report
151	Update on BSAI Chum salmon bycatch
154	Meeting Calendars

SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL
AURORA INN CONFERENCE ROOM
NOME, ALASKA
September 21-22, 2011
8:30 a.m. – 5:00 p.m. each day or until meeting is concludes.
Evening sessions may be called by the Chair.

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.

DRAFT AGENDA

1. **Call to Order** *(Chair)*
2. **Roll Call and Establishment of Quorum** *(Council Secretary)*.....4
3. **Welcome and Introductions** *(Chair)*
4. **Election of Officers**
   A. Chair
   B. Vice Chair
   C. Secretary
5. **Review and Adoption of Draft Agenda** *(Council)*.....1
6. **Review and Adoption of Minutes from February 15–16, 2011 Meeting** *(Council)*.....5
7. **Report on September 14, 2011 Tribal Consultation Teleconference**
8. **Review 2012 – 2014 Federal Subsistence Wildlife Proposals** *(Council)*

PRESENTATION PROCEDURES FOR PROPOSALS
1. Introduction of proposals and analyses
2. Alaska Department of Fish and Game comments
3. Federal and State agency comments
4. Tribal comments
5. Interagency Staff Committee comments
6. Local Fish and Game Advisory Committee comments
7. Summary of written public comments
8. Public testimony
9. Regional Advisory Council deliberations, recommendations and justification

Statewide Proposals

A. WP12-01 *Requirements when selling handicrafts incorporating claws (Helen Armstrong)* 22

B. WP12-02 *Redefine "designated hunter" so that a designated hunter can only hunt for elders or a person who is disabled (Helen Armstrong)* 50

C. WP10-02 *Bear handicrafts (deferred WP08-05) (Helen Armstrong)* 36

D. WP12-03 *Trapping; incidental take (Helen Armstrong)* 65

Regional Proposal

E. WP12-61 *Revise harvest limit of 10 wolves (Chris McKee)* 72

Crossover Proposals

F. WP12-42 *Revise season dates* 78

G. WP12-45/49 *Revise season dates and harvest limit/ Revise season and harvest limit (Chris McKee)* 85

H. WP12-47 *Limit use of aircraft in controlled use area (Chris McKee)* 96

I. WP12-52 *Close sport hunting along the Yukon River (Helen Armstrong)* 111

J. WP12-53 *Redefine language under Special Provisions for use of motorized vehicles to harvest ungulates (Helen Armstrong)* 114

9. Fisheries Resources Monitoring Program

A. Review draft 2012 Monitoring Plan for the Northern Region *(Karen Hyer)* 122

10. Fisheries Issues

11. Agency/Organizations Reports

A. Office of Subsistence Management *(Helen Armstrong)*

1. Briefing on tribal consultation 151
2. Status of Secretarial review recommendations 155
3. Update on BSAI Chum salmon bycatch 159
4. Tri-RAC Customary Trade Subcommittee Status Report 162

B. National Park Service *(Ken Adkisson)*

C. Bureau of Land Management *(Tom Sparks)*

D. Alaska Department of Fish and Game *(Tony Gorn)*

E. Organizations

F. Other

12. Council Business

A. 2010 Annual Report Reply

B. 2011 Annual Report Topics

13. Next Meeting Date 165

A. Confirm winter 2012 meeting date of February 14–15, 2012 in Nome

B. Establish fall 2012 meeting date and location

14. Closing comments

15. Adjourn

If you have any questions regarding this agenda or need additional information, please contact Alex Nick, toll free at 1-800-621-5804 ext. 257 or 543-1037; by fax at 907-543-4413; or email to alex_nick@fws.gov.

Teleconferencing is available upon request. You must call Alex Nick at 1-800-621-5804 ext 257, 907-543-1037 or the Office of Subsistence Management, at 1-800-478-1456, 786-3888 or 786-3676, at least 72 hours prior to the meeting to receive this service. Please state which agenda topic interests you and whether you wish to testify regarding it.

The U.S. Fish and Wildlife is committed to providing access to this meeting for all participants. Please direct all requests for sign language interpreting, Computer Aided Real-time Translation (CART) or other accommodation needs to Alex Nick no later than September 16, 2011. Call 1-800-621-5804 ext. 257, fax 907-543-4413, or email alex_nick@fws.gov.

If you need alternative formats or services because of a disability, please contact the Diversity and Civil Rights Manager at (907)786-3328 (Voice), via e-mail at douglas_mills@fws.gov, or via Alaska Relay (dial 7-1-1 from anywhere in Alaska or 1-800-770-8255 from out-of-state) for hearing impaired individuals with your request by close of business Friday, September 16, 2011.

REGION 7—SEWARD PENINSULA REGIONAL ADVISORY COUNCIL

Seat	Yr Apptd *Term Expires*	Member Name & Community	
1	2007 ***2013***	**Anthony Martin Keyes Jr.** Wales	
2	1995 ***2013***	**Peter Garfield Buck** White Mountain	**Secretary**
3	2010 ***2013***	**Louis H. Green Jr.** Nome	
4	2010 ***2013***	**Tom L. Gray** Nome	
5	2008 ***2011***	**R. Weaver Ivanoff** Unalakleet	**Chair**
6	2005 ***2011***	**Peter P. Martin Sr.** Stebbins	
7	2008 ***2011***	**Fred D. Eningowuk** Shishmaref	
8	1994 ***2012***	**Elmer K. Seetot Jr.** Brevig Mission	
9	2005 ***2012***	**Michael H. Quinn** Nome	**Vice-Chair**
10	2010 ***2012***	**Timothy Edwin Smith** Nome	

DRAFT
Seward Peninsula Subsistence Regional Advisory Council
Minutes of
February 15–16, 2011 Meeting
Aurora Inn
Nome, Alaska

Meeting called to order by Mr. Michael H. Quinn, Acting Chair

Members present
Michael H. Quinn, Nome
Peter G. Buck, White Mountain
Louis H. Green, Jr., Nome (Online)
Elmer K. Seetot, Jr., Brevig Mission
Fred D. Eningowuk, Shishmaref
Timothy Edwin Smith, Nome
Anthony M. Keyes, Jr., Wales
Peter P. Martin, Sr., Stebbins

Members Absent
Tom L. Gray, excused
Ralph W. Ivanoff, excused

Meeting Participants
Alex Nick, Tom Kron, Coleen Brown, OSM
Jeanette Pomrenke, Fred Tocktoo, Ken Adkisson, NPS
Tina Hile, Court Reporter
Marci Johnson, NPS (Online)
Tom Sparks, BLM
Tony Gorn, Letty Hughes, ADF&G
Sandy Tabone, Rose Fosdick, Kawerak, Inc.

Welcome and Introductions

Acting Chair Michael Quinn welcomed everyone to community of Nome. Mr. Quinn was disappointed in the limited attendance and felt there should be more public attendance at the Regional Advisory Council meetings.

Election of Officers

Acting Chair Michael Quinn stated he would like to put off election of officers until Mr. Smith, Mr. Gray, and Mr. Green were in attendance. He hoped that Mr. Green will participate online during the election of officers as Mr. Green is on travel status. On the second day of the meeting, it was decided to put off elections until the next meeting.

Review and Adoption of Draft Agenda

The Council reviewed its draft agenda and added several topics, including:

The Chair added Fish and Game Advisory Committee actions under the Alaska Department of Fish and Game reports.

Tim Smith added chum salmon bycatch in the Bering Sea. Tom Kron informed the Council under item 12 A. there will be discussions about salmon bycatch in the ground fisheries.

Mr. Anthony M. Keyes added on the agenda a proposal to change season for wildlife regulations in Unit 22 remainder

Motion
Peter G. Buck moved to adopt revised agenda, seconded by Peter P, Martin, Sr.

Motion passed unanimously.

Review and Approve Minutes of October 13, 2010 Meeting

Council noted a typo on page 10 of the RAC book. The word I-Q-U-U-P-U-K should be changed to A-G-I-A-P-U-K because this is the name of the river as it appears on the map. Also on page 15 of the Council workbook under Bureau of Land Management, Mr. Noiquk and Mr. Karkarek's herds are spelled incorrectly. Corrections were provided by Council member Mr. Elmer Seetot, Jr.

Motion
Mr. Peter P. Martin, Sr. made a motion to adopt draft minutes of October 13, 2010 as revised, seconded by Peter G. Buck.

Motion carried. Mr. Smith abstained because he was not present at the last Council meeting.

Federal Subsistence Board Meeting Action Report from January 18–20, 2011

Tom Kron informed the Council that the 805c letter reports on actions taken by the Federal Subsistence Board at its meeting in January 2011. It can be found on page 19 in the work book.

Tim Smith reported that he attended the last Federal Subsistence Board meeting on his own. Mr. Smith informed the Council that people who attended the meeting had lot of time to participate. Mr. Smith gave credit to Board Chair Tim Towarak for trying a new method for public participation because for years public participation in meetings has not been appropriate for people attending from rural areas. Mr. Smith encouraged other Council members to attend Board meetings if they could.

Mr. Peter G. Buck reported he also attended the Board meeting for the first time on behalf of the Seward Peninsula Regional Advisory Council and it was also Tim Towarak's first Board meeting. Mr. Buck reported that the emphasis was on rural opinions and Board listened to all of the participant comments. Mr. Buck thought that the meeting went well and he enjoyed attending it.

Wildlife Closure Review and Council Recommendations

Cole Brown, OSM, explained the closure review process. In brief, existing wildlife closures are reviewed on a three year cycle to determine whether they are still necessary, consistent with the Board's Closure review Policy. If the Council agrees with the closure, then it can recommend that it be retained. Otherwise, it can submit a proposal to open the lands. The deadline to submit wildlife regulatory change proposals is on March 24, 2011.

WCR10-10 — Unit 22B — Muskoxen
The Council had lengthy discussions regarding quota and population trends. After a lengthy discussions and clarifications from the staff, Council took following action.

Motion
Tim Smith moved to accept continuation of the closure in Unit 22B. Motion was seconded by Anthony M. Keyes.

Motion carried.

WCR10-11 — Unit 22B West of Darby Mountains — Moose
WCR10-12 — Unit 22B West of Darby Mountains — Moose

Motion
Mr. Tim Smith moved to adopt closure WCR10-11 and WCR10-12. Motion was seconded by Mr. Anthony M. Keyes.

Mr. Smith participated on moose collared surveys in early 1980s including moose counts in Unit 22. Seward Peninsula used to be one of the best places to hunt moose in 1980s. There were lot of moose in Fish River Flats at that time and now there aren't any and this is disturbing because nobody seems to know why. Best thing to do now would be to close hunting in the area because there needs to be some moose available to harvest by residents of White Mountain and Golovin. There are complaints from that area that hunters from Nome are better equipped for hunting. It would be appropriate to allocate moose to be harvested by White Mountain and Golovin residents.

No matter how much restrictions are placed on subsistence users, subsistence hunters and other users from different communities know where more abundant fish and wildlife resources are located and they hunt in that area where resources are. That's why moose population numbers starts to decline in certain areas because hunters sneak and hunt in certain areas where resources are available.

One of the problems in White Mountain area for moose hunting season is the current hunting seasons is from September 1 to 14, and January 1 to 31. In the January season, moose meat is lean. One time during one season the water level dropped so low the moose hunters couldn't access hunting areas. White Mountain residents couldn't get to their traditional hunting grounds due to the low water level that year.

Motion carried.

WCR10-13 — Unit 22D within the Kougarok, Kuzitrin and Pilgrim River drainages — Moose

Motion

Mr. Peter Martin, Sr. moved to support WCR10-13. Motion was seconded by Mr. Peter G. Buck.

In discussing this closure, the Council noted that resource studies by the Alaska Department of Fish and Game should focus first on the Game Management Units with a least amount of resource population levels. Studies should occur during population counts in springtime.

Motion carried.

WCR10-14 — Unit 22D west of the Tisuk River drainages and Canon Creek — Moose

Motion
Mr. Elmer Seetot, Jr. made a motion to support closure WCR10-14. Motion was seconded by Anthony M. Keyes, Jr.

In discussing this closure, the Council noted that in Tisuk and Canyon Creek area willows for cover and food are in short supply. This area is rarely used by residents of Teller and Brevig Mission for resources other than waterfowl. Access to this area is not easy.

Motion carried

WCR10-16 — Unit 22E — Moose

Motion
Mr. Tim Smith moved, seconded by Mr. Anthony Keyes, to submit a proposal to remove closure WCR10-16.

Under discussions of motion, Council had lengthy discussions relating to the Federal permit systems and the State harvest tickets. The Council agreed that removing closure WCR10-16 would allow the proposal process to start. Council would support winter nonlocal hunting in the area. One of the reasons why moose population numbers remain high in the area is because moose hunting occurs from end of January to March and weather conditions plays a big role during that time of year.

Motion carried.

Federal Permits and State Harvest Tickets

Tom Kron, OSM, explained the Federal and State permit systems, and discussed specific situations where Federal or State permits are required. The Council suggested that instead of having to have two permits, there should be one permit with a box to check for Federal or State harvest to avoid fumbling over unnecessary paperwork. There was a discussion between the Council, State, and Federal staff relating to hunter reports and how managers would gather information where successful hunters were from.

Call for Proposals to Change Federal Subsistence Wildlife Regulations

Cole Brown informed the Council that staff is available to assist to draft wildlife regulatory change proposals. The proposal forms are available from Office of Subsistence Management. Peter Martin from Stebbins and Anthony M. Keyes indicated that they had plans to submit proposals. Mr. Keyes preferred to submit proposals working with the Council. Mr. Martin's proposal is a new regulation in 22A remainder for moose season to change from January 1 – February 15 to December 15 – January 31. Due to low harvest of antlered moose, there would be no impact on antlered moose in the area. Mr. Keyes decided to work with his community before he submits a proposal. Mr. Peter Buck's concern was to go forward with a proposal to include special community potlucks. It was explained that there already is regulation in place to accommodate this need.

Review and Finalize Draft 2010 Annual Report

Alex Nick reminded the Council that during the October 2010 meeting, topics for 2010 annual report were provided by the Council and incorporated them to the draft annual report. The draft annual report will be revised, reviewed by the Chair and then submitted to the Federal Subsistence Board.

There was a discussion about Streamlining Council nomination process. One Council member indicated that he thought that interest in the Federal Regional Advisory Council membership was limited because of the lack of compensation to Council members. Tom Kron explained that in the past other Councils from other regions had brought this issue forward through OSM to the Secretaries. Sandy Robinowitch said that apparently there are over 113 committees nationwide and the Secretaries retained authorities to make choices whether to compensate committee members or not. Regional Advisory Councils and other committees are subject to comply with rules like Federal Advisory Committee Act (FACA). This issue was discussed at length. After discussions, the Council took following action.

Motion
Peter G. Buck made a motion seconded by Anthony M. Keyes to approve 2010 annual report as written.

Motion carried with Mr. Smith abstaining because he was not a Council member last meeting.

Council Charter

Alex Nick note what page Council Charter could be found and he reminded the Council that in the past they recommended some changes on their Charter on membership removal but recommended changes were not incorporated. No changes were recommended by the Council at this time.

Agency and Organization Reports

Office of Subsistence Management

Travel Procedures
Alex Nick updated the Council on travel procedures. One of the Council members stated that weather is the factor regardless who says of what will be with respect to travel. At this time of year the weather is unpredictable. If he didn't make it in yesterday, he would try to get on any flight that is coming in to attend this Council meeting. What would happen if an aircraft had mechanical problem? He is concerned about rules relating to travel because some Council members do travel together on the same aircraft to attend Council meetings. The Chair used an example of various airlines electronic systems that fails. His recommendation is to get Council members to the meetings safely and economically. He also recommended this because there are only two airlines with two flights per day, OSM should give Council members ability to travel on whatever flight is available to meeting location.

Travel Vouchers
Alex Nick provided information that the U. S. Fish and Wildlife Service is preparing to initiate new software for the Federal financial business management system beginning October 1, 2011. There are two ways this could affect the Council members directly. First, members who make the last minute decision to attend Council meetings will not receive advance of funds. Two, Travel voucher processing for fall 2011 meeting will be delayed. He also informed the Council that the remainder of per diem and reimbursable expenses will be sent to the Office of Subsistence Management and then mailed to member's known mailing address. Mr. Nick stressed that Council members contact him about what day and what time of day members arrive home. Members were advised to provide any receipts from this travel period and he would send on this information to Mr. Durand Tyler at the OSM for the travel voucher.

Letter to the Secretary from Federal Subsistence Board
Tom Kron informed the Council about progress on the Secretarial Review recommendations. He told the council that the Chair and the Board are working on the tasks outlined by the secretary. The first item of business was to expand the Federal Subsistence Board ot include two new members representing rural

Alaska subsistence users. A proposed rule to do this has been developed and is out for review and public comment. The Board will review the public comments received during its meeting on May 3–4, 2011 and provide its recommendations to the Secretaries of the Interior and Agriculture. The Secretaries will make their decision on this proposed change. Additional changes to the Board composition regulations also are proposed to clarify the designation of alternatives for Federal agency members and to increase the size of the quorum to take into account the two new members. Should this proposed Board membership appointment process moves forward, new members would be appointed by the Secretaries, very much like Council members are appointed to the Council membership.

A Council member commented that Federal Regional Advisory Council members should be considered to become FSB members because members are given an opportunity to provide recommendations to the Board. Rural Board representatives should represent subsistence interests. A Council member indicated an Elderly person age 65 years or older would provide sufficient ecological information. Another Council member brought up that Alaska Department of Fish and Game Local Advisory Committee has two members appointed by the local IRA Councils and this idea would represent subsistence interests.

Motion
Mr. Tim Smith made a motion, seconded by Mr. Anthony M. Keyes to support two additional Federal Subsistence Board members from rural residents.

The Council felt that it would be beneficial to add additional Federal Subsistence Board members who would speak on behalf of subsistence interests. There needs to be specific information on how additional Board members will broadly represent the regions because there is a possibility there would be additional members from same region representing other regions.

Motion carried.

Deference to Councils
Tom Kron informed the Council that this item is just for Council's information and no action is required. The Secretary asked the Board to look at deference to Council recommendations in the context of customary and traditional use determinations, rural determinations, and in-season management. The Board is examining this issue further, and will be looking to the Councils for their input down the road.
Customary and Traditional Use Determinations (C&T)

Tom Kron stated that this is an opportunity for the Council to weigh in at a general level before the Federal Subsistence Board considers possible regulatory changes. To date more than 300 customary and traditional determinations have been done. At this point the Federal Subsistence Board is interested in what the Council thinks about existing process for customary and use determinations and want to know:

Is the current process working for you?

If not, how or what would you change?

The summary of the Council's comments on the customary and tradition use determinations is as follows:

One Council member stated that he has been involved on the customary and traditional use determinations on the State side but not on the Federal government for muskoxen and for chum salmon. The process is way too arbitrary. There should be better guidelines for C&T findings. There were two C&T hearings and findings for muskoxen using the same data. The State Board did not grant C&T due to lack of historical

information. The second time using the same data the Board granted C&T for muskoxen. There needs much more objective way to grant C&T determinations

Customary and traditional use determination have been done for number years. There have been some changes made on C&T determinations in the past. There is an opportunity to change C&T determinations in the future. There should not be understanding that C&T in certain area will last forever. The current process seems to work.

Customary and traditional use determination for muskoxen did not exist in the area until it was introduced. C&T determination for muskoxen is not based on long term use pattern. But it is believed C&T for muskoxen already existed because it did not matter what kind of animals were harvested, local people shared harvested animals among others.

Memorandum of Understanding (MOU)
Tom Kron explained that the Federal Subsistence Board is seeking input from all ten Regional Advisory Councils on the Memorandum of Understanding.

Motion
Tim Smith made a motion seconded by Fred D. Eningowuk to request the State of Alaska redesign harvest reports and look into placing a check box to identify an animal taken on Federal or State lands for subsistence use.

Motion carried.

Rural/ Nonrural Determinations
Tom Kron informed the Council that a a Federal Subsistence Board work session will be held on April 6, 2011 to discuss rural/nonrural status. The Councils are invited to send a representative to attend this work session.

Executive Session Policy
Tom Kron described the Board's position on executive sessions, and reminded the Council that the Board is committed to an open and transparent public process. The summary from the January 5, 2011 exeuctive session is included in the Council's book. The Board worked on the number of issues and tried to figure out how to deal with the issues brought forth by the Secretary on the program review. In the future the Board plans to provide summaries of executive sessions and to provide them to the Regional Advisory Councils. The Council was concerned about possible noncompliance with the Alaska Public Meetings Act that may have potentially been violated by some organizations. According to a Council member, some organizations may have abused executive sessions. According to the Act, executive sessions are not supposed hide information from public awareness with exceptions of a few situations.

Tribal Consultation
Tom Kron referred to the letter from Tim Towarak, Federal Subsistence Board Chair that is included in the Council book that described the Board's proposed approach to Tribal consultation.

Duck Stamps Tom Kron reminded the Council that duck stamps are required for hunting waterfowl. Some groups raised an issue on duck stamps but the laws have not changed.

Ms. Sandy Tabone with Kawerak said that she is representative for Kawerak who is a partner to the Alaska Migratory Bird Co-management Council. The latest information is both Senator Murkowski and Begich submitted a bill to allow subsistence migratory bird hunters to hunt without duck stamps in their

possession but unfortunately with the Deep Water Horizen issue there was no action taken on the bill. One of the Council members was concerned about elderly hunters. Why not give elderly hunters an exception on possession of duck stamps? This issue also affects younger generations who likely will be bothered by this requirement. Ms. Tabone said that is one of the issues that was raised. U.S. Fish and Wildlife Service had a three year phase-in plan where in the first year the Service would do public education on duck stamp possession requirement. On the second year the Service would just issue verbal warning. On the third year they would issue citations for violations. This is the third year. A Council member wanted to know which group of people would be excluded under the proposed bill? Ms. Tabone stated that all residents fall under the indigenous definition under the protocols. Indigenous people would be eligible to hunt in spring and the bill would legalize spring waterfowl hunting. Council members discussed that many people are not aware of the requirement. A Council member asked if public assistance would available to pay for duck stamps if a subsistence hunter didn't have any bank account? Ms. Tabone responded that there is all kinds of ideas that were brought up. Part of the idea was the Migratory Bird Co-Management Council buying duck stamps for subsistence hunters. Co-management Council is trying to move this issue forward.

National Park Service

Ken Adkisson, NPS briefed the Council on the Arctic Network Inventorying and Monitoring Program, including specific focuses on caribou and dall sheep and other elements that are more broad in their application, including weather, climate change, terrestrial, vegetation, large lake communities and ecosystems, and coastal erosion and contaminant work. These are vital signs that NPS is involved in and monitoring and protocols are currently being developed for a number of others species including muskoxen and brown bear. Adkisson informed the Council that there is a new letter provided by the Arctic Network and it covers more current highlights and interesting information relating to vital signs. Adkisson went on and briefed the Council on other inventory and monitoring program issues such as developing consistent protocols for long term data sets, data management, and data storage that will be easily retrieved and used. Adkisson also briefed the Council on a number of studies that the NPS is engaged in, reminding the Council that a lot of NPS projects are carried out collaboratively with organizations such as the ADF&G. NPS is not typically the lead agency working on the project, but it provides funding for the projects, staff and aircraft support for other agencies. In response to a Council comment that beavers are expanding in numbers and range in the region, Adkisson explained that the NPS do not have any plans to does a study on beavers in the region. In Serpentine Hot Springs, there are number of beaver lodges that brought some issues for NPS.

Sandy Rabinowitch with NPS explained a process currently underway where the NPS is looking at uses of discarded antlers (on NPS lands). The Park Service had two different requests to change regulations which currently do not allow people to pick up horns or antlers that are naturally shed or discarded by the hunter and regulatory change request is to allow people to pick up horns, antlers, bones and plants and use them. Plants currently could be picked up but cannot be sold. A Council member commented that traditionally the antlers, skulls, tusks, or anything naturally dropped or left by a hunter were used for artist needs in the past and is passed on by ancestors. When these things are picked up, items were used for bartering needs in the past that are naturally given free of charge. He said he doesn't support restrictions for collection of horns, antlers and other items on Park Service lands. Mr. Rabinowitch responded the Park Service regulations that have been in place since early 1980s. Collection of items and making them into significant commercial enterprise is prohibited by law. The Park Service is not regulating gathering berries and edible plants and people could gather an unlimited amount of berries for personal use.

Ms. Jeannette Pomrenke with NPS said the NPS is waiting for a budget to go forward with an environmental assessment for big game guiding commercial use authorization. There was no big game guiding on Park Service lands since late 1980s. In early 1990s when NPS conducted public meetings people adamantly opposed big game guiding at that time but now their opinions have changed. NPS is now actively seeking funding for EIS. A pre-meeting was held in the community of Shishmaref. To write EIS with limited staff would take very long time to complete an EIS. An EIS has been done in other National Preserves but not in Bering Land Bridge. Efforts to do that stopped in Bering Land Bridge because people are opposed to sport hunting in the Preserve so the NPS acquiesced to village needs.

Bureau of Land Management

Tom Sparks, BLM reported on recent activity with regard to land conveyances to local village corporations. He also spoke about subsistence permits, noting that a permit for muskox was issued for Unit 22B. In Unit 22A remainder for moose, a Federal tag is necessary. BLM has not issued any new special recreation permits in the Seward Peninsula. Mr. Sparks noted that the Salmon Lake agreement was introduced by Senator Murkowski and Begich and this is the third legislation for that. This legislation passed the House in the past but it never passed through the Senate. A Council member stated that the Coast Guard deactivated last year but its five mile radius still exists around its loran station which tumbled to the ground. There was digging activity for artifacts toward the station and wildlife trooper went to communities of Brevig Mission and Teller and talk to people there about that. A Council member was concerned about the effect this may have on residents because they will go to any extremes to dig for artifacts. Mr. Sparks stated that he went to Teller with law enforcement personnel from the Coast Guard, representatives of the regional corporation, but BLM does not have primary jurisdiction at the Coast Guard loran station because that land is withdrawn for Coast Guard use. The Coast Guard tried to give the land management authority back to BLM in the past. BLM may try to make the determination of whether or not the land is suitable to be back in public domain. If it's not suitable for public domain, the land gets sold through the Government Services Administration (GSA).

Alaska Department of Fish and Game

Tony Gorn, ADF&G area biologist updated the Council on muskox populations in Unit 22. Mr. Gorn informed the Council that although Unit 22 is not within the Board of Game's cycle this year, there is an important Board of Game proposal that could adversely impact hunting population of game in Unit 22. Mr. Gorn's report and Council's questions and answers given are lengthy and any interested person may review the Council meeting transcripts from February 16, 2011 page 165 line 10 through page 188 line 2.

Letty Hughes, ADF&G briefed Council on the Board of Game proposal number 223 that will be taken up at the March meeting. This proposal as Mr. Gorn mentioned will affect Unit 22. Currently Unit 22 has horn destruction on muskox in some areas in Unit 22D and Unit 22E and the requirement is that when horn is to be removed from Unit 22 it will be destroyed. Hunters near the road systems have 72 hours to bring in the horns regardless whether or not horn will be removed from the Unit to other area. This proposal will also affect other Units with horn/antler restrictions like in Unit 18.

There was great deal of discussion between staff and Council and interested public, agencies, and organizations can visit meeting transcripts.

Organizations

Rose Fosdick with Kawerak updated the Council and audience that the Kawerak Natural Resources has number of programs and all are interested in information data collection, and research advocacy for

subsistence. Kawerak has subsistence program and Ms. Sandra Tabone is the director. Ms. Julie Raymond Yakoubian is the director of social science program. Other programs are land management services, Eskimo Walrus Commission, and Eskimo Heritage Program. One of the Kawerak's plans is to prepare for the North Pacific Fishery Management Council meeting schedule to be held in Nome in June, 2011. There is concern about chum salmon and other salmon species bycatch by Area M June fisheries. Ms. Fosdick thinks that this issue is not documented very well. She also thinks that the amount necessary is inaccurate. These types of points are going to be bought up to North Pacific Fishery Management Council meeting in June. Ms. Fosdick believes that management decisions made and considered leaves so much burden on the subsistence hunters in the small communities. Also resource managers leaving it up to local residents to decipher on their own whether certain areas are open for hunting or not, whether they are required to possess permits by State of Federal Government and there was lot of question and answers during this meeting.

Ms. Sandra Tabone with Kawerak brought up her observations and concerns stating that this is just another process and opportunity people have to fight for subsistence. That it's important the Regional Advisory Council understand local people have placed their reliance on them to deliberate on proposed regulations that would help toward putting food on their table. Ms. Tabone believes it's important to support the MOU with the State of Alaska to accomplish Council's tasks. Ms. Tabone was surprised reliance on ADF&G by the Office of Subsistence Management staff at this meeting, they were not capable to answer Council's questions and they never offered to call their offices to get an answer. It's real important the issues Council brought forth such as climate change that has an effect on resources and questions raised needs to be addressed. Harvest timing in consideration of the climate change is also important. Education outreach is also important. This is the time the Federal Subsistence Board reevaluate how they do their business. It's crucial time for the Council to evaluate how they do business as well to accomplish its tasks. Ms. Tabone is interested how her program can assist which could possibly begin by informal discussions prior to Council's next meeting, a work session, how her program could help. Ms. Tabone suggested a couple of ways Council could accomplish its task by working with her program.

Tim Smith shared his experience attending the North Pacific Fishery Management Council (NPFMC) stating that the biggest issue is chum salmon bycatch of the Pollock fishery. He went to the NPFMC meeting couple of years ago when they set the cap on King salmon and he was disappointed to see what happened there. He said what affected local people here was the CDQ group, approximately 100 people testifying that Pollock were more important than King salmon and he anticipated same thing might happen this summer. Norton Sound Economic Development Corporation (NSCDC) indicated that they will support a 47,951 hard cap. Mr. Smith asked if NSEDC was approached asking for a written position on the bycatch issue.

Louis Green, participating online, said he would like to echo what Tim Smith said.

It is important to get information from NSEDC where they stand on this issue because in the past they did not allow anyone to know where they stand on this issue. CDQ group along with Area M are no different and are a threat to the chum stock.

Tom Kron updated the Council on NPFMC chum salmon bycatch and pointed out materials on page 81 of the Council workbook. The NPFMC is currently evaluating measures to limit chum salmon bycatch in the Bering Sea commercial Pollock fishery. There are three alternatives with multiple components. NPFMC staff is analyzing these alternatives and subcomponents hoping to get done in time for June 2011 meeting in Nome. Council meeting materials included in the Council workbook has been provided by NPFMC. There were discussions about chum bycatch and importance of subsistence resource that is being wasted

by Pollock fishery. A Council member noted amount of chum bycatch by Pollock fishery is enough fish to satisfy one community's subsistence needs. After much discussion, the Council took the following action.

Motion
Peter Buck moved seconded by Louis Green, to recommend to NPFMC they establish 30,000 chum salmon bycatch cap.

Motion carried.

Fall 2011 Meeting Date

Motion
Mr. Peter Buck moved seconded by Mr. Elmer Seetot, Jr. to keep September 21–22, 2011 as the fall 2011 meeting date.

Motion carried.

Winter 2012 Meeting Date

Motion
Peter Buck moved seconded by Peter Martin, Sr. to establish SPRAC winter 2012 meeting on February 14–15, 2012 in Nome, Alaska.

Chair indicated that is action is to tentatively establish meeting date.

Closing comments

Peter Buck welcomed Mr. Tim smith, Tom Gray, and Louis Green as new Regional Advisory Council members. Mr. Buck said he would provide a report relating to bycatch issues to Mr. Dan Harrelson.

Mr. Elmer Seetot, Jr. said that he agrees with Mr. Anthony Keyes on his comments relating to muskox issues. Mr. Seetot said that there were extended discussion that takes too long in support of musk ox issues. One of the comments was the State can do a trophy destruction on muskox when harvested for subsistence. Muskox is a new species for subsistence. Question is, are managers looking to other way when it comes to other species such as caribou and moose? Caribou and moose are the most, preferred meat by local people. The other thing is, during the last meeting there was too much attention to the Yukon River fishery issues. There are fishery problems in the region especially in the Emerald Basin drainages. Supporting other regions is okay. But discussions about other region's fishery issues take too much time from local regional needs.

Mr. Fred D. Eningowuk welcomed new members. He is still learning the Council process. He would like to see agenda item relating to climate change in the future because that has an effect on the resource harvest regulations. Some of the reasons to place climate change on future agenda is because there are willows growing in the area. Animals depend on willows for food and as a result, animals that depend on willows for food are migrating to new areas.

Mr. Louis Green thanked Mr. Tom Kron who provided much information at the Anchorage Airport Terminal. Mr. Green have served 13 years on the Norton Sound Advisory Council and has dealt with Area M issues in the past. While he served on the Council it took long time to resolve this issue. Council thought this issue was resolved in 2001 when Area M fishery was shut down for three openings a week.

That was changed b y then Governor Murkowski three years later. One of the issues they talked about was the Federal side of the issue and the trawlers which was untouchable issue at that time. Mr. Green is glad that he is now part of the Regional Advisory Council and for forwarding resolution to Tim Towarek, FSB Chair.

Mr. Peter Martin thanked staff for preparing for this meeting. He wished everyone to have safe trip home.

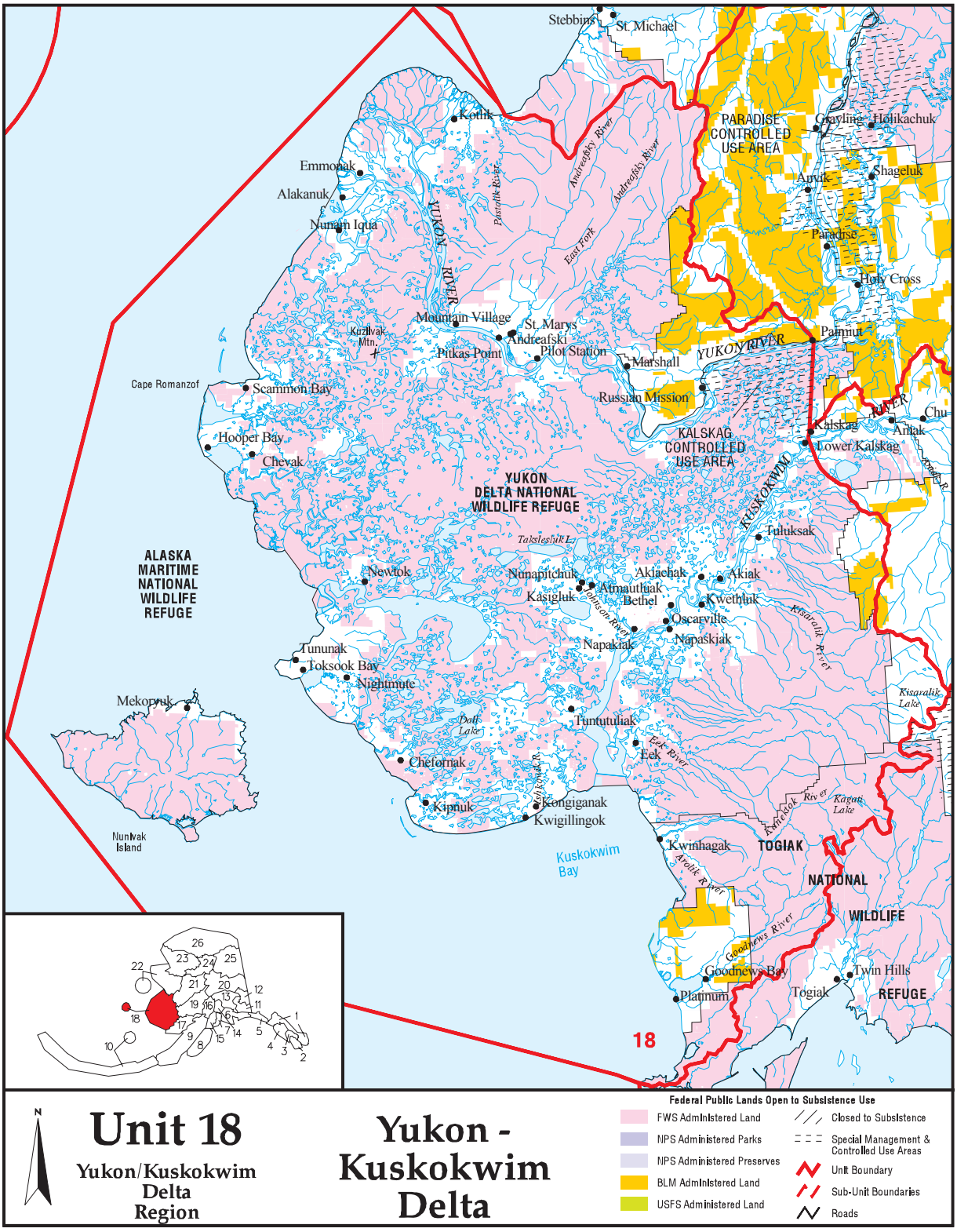
Mr. Tim Smith said he is glad to part of this Council and that he has lot to learn. He said Seward Peninsula is rich and is very productive area. Subsistence is very important part of the region's economy and can produce a lot of valuable food for local people including those who are very poor. Something is wrong and is not working for the benefit of local people. Local vegetation is extremely productive and has potential for producing animals. For some reason, region has just a fraction of the game it should have. Locals know in the past there were more animals in the region. Bering Sea is a very productive sea. It produces a lot of fish and marine mammals and yet fish harvest has been terrible and is getting worse. There is lot of work to be done in support of subsistence needs in the region. People in the Yukon river are having hard time harvesting fish they need, same happened in our region approximately 20 years ago and is spreading out. Mr. Smith said should people attend North Pacific Fishery Management Council, they would be testifying in front of highly paid staff including attorneys. This group is backed up by financial power. Mr. Smith hopes everyone will work together on the regional issues.

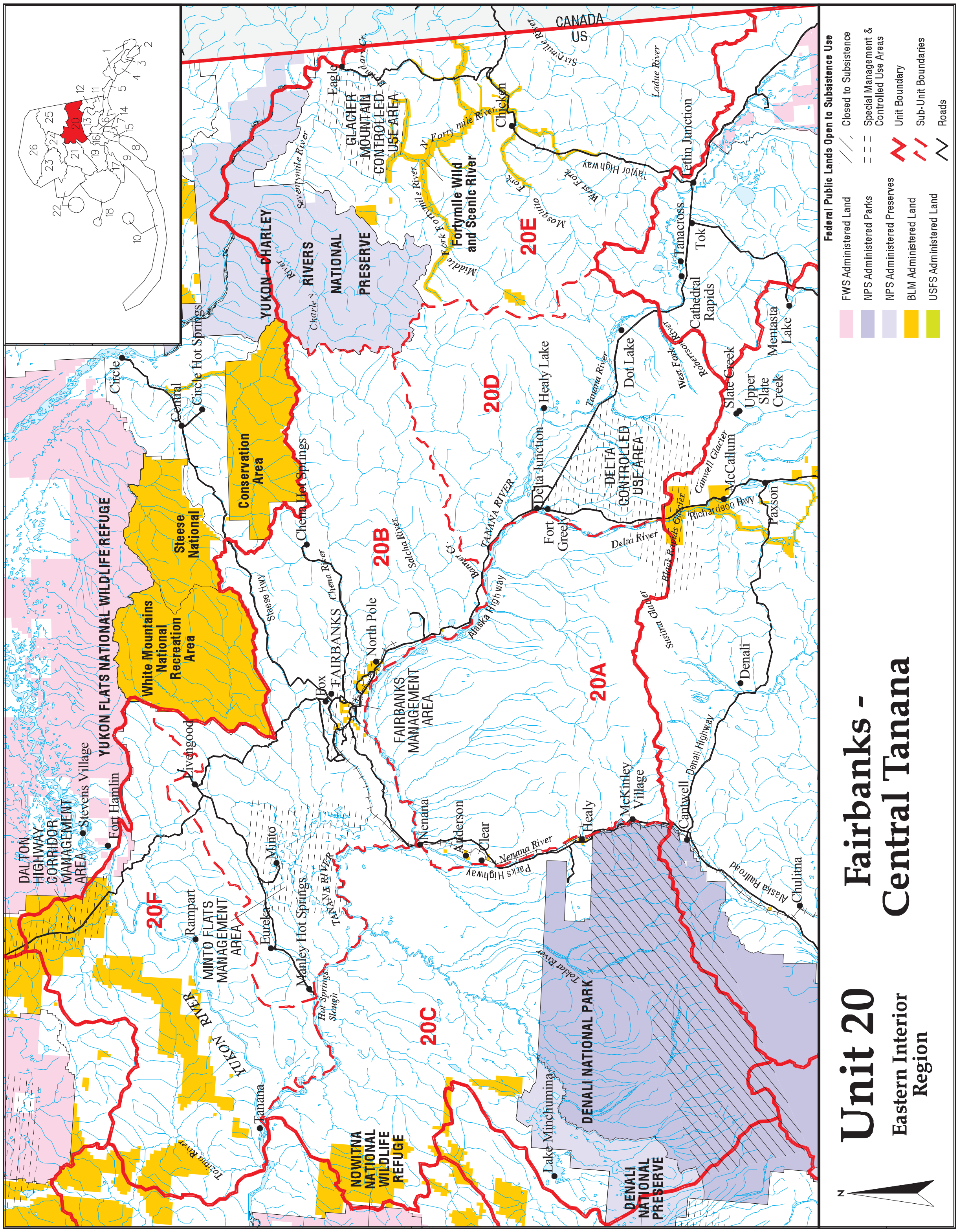
Mr. Michael Quinn thanked everyone for attending this meeting and said this meeting was long enough but Council got done what they needed to do. He stated that part of the reason why the Seward Peninsula Subsistence Regional Advisory Council deals with other region's issues like the Yukon River proposals is because some villages in the region uses subsistence resources in other regions. Mr. Quinn advised Federal staff to be prepared with knowledge and familiarity with biology and statistics of this region's resources as Mr. Tony Gorn does when Mr. Gorn attends SPSRAC meetings. Mr. Quinn thought it is not appropriate to let the State Department of Fish and Game do all the work and keep deferring to ADF&G for information.

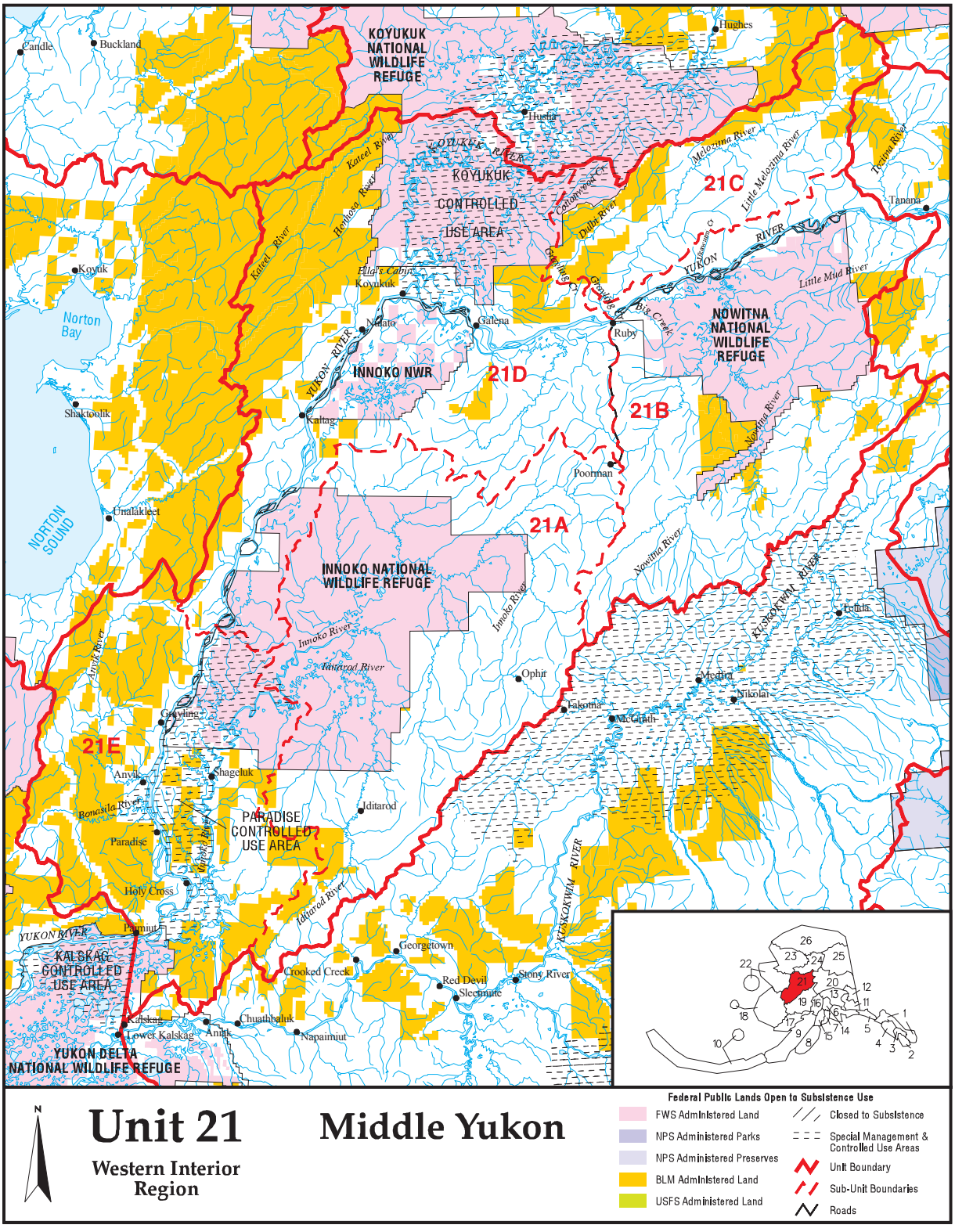
Adjournment

Motion
Mr. Peter Martin, Sr. moved, seconded by Mr. Louis Green to adjourn the meeting

Motion carried.

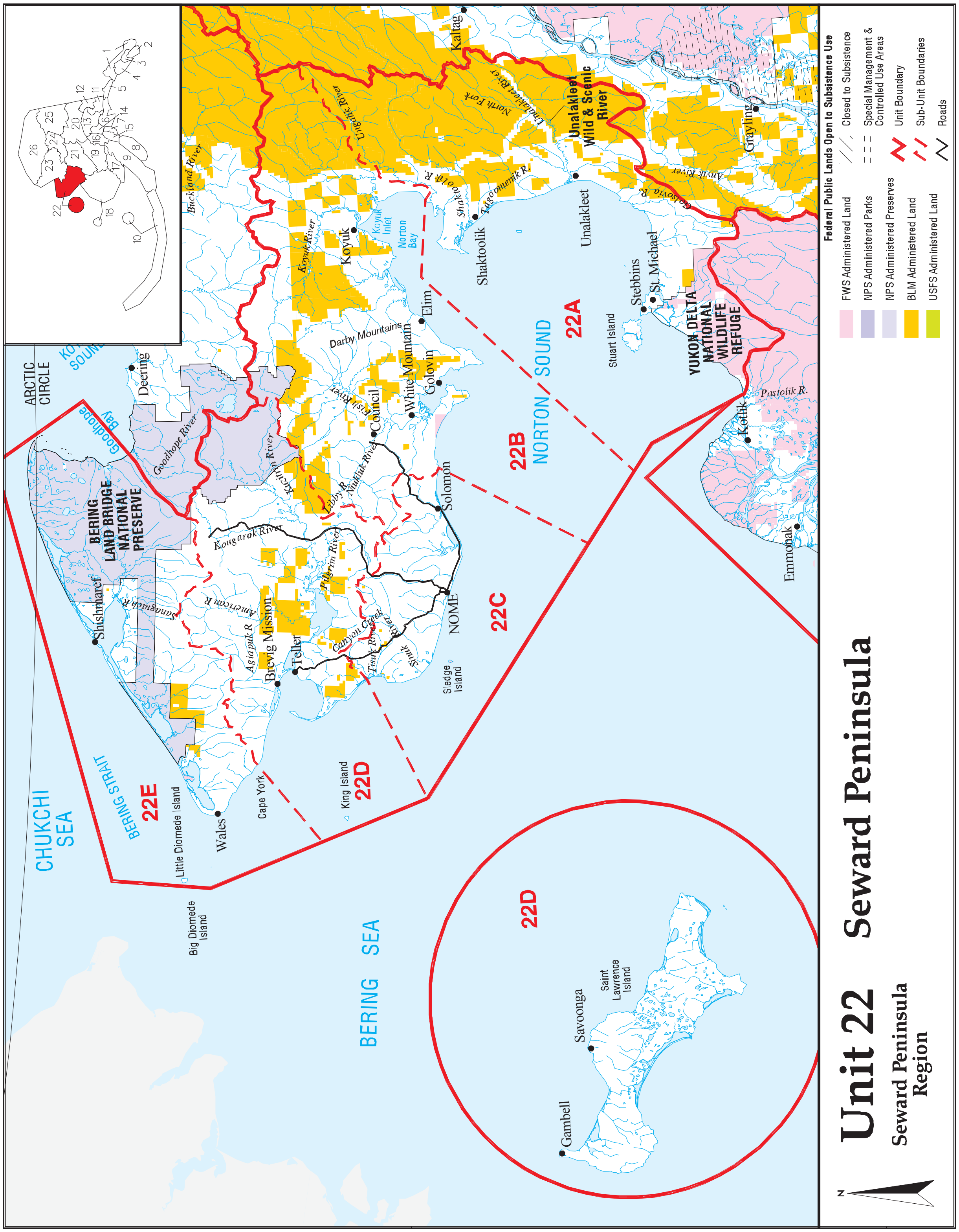

Stebbins
St. Michael
Koyuk
Emmonak
Alakanuk
Nunam Iqua
YUKON RIVER
Pastolik River
Andreafsky River
East Fork
PARADISE CONTROLLED USE AREA
Grayling
Holikachuk
Anvik
Shageluk
Paradise
Holy Cross
Mountain Village
St. Marys
Andreafski
Kuzilvak Mtn.
Pitkas Point
Pilot Station
Marshall
YUKON RIVER
Pamiut
Cape Romanzof
Scammon Bay
Russian Mission
Hooper Bay
Chevak
KALSKAG CONTROLLED USE AREA
Kalskag
Lower Kalskag
Aniak
Chu
KUSKOKWIM RIVER
YUKON DELTA NATIONAL WILDLIFE REFUGE
Tuluksak
Taksleshlak L.
ALASKA MARITIME NATIONAL WILDLIFE REFUGE
Newtok
Nunapitchuk
Akiachak
Akiak
Atmautluak
Kasigluk
Bethel
Kwethluk
Johnson River
Oscarville
Napaskiak
Napakiak
Kisaralik River
Tununak
Toksook Bay
Nightmute
Mekoryuk
Kisaralik Lake
Tuntutuliak
Eek
Eek River
Chefornak
Eek River
Kipnuk
Kongiganak
Kwigillingok
Nunivak Island
Kuskokwim Bay
Kwinhagak
Kanektok River
Kagati Lake
TOGIAK NATIONAL WILDLIFE REFUGE
Arolik River
Goodnews River
Goodnews Bay
Platinum
Togiak
Twin Hills
18
N
Unit 18
Yukon/Kuskokwim Delta Region
Yukon - Kuskokwim Delta
Federal Public Lands Open to Subsistence Use
FWS Administered Land
NPS Administered Parks
NPS Administered Preserves
BLM Administered Land
USFS Administered Land
Closed to Subsistence
Special Management & Controlled Use Areas
Unit Boundary
Sub-Unit Boundaries
Roads

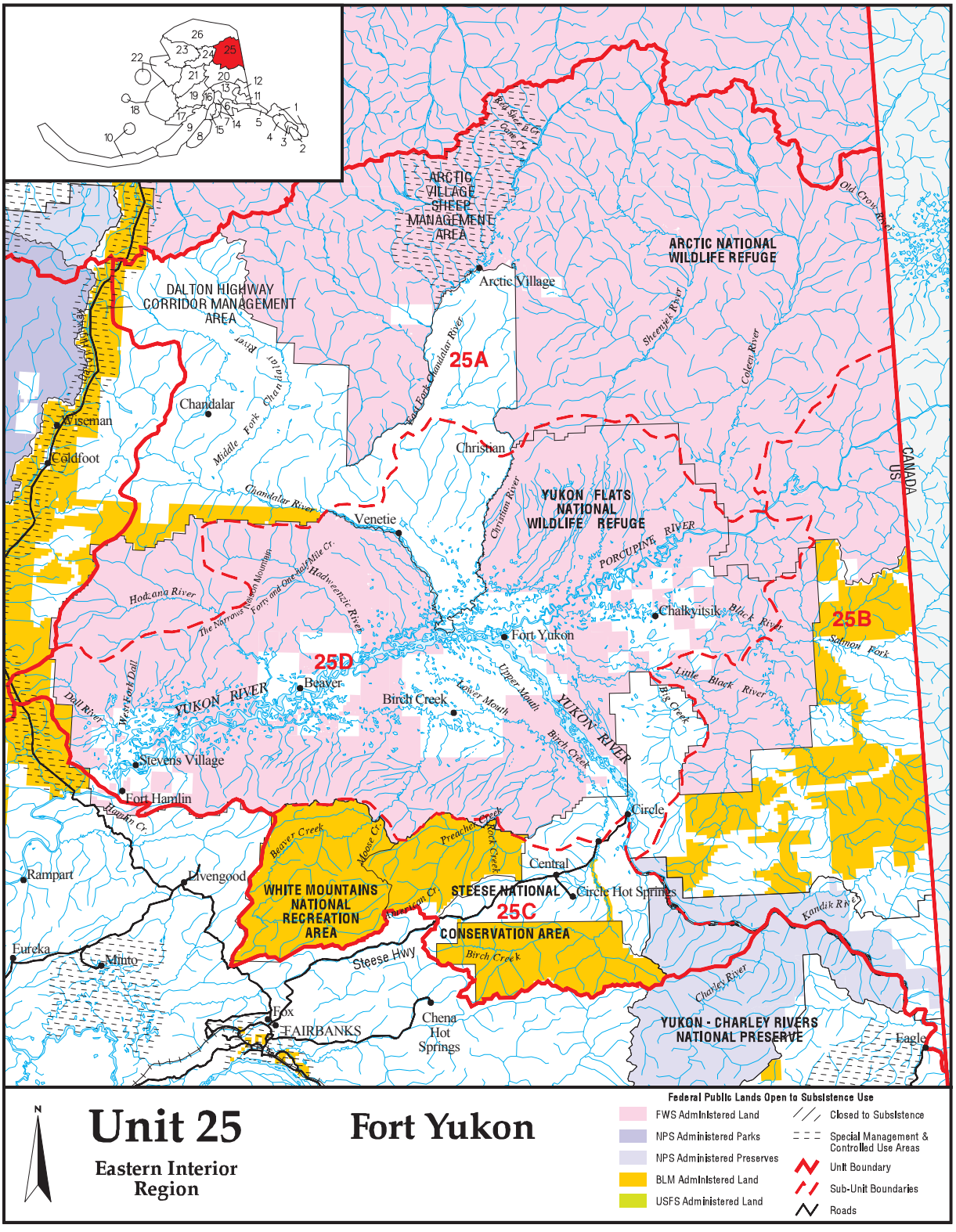

Unit 20
Eastern Interior Region
Fairbanks - Central Tanana
Federal Public Lands Open to Subsistence Use
FWS Administered Land
NPS Administered Parks
NPS Administered Preserves
BLM Administered Land
USFS Administered Land
Closed to Subsistence
Special Management & Controlled Use Areas
Unit Boundary
Sub-Unit Boundaries
Roads
CANADA
US
20A
20B
20C
20D
20E
20F
YUKON FLATS NATIONAL WILDLIFE REFUGE
White Mountains National Recreation Area
Steese National
Conservation Area
YUKON-CHARLEY RIVERS NATIONAL PRESERVE
GLACIER MOUNTAIN CONTROLLED USE AREA
Fortymile Wild and Scenic River
DELTA CONTROLLED USE AREA
FAIRBANKS MANAGEMENT AREA
MINTO FLATS MANAGEMENT AREA
DALTON HIGHWAY CORRIDOR MANAGEMENT AREA
DENALI NATIONAL PARK
DENALI NATIONAL PRESERVE
NOWITNA NATIONAL WILDLIFE REFUGE
FAIRBANKS
North Pole
Fox
Circle
Central
Circle Hot Springs
Chena Hot Springs
Eagle
Chicken
Tetlin Junction
Tok
Tanacross
Cathedral Rapids
Mentasta Lake
Dot Lake
Healy Lake
Delta Junction
Fort Greely
Slate Creek
Upper Slate Creek
McCallum
Paxson
Denali
Cantwell
McKinley Village
Healy
Clear
Anderson
Nenana
Minto
Eureka
Manley Hot Springs
Rampart
Tanana
Livengood
Stevens Village
Fort Hamlin
Lake Minchumina
Chulitna
YUKON RIVER
TANANA RIVER
Nenana River
Delta River
Chena River
Salcha River
Tolovana River
Kantishna River
Charley River
Seventymile River
Sixtymile River
Ladue River
Taylor Highway
Alaska Highway
Richardson Hwy
Parks Highway
Steese Hwy
Denali Highway
Alaska Railroad



Unit 21 Middle Yukon

Western Interior Region


Unit 22
Seward Peninsula
Seward Peninsula Region
Federal Public Lands Open to Subsistence Use
FWS Administered Land
NPS Administered Parks
NPS Administered Preserves
BLM Administered Land
USFS Administered Land
Closed to Subsistence
Special Management & Controlled Use Areas
Unit Boundary
Sub-Unit Boundaries
Roads
N
22A
22B
22C
22D
22E
CHUKCHI SEA
BERING SEA
BERING STRAIT
NORTON SOUND
Norton Bay
Koyuk Inlet
Goodhope Bay
ARCTIC CIRCLE
BERING LAND BRIDGE NATIONAL PRESERVE
YUKON DELTA NATIONAL WILDLIFE REFUGE
Unalakleet Wild & Scenic River
Kaltag
Grayling
Unalakleet
Shaktoolik
Stebbins
St. Michael
Stuart Island
Kotlik
Emmonak
Elim
Koyuk
Golovin
White Mountain
Council
Solomon
NOME
Teller
Brevig Mission
Shishmaref
Wales
Deering
Darby Mountains
Cape York
King Island
Sledge Island
Little Diomede Island
Big Diomede Island
Saint Lawrence Island
Savoonga
Gambell
Buckland River
Koyuk River
Ungalik River
North Fork
Unalakleet River
Tagoomenik R.
Anvik River
Golsovia R.
Pastolik R.
Goodhope River
Kuzitrin River
Fish River
Niukluk River
Kougarok River
Pilgrim River
American R.
Agiapuk R.
Canyon Creek
Serpentine R.
Sinuk
Tisuk R.
Darby Mountains


ARCTIC VILLAGE SHEEP MANAGEMENT AREA
ARCTIC NATIONAL WILDLIFE REFUGE
DALTON HIGHWAY CORRIDOR MANAGEMENT AREA
Arctic Village
Chandalar
Wiseman
Coldfoot
Christian
Venetie
25A
25B
25C
25D
YUKON FLATS NATIONAL WILDLIFE REFUGE
Fort Yukon
Chalkyitsik
Beaver
Birch Creek
Stevens Village
Fort Hamlin
Circle
Central
Rampart
Livengood
WHITE MOUNTAINS NATIONAL RECREATION AREA
STEESE NATIONAL CONSERVATION AREA
Circle Hot Springs
Eureka
Minto
Fox
FAIRBANKS
Cheng Hot Springs
YUKON - CHARLEY RIVERS NATIONAL PRESERVE
Eagle
CANADA
US
YUKON RIVER
PORCUPINE RIVER
Steese Hwy
Unit 25
Eastern Interior Region
Fort Yukon
Federal Public Lands Open to Subsistence Use
FWS Administered Land
NPS Administered Parks
NPS Administered Preserves
BLM Administered Land
USFS Administered Land
Closed to Subsistence
Special Management & Controlled Use Areas
Unit Boundary
Sub-Unit Boundaries
Roads

WP12-01 Executive Summary	
General Description	Proposal WP12-01, submitted by the Brown Bear Claw Handicraft Working Group, requests that prior to selling a handicraft incorporating a brown bear claw(s), the hide or claw(s) not attached to a hide, must be sealed by an authorized Alaska Department of Fish and Game (ADF&G) representative and that a copy of the ADF&G sealing certificate would then accompany the handicraft when sold.
Proposed Regulation	**Definitions and Utilization of Wildlife** *§___.25(j)(7) If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur, including claws, of a brown bear taken from Units 1–5, 9A–C, 9E, 12, 17, 20, 22, 23, 24B (only that portion within Gates of the Arctic National Park), 25, or 26.* *(i) In Units 1, 2, 3, 4, and 5, you may sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of a brown bear taken from Units 1, 4, or 5.* *(ii) ~~[Reserved]~~* ***Prior to selling a handicraft incorporating a brown bear claw(s), the hide or claw(s) not attached to a hide, must be sealed by an authorized ADF&G representative.*** *(A)* ***A copy of the ADF&G sealing certificate must accompany the handicraft when sold.***
OSM Preliminary Conclusion	**Support**
Southeast Regional Council Recommendation	
Southcentral Regional Council Recommendation	
Kodiak/Aleutians Regional Council Recommendation	
Bristol Bay Regional Council Recommendation	
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	

continued on next page

WP12-01 Executive Summary *(continued)*	
Northwest Arctic Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
North Slope Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**1 Support**

DRAFT STAFF ANALYSIS
WP12-01

ISSUES

Proposal WP12-01, submitted by the Brown Bear Claw Handicraft Working Group, requests that prior to selling a handicraft incorporating a brown bear claw(s), the hide or claw(s) not attached to a hide, must be sealed by an authorized Alaska Department of Fish and Game (ADF&G) representative and that a copy of the ADF&G sealing certificate would then accompany the handicraft when sold.

DISCUSSION

This proposal is a compromise reached by the members of the Brown Bear Claw Handicraft Working Group (Working Group). The proposal addresses concerns originally raised by the State of Alaska with Federal regulations that allow the sale of handicrafts that include brown bear claws from bears that are taken under Federal subsistence regulations. The Working Group suggested that deferred Proposals WP08-05 and WP10-02 be opposed (see deferred Proposal WP10-02), and that Proposal WP12-01 be submitted. The intent of the proposal is to protect subsistence users who incorporate brown bear claws into handicrafts for sale by providing proof that the claws are from brown bears that were harvested by Federally qualified subsistence users. Having proof that the claws are from subsistence-harvested brown bears could provide added value to a handicraft, as it would clearly identify that the claws are from a legally harvested brown bear. Requiring that a copy of the sealing certificate accompany the handicraft would provide a method of tracking legally harvested brown bears, but also would require modification to the sealing certificate, which is managed by the State of Alaska, to include a place on the certificate indicating that the bear was harvested by a Federally qualified subsistence user.

Existing Federal Regulation

Definitions and Utilization of Wildlife

§___.25(j)(7) If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur, including claws, of a brown bear taken from Units 1–5, 9A–C, 9E, 12, 17, 20, 22, 23, 24B (only that portion within Gates of the Arctic National Park) , 25, or 26.

(i) In Units 1, 2, 3, 4, and 5, you may sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of a brown bear taken from Units 1, 4, or 5.

(ii) [Reserved].

Proposed Federal Regulation

Definitions and Utilization of Wildlife

§___.25(j)(7) If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur, including claws, of a brown bear taken from Units 1–5, 9A–C, 9E, 12, 17, 20, 22, 23, 24B (only that portion within Gates of the Arctic National Park), 25, or 26.

(i) In Units 1, 2, 3, 4, and 5, you may sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of a brown bear taken from Units 1, 4, or 5.

(ii) ~~*[Reserved]*~~ ***Prior to selling a handicraft incorporating a brown bear claw(s), the hide or claw(s) not attached to a hide, must be sealed by an authorized ADF&G representative.***

(A) ***A copy of the ADF&G sealing certificate must accompany the handicraft when sold.***

Existing State Regulations

5AAC 92.200. Purchase and sale of game

In accordance with AS 16.05.920(a) and 16.05.930(e), the purchase, sale, or barter of game or any part of game is permitted except as provided in this section.

Except as provided in 5AAC 92.031, a person may not purchase, sell, barter, advertise or otherwise offer for sale or barter:

(1) any part of a bear, except an article of handicraft made from the fur of a bear;

In 2005, the State of Alaska, Board of Game began to allow the sale of raw bear hides, with claws attached, harvested in specific predator control management areas under a State permit.

5 AAC 92.031. Permit for selling skins, skulls, and trophies

(c) After the skin and skull is sealed as required under 5 AAC 92.165(a) , a person may sell the untanned skin, with claws attached, and skull of a black bear taken in an active predator control area listed in 5 AAC 92.125 only under a permit issued by the department.

(d) After the skin and skull is sealed as required under 5 AAC 92.165(a) , a person may sell the untanned skin, with claws attached, and skull of a brown bear taken in an active brown bear predator control area listed in 5 AAC 92.125 only under a permit issued by the department.

(e) In this section, "active" means that predator control permits have been issued for the referenced predator control area during the current year.

Extent of Federal Public Lands

Proposed regulations would apply to all Federal public lands in Units 1-5, 9A-C, 12, 17, 20, 23, 24B (only that portion within Gates of the Arctic National Park), 25, or 26, as defined by Federal subsistence hunting regulations.

Customary and Traditional Use Determinations

The customary and traditional use determinations for brown bear for all units in the State are included in **Appendix A**.

Regulatory History

The Board has consistently rejected attempts to remove brown bear claws as a legal item with which Federally qualified users can make handicrafts for sale. Retaining the use of claws in handicrafts for sale is consistent with previous Board action, and is not expected to significantly increase harvests, as described in previous analyses.

The Board has provided for the sale of handicrafts made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of brown bears by Federally qualified subsistence users where required. The intent of the Board has been to allow Federally qualified subsistence users to fully utilize the above-listed parts of bears legally harvested under Federal subsistence regulations. It has not been the intent of the Board to create a commercial incentive to harvest bears based on the sale of bear handicrafts.

The following is a brief summary of regulatory actions taken by the Board regarding the sale of handicrafts made from bear parts.

May 2002 — The Board adopted regulations allowing the sale of handicrafts made from the "fur" of black bear (statewide regulation).

May 2004 — The Board adopted regulations allowing the sale of handicrafts made from the "fur" of brown bear taken in Eastern Interior, Bristol Bay, and Southeast regions. The Board also clarified its intent to maintain the Federal definition of "fur," which includes claws.

May 2005 — The Board adopted regulations that:

- Modified the definition of the term *handicraft*.
- Modified the definition of the terms *skin, hide, pelt, and fur*.
- Modified regulatory language to clarify that bear claws can be used in handicrafts for sale. (The previous language allowing the sale of handicrafts made with bear claws specifically referred to bear fur, with the reference to claws contained in the definition of fur. With the old language it was not obvious to most readers that the use of claws was permitted. This action by the Board did not authorize any new uses.)
- Allowed the sale of handicrafts in Units 1–5 made from bones, teeth, sinew, or skulls of bears taken in those units.

May 2006 — The Board rejected proposed regulations to prohibit the sales of handicrafts made from bear claws to businesses. However, the Board did adopt regulatory language that prohibits handicraft sales that constitute a "significant commercial enterprise."

May 2007 — The Board rejected proposed regulations that claws be removed from the Federal definition of fur and that sales of handicraft articles made from claws, bones, teeth, sinew, or skulls of black and brown bears be allowed for sale only between Federally qualified subsistence users statewide.

May 2008 — The Board deferred a proposed regulation governing the use of brown bear claws in handicrafts for sale. The proposal asked for the removal of all unit-specific regulations related to the statewide sale of brown bear handicrafts made of skin, hide, pelt or fur. The proposal also stated that sales of brown bear handicrafts made of claws, bones, teeth, sinew, or skulls should occur only between Federally qualified subsistence users. The deferment pended on the formation of a working group to address the issue of developing a method of tracking brown bear claws made into handicrafts for sale. The working group would include representatives from all interested Subsistence Regional Advisory Councils (Councils) and State and Federal staff (FSB 2008:102-119).

May 2010 — The Board was presented with an update of the working group.

Brown Bear Claw Handicraft Working Group

The Brown Bear Claw Handicraft Working Group was composed of representatives from nine of the ten Councils, staff from ADF&G, and staff of Federal agencies. The working group met over several occasions between 2009 and 2011 to discuss a range of issues relating to brown bear claws including their uses in handicrafts, the feasibility of tracking, and potential changes to regulations. An initial scoping meeting between Federal and State staff was held in January 2009; at that meeting a draft charge was developed[1]. A briefing was provided to the Councils during the Winter 2009 meeting cycle on the status of the working group, and Councils selected representatives to participate in the working group. The first working group meeting occurred in June 2009. Federal and State staff conducted further research and met twice in the summer of 2009 to discuss research questions and issues. Staff provided another briefing to the Councils on the status of the working group at the Fall 2009 Council meetings.

The working group met again in July 2010 and discussed changing the Federal subsistence regulations over the sale of handicrafts incorporating brown bear claws. The group posed that if these regulations were to change, that the new regulations not be burdensome to subsistence users. The working group also discussed the Convention on International Trade in Endangered Species agreement and sealing requirements, which affect subsistence users who wish to sell handicrafts that incorporate brown bear claws.

The working group came to consensus in July 2010 to recommend that the Board reject deferred Proposal WP10-02 that had been submitted in 2008 (numbered in 2008 as WP08-05) and submit a new proposal. The working group suggested the new proposal require sealing a brown bear only if the subsistence user intends to sell a handicraft incorporating brown bear claw(s). The results of the July 2010 meeting, including the working group's suggested proposal language, were taken to nine of the ten Councils during the Fall 2010 meeting cycle to seek input from the Councils. The Councils also were notified that a new proposal would come before them in the fall of 2011 and before the Board in January of 2012. The working group had requested that the Councils' comments and suggestions be brought back to the working group for their consideration prior to finalizing a proposal. The working group held a teleconference March 2011 to hear the comments and suggestions from the Councils. At its March 2011 meeting, the working group developed a new proposal, WP12-01, requesting that prior to selling a handicraft incorporating a brown bear claw, the hide or claws not attached to a hide, must be sealed by an authorized ADF&G representative. To assure that the handicraft came from a brown bear hide that had been harvested by a Federally qualified subsistence user, a copy of the ADF&G sealing certificate would be required to accompany the handicraft when sold.

Biological Background

Brown bears range throughout most of Alaska, except the islands of the Aleutian Chain west of Unimak and the southeast Alaska islands south of Frederick Sound. Brown bear populations throughout most of Alaska are generally stable and occupy all of their historic range (Miller 1993). Throughout the State, brown bear population densities are diverse and vary according to food availability. On the North Slope where food is scarce, bear densities can be as low as one bear every 300 miles. Brown bear densities as high as one brown bear per mile have been recorded in coastal areas with healthy salmon runs. Brown

1 Draft charge for working group: Develop a method(s) to recommend to the Federal Subsistence Board and Board of Game for tracking brown bear claws made into handicrafts that is enforceable and culturally sensitive, commensurate with the need to provide conservation of this wildlife resource.

bear density is moderate in interior Alaska where the average is one bear per 15–23 miles (Eide et al. 2008).

The following quote from *Ursus* (2002) may provide a clearer picture of the status of brown and other bears:

> Despite our rapidly increasing knowledge of bears, there are few places in the world where we really know how bear populations are faring…Assessments of bear populations often are based on records of dead animals and trends in habitat availability. These data produce dubious indications of population trends. Case studies relating to the trade in bear parts, sport harvests, and nuisance kills indicate that records of human-killed bears may not be accurate and may not necessarily reflect changes in population size. Increasing bear populations may continue to rise with increased levels of human exploitation (as long as it is below the maximum sustainable take), whereas declining populations may continue to plummet despite reduced exploitation. Ironically, bear populations that have been managed for sustained harvests have generally fared better than populations in which hunting has been prohibited, mainly because the former better controls illicit hunting than the latter (Garshelis 2002: 321–334).

There is no evidence to indicate that Federal subsistence regulations have led to an increased legal or illegal harvest of brown bears or that current Federal subsistence regulations adversely affect brown bear populations.

Effects of the Proposal

Adopting the proposal would provide some protection to subsistence users who incorporate brown bear claws into handicrafts for sale by providing proof that the claws are from brown bears that were harvested by Federally qualified subsistence users. By requiring that a copy of the sealing certificate accompany the handicraft, it would clearly identify that the claws are from a legally harvested brown bear. It is possible that having proof that the claws are from a subsistence-harvested brown bear could provide added value to a handicraft, as it would identify that the claws are from a legally-harvested brown bear. Adopting the proposal would only add an additional requirement of sealing the brown bear hide for those who are selling a handicraft incorporating a brown bear claw. In those units where sealing is already required (see **Table 1**), this proposal would have no substantial effect on subsistence users. If adopted, the proposal would require additional paperwork requirements to some subsistence users, which could be a burden to those users.

The sealing certificate would require modification so that there would be a space for indicating that the bear was harvested by a Federally qualified subsistence user. Sealing certificates are managed by the State of Alaska.

There is no known evidence to indicate that current Federal subsistence regulations adversely affect brown bear populations, nor that Federal subsistence regulations have led to an increased legal or illegal harvest of brown bears.

OSM PRELIMINARY CONCLUSION

Support Proposal WP12-01.

Table 1. Handicraft, salvage, and sealing requirements for brown bears harvested under Federal Subsistence Management Regulations*

	Unit																			
Regulation	1	2	3	4	5	6–8	9	10–11	12	13–16	17	18	19	20	21	22	23	24	25	26
__.25(j)(7) Authorized to sell handicrafts made from skin, hide, pelt, or fur, including claws, of a brown bear taken from the below units:	X	X	X	X	X		A, B, C, E		X		X			X		X	X	B[1]	X	X
__.25(j)(7)(i) In Units 1-5, authorized to sell handicrafts made from skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of a brown bear taken from the below units:	X			X	X															
__.25(j)(2)(ii) The hide of brown bears need not be salvaged in units:					X		B				X	X	A[2], B		D	X	X	X		A
__.26(j)(2) You may not possess or transport from Alaska the untanned skin or skull of a bear unless both have been sealed; sealing is not required for bears taken in the below units unless removed from the area.					X		B, E				X	X	A, B[3]		D	X	X	X		A
__.26(j)(3) You must keep a bear skin and skull together until both are sealed; this provision and sealing is not required for bears taken in the below units unless removed from the area. If sealed, ADF&G will remove a rudimentary premolar tooth.					X		B, E				X	X	A, B[3]		D	X	X	X		A
__.26(j)(3)(ii) If the skin or skull of a bear taken in the below units are removed from the area, you must have it sealed in Bethel, Dillingham, or McGrath; ADF&G will retain the skin of the skull and front claws.							B				X	X	A, B[3]							
__.26(j)(3)(iii) If the skin or skull of a bear taken in the below units are removed from the area or taken for commercial tanning within the area, you must first have it sealed in Barrow, Galena, Nome, or Kotzebue; ADF&G will retain the skin of the skull and front claws.															D	X	X	X		A
__.26(j)(3)(iv) If the skin or skull of a bear taken in the below units are removed from the area, you must first have it sealed in Yakutat.					X															
__.26(j)(3)(v) If the skin or skull of a bear taken in the below units are removed from the unit, you must first have it sealed; ADF&G will retain the skin of the skull and front claws.							E													

* See 50 CFR 100 for exact regulatory text.

[1] only in that portion within Gates of the Arctic National Park; [2] portions of; [3] downstream of and including the Aniak River drainage.

Justification

Previous action of the Board has been consistent with Section 803 of ANILCA, which includes the "making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption." This proposal would provide some protection to subsistence users who incorporate brown bear claws into handicrafts for sale by providing proof that the claws are from brown bears that were harvested by Federally qualified subsistence users. Requiring a copy of the sealing certificate to accompany the handicraft would clearly identify that the claws are from a legally-harvested brown bear. Value could be added to the handicraft, because the sealing certificate would identify that the claws are from a legally-harvested brown bear. Those subsistence users who harvest brown bears from units where sealing is already required would not be affected by this proposal. It is not anticipated that this proposal would adversely affect brown bear populations.

There is no known evidence to indicate that current Federal subsistence regulations adversely affect brown bear populations and there is no evidence to indicate that Federal subsistence regulations have led to an increased legal or illegal harvest of brown bears.

Requiring that a copy of the sealing certificate accompany the handicraft would provide a method of tracking legally-harvested brown bears, but also would require modification to the sealing certificate, which is managed by the State of Alaska, to include a place on the certificate indicating that the bear was harvested by a Federally qualified subsistence user.

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APPENDIX A

The customary and traditional use determinations for brown bear for all units in the State are included below.

Unit	C & T determination for Brown Bear	Harvest Limits for Brown Bear
1	Unit 1A—Rural residents of Unit 1A, except no Federal subsistence priority for residents of Hyder Unit 1B—Rural residents of Unit 1A, Petersburg and Wrangell, except no Federal subsistence priority for residents of Hyder Unit 1C—Rural residents of Unit 1C, Haines, Hoonah, Kake, Klukwan, Skagway, and Wrangell, except no Federal subsistence priority for residents of Gustavus Unit 1D—Rural residents of Unit 1D	1 bear every four regulatory years by State registration permit only
2		
3		
4	Rural residents of Unit 4 and Kake	Unit 4, Chichagof Island south and west of a line that follows the crest of the island from Rock Point to Rodgers Point, including Yakobi and other adjacent islands; Baranof Island south and west of a line which follows the crest of the island from Nisnemi Point to the entrance of Gut Bay and including Kruzof and other adjacent islands—One bear every four regulatory years by State permit only
5	Rural residents of Yakutat	1 bear by Federal registration permit only
6	No Federal subsistence priority	No Federal open season
7	No Federal subsistence priority	No Federal open season

Unit	C & T determination for Brown Bear	Harvest Limits for Brown Bear
8	Rural residents of Old Harbor, Akhiok, Larsen Bay, Karluk, Ouzinkie, and Port Lions	1 bear by Federal registration permit only. Up to 1 permit may be issued in Akhiok; up to 1 permit may be issued in Karluk; up to 3 permits may be issued in Larsen Bay; up to 2 permits may be issued in Old Harbor; up to 2 permits may be issued in Ouzinkie; and up to 2 permits may be issued in Port Lions.
9	Unit 9A—Residents of Pedro Bay Unit 9B—Rural residents of Unit 9B Unit 9C—Rural residents of Unit 9C Unit 9D—Rural residents of Units 9D and 10 (Unimak Island) Unit 9E—Residents of Chignik, Chignik Lagoon, Chignik Lake, Egegik, Ivanof Bay, Perryville, Pilot Point, Ugashik, and Port Heiden/Meshik	Units 9A, 9C, and 9D: *see Special Provisions* for the communities of False Pass, King Cove, Cold Bay, Sand Point, and Nelson Lagoon. Unit 9B, Lake Clark National Park and Preserve—Residents of Nondalton, Illiamna, Newhalen, Pedro Bay, and Port Alsworth only—1 bear by Federal registration permit only. The season will be closed when 4 females or 4 bears have been taken, whichever occurs first. Unit 9B remainder—1 bear by State registration permit only Unit 9E—1 bear by Federal registration permit only
10	Unit 10—Rural residents of Units 9D and 10 (Unimak Island)	No Federal open season. *See Special Provisions for the communities of False Pass, King Cove, Cold Bay, Sand Point, and Nelson Lagoon for Unit 10.*
11	Unit 11, north of the Sanford River—Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12 Unit 11 remainder—Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Unit 11	1 bear
12	Rural residents of Unit 12, Dot Lake, Chistochina, Gakona, Mentasta Lake, and Slana	1 bear

Unit	C & T determination for Brown Bear	Harvest Limits for Brown Bear
13	Rural residents of Unit 13 and Slana	1 bear—Bears taken within Denali National Park must be sealed within 5 days of harvest. That portion within Denali National Park will be closed by announcement of the superintendent after 4 bears have been harvested
14	Unit 14A—All rural residents Units 14B and 14C—No Federal subsistence priority	No Federal open season
15	No Federal Subsistence priority	
16	No Federal subsistence priority	
17	Unit 17A—Rural residents of Unit 17, and rural residents of Akiak, Akiachak, Goodnews Bay and Platinum Units 17A and 17B, those portions north and west of a line beginning from the Unit 18 boundary at the northwest end of Nenevok Lake, to the southern point of Upper Togiak Lake, and northeast to the northern point of Nukakuk Lake, northeast to the point where the Unit 17 boundary intersects the Shotgun Hills—Rural residents of Kwethluk Unit 17B, that portion draining into Nuyakuk Lake and Tikchik Lake—Rural residents of Akiak and Akiachak Units 17B and 17C—Rural residents of Unit 17	1 bear by State registration permit only *Contact ADF&G for permit details*
18	Residents of Akiachak, Akiak, Eek, Goodnews Bay, Kwethluk, Mountain Village, Napaskiak, Platinum, Quinhagak, St. Marys and Tuluksak	1 bear by State registration permit only
19	Units 19A and 19B—Rural residents of Units 19 and 18 within the Kuskokwim River drainage upstream from and including) the Johnson River Unit 19C—No Federal subsistence priority Unit 19D—Rural residents of Units 19A and 19D, Tuluksak, and Lower Kalskag	Units 19A and 19B, those portions which are downstream of and including the Aniak River drainage—1 bear by State Registration permit only Unit 19A remainder; Unit 19B remainder; and Unit 19D—1 bear Unit 19C—No Federal open season
20	Unit 20E—Rural residents of Unit 12 and Dot Lake Unit 20F—Rural residents of Unit 20F, Stevens Village and Manley Unit 20 remainder—All rural residents	Unit 20A—1 bear Unit 20E—1 bear Unit 20 remainder—1 bear

Unit	C & T determination for Brown Bear	Harvest Limits for Brown Bear
21	Rural residents of Units 21 and 23	Unit 21D—1 bear by State registration permit only Unit 21 remainder—1 bear
22	Unit 22—Rural residents of Unit 22	Units 22A, 22B, 22D, and 22E—1 bear by State registration permit only Unit 22C—1 bear by State registration permit only
23	Rural residents of Units 21 and 23	Unit 23, except the Baldwin Peninsula north of the Arctic Circle—1 bear by State registration permit only Unit 23 remainder—1 bear every four years
24	Unit 24, that portion south of caribou mountain and on public lands within and adjacent to the Dalton Highway Corridor Management Area—Rural Residents of Unit 24 and Stevens Village Unit 24 remainder—Rural residents of Unit 24	1 bear by State registration permit
25	Unit 25D—Rural residents of Unit 25D Unit 25 remainder—Residents of Unit 25 and Eagle	Units 25A and 25B—1 bear Unit 25C—1 bear Unit 25D—1 bear
26	Rural residents of Unit 26, except the Prudhoe Bay-Deadhorse Industrial Complex), Anaktuvuk Pass, and Point Hope	Unit 26A—1 bear by State registration permit only Unit 26B—1 bear Unit 26C—1 bear

WRITTEN PUBLIC COMMENTS

Support. No justification was provided.

Gates of the Arctic Subsistence Resource Commission

WP10-02 (Deferred) Executive Summary	
General Description	Proposal WP10-02 (deferred proposal WP08-05) requested clarification of the existing Federal Subsistence management regulation governing the use of brown bear claws in handicrafts for sale. The proposal asked for the removal of all unit-specific regulations related to the statewide sale of brown bear handicrafts made of skin, hide, pelt or fur and that sales of brown bear handicrafts made of claws, bones, teeth, sinew, or skulls should occur only between Federally qualified subsistence users. *Submitted by the Alaska Department of Fish and Game*
Proposed Regulation	*§___.25(j)(7) If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur,* ***not*** *including claws, of a brown bear ~~taken from Units 1–5, 9A–C, 9E, 12, 17, 20, or 25~~.* *(i) ~~In Units 1, 2, 3, 4, and 5~~,* ***If you are a Federally qualified subsistence user,*** *you may sell handicraft articles made from the ~~skin, hide, pelt, fur~~, claws, bones, teeth, sinew, or skulls of a brown bear* ***to another Federally qualified subsistence user*** *~~taken from Units 1, 4, or 5~~.* *(ii) [Reserved].*
OSM Preliminary Conclusion	**Take no action**
Southeast Regional Council Recommendation	
Southcentral Regional Council Recommendation	
Kodiak/Aleutians Regional Council Recommendation	
Bristol Bay Regional Council Recommendation	
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Northwest Arctic Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	

continued on next page

WP10-02 (Deferred) Executive Summary *(continued)*	
North Slope Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
WP10-02 *(DEFERRED WP08-05)*

Proposal WP10-02 (deferred proposal WP08-05), submitted by the Alaska Department of Fish and Game (ADF&G), requested clarification of the existing Federal Subsistence management regulation governing the use of brown bear claws in handicrafts for sale. The proposal asked for the removal of all unit-specific regulations related to the statewide sale of brown bear handicrafts made of skin, hide, pelt or fur and that sales of brown bear handicrafts made of claws, bones, teeth, sinew, or skulls should occur only between Federally qualified subsistence users.

Proposal WP10-02 was deferred by the Federal Subsistence Board (Board) at its May 2008 meeting at the suggestion of the ADF&G. The original deferment pended on the formation of a working group to address the issue of developing a method of tracking brown bear claws made into handicrafts for sale. In 2008, the Board voted unanimously to defer the proposal. The Board directed that the working group include representatives from all interested Subsistence Regional Advisory Councils (Councils) and State and Federal staff (FSB 2008:102-119). In 2010, the Board was presented with an update of the working group. The Board agreed to continue to defer WP10-02 until the working group could meet again and come to a consensus on a future plan or proposal.

The Brown Bear Claw Handicraft Working Group (Working Group) was composed of representatives from nine of the ten Councils, staff from ADF&G, and staff of Federal agencies. The Working Group met several times between 2009 and 2011 to discuss a range of issues relating to brown bear claws including their uses in handicrafts, the feasibility of tracking, and potential changes to regulations. An initial scoping meeting between Federal and State staff was held in January 2009; at that meeting a draft charge was developed[1]. A briefing was provided to the Councils (except Western) during the Winter 2009 meeting cycle on the status of the Working Group, and the Councils selected representatives to participate in the Working Group. The first Working Group meeting occurred in June 2009. Federal and State staff conducted further research and met twice in the summer of 2009 to discuss research questions and issues. Staff provided another briefing to the Councils (except Western) on the status of the Working Group at the Fall 2009 Council meetings.

The Working Group met again in July 2010 and discussed changing the Federal subsistence regulations concerning the sale of handicrafts incorporating brown bear claws. The group posed that if these regulations were to change, that the new regulations not be burdensome to subsistence users. The Working Group also discussed the Convention on International Trade in Endangered Species agreement and sealing requirements, which affect subsistence users who wish to sell handicrafts that incorporate brown bear claws.

The Working Group came to consensus in July 2010 to recommend that the Board reject deferred Proposal WP10-02 that had been submitted in 2008 (numbered in 2008 as WP08-05) and that a new proposal should be submitted. The Working Group suggested the new proposal (WP12-01) require sealing a brown bear only if the subsistence user intends to sell a handicraft incorporating brown bear claw(s). The results of the July 2010 meeting, including the Working Group's suggested proposal, were taken to nine of the ten Councils during the Fall 2010 meeting cycle to seek input from the Councils. The Councils also were notified that a new proposal would come before them in the fall of 2011 and before the Board

1 Draft charge for working group: Develop a method(s) to recommend to the Federal Subsistence Board and Board of Game for tracking brown bear claws made into handicrafts that is enforceable and culturally sensitive, commensurate with the need to provide conservation of this wildlife resource.

in January of 2012. The Working Group had requested that the Councils' comments and suggestions be brought back to the Working Group for their consideration prior to finalizing a proposal. The Working Group held a teleconference March 2011 to hear the comments and suggestions from the Councils. At its March 2011 meeting, the Working Group developed a new proposal, WP12-01, requesting that prior to selling a handicraft incorporating a brown bear claw, the hide or claws not attached to a hide, must be sealed by an authorized ADF&G representative. To assure that the handicraft came from a brown bear hide that had been harvested by a Federally qualified subsistence user, a copy of the ADF&G sealing certificate would be required to accompany the handicraft when sold.

No analysis was written regarding deferred Proposal WP08-05 (WP10-02). Nothing has changed since the analysis of Proposal WP08-05 was presented to the Board in May of 2008 (see Appendix A).

Analysis of Proposal WP12-01 is presented separately.

OSM PRELIMINARY CONCLUSION

Take no action on Proposal WP10-02 (deferred proposal WP08-05).

Justification

Proposal WP08-05 (and subsequently WP10-02) was deferred by the Board pending the recommendations of the Brown Bear Claw Handicraft Working Group. The Working Group compromised on a proposed regulation that would address concerns originally raised by the State of Alaska with Federal regulations that allow the sale of handicrafts that include brown bear claws from bears that are taken under Federal Subsistence regulations. The recommendation of the Working Group is to oppose Proposals WP08-05/WP10-02 and for the Board to consider Proposal WP12-01 in place of Proposals WP08-05/WP10-02. Proposal WP12-01, submitted by the Working Group, would continue to allow selling a handicraft incorporating brown bear claws in specific units, while requiring sealing the brown bear hide only when the handicraft incorporating the claw(s) is sold. Analysis of Proposal WP12-01 is presented separately. The State of Alaska intends to request that the Board withdraw deferred proposals WP10-02 (WP08-05) at the January 2012 Board meeting (Yuhas 2011, pers. comm.).

LITERATURE CITED

FSB. 2008. Transcripts of the Federal Subsistence Board proceedings, April 29, 2008. Office of Subsistence Management, FWS. Anchorage, AK.

Yuhas. 2011. State-Federal Subsistence Liaison Team Leader. Alaska Department of Fish and Game, State of Alaska. Anchorage, AK.

APPENDIX A

STAFF ANALYSIS
WP08-05

ISSUES

Proposal WP08-05, submitted by the Alaska Department of Fish and Game (ADF&G), requests the removal of all unit-specific regulations related to the statewide sale of brown bear handicrafts made of skin, hide, pelt or fur and that sales of brown bear handicrafts made of claws, bones, teeth, sinew, or skulls should occur only between Federally qualified subsistence users.

It should be noted that within the Proposed Federal Regulation, the regulatory language, as presented, would preclude all sales of brown bear claws unless amended. This language is found in §___.25(j)(7) and includes "not including claws" which would supersede the language in the next passage which, as written, is intended to allow the sale of handicrafts that include brown bear claws only between Federally qualified subsistence users.

DISCUSSION

The proponent submitted this proposal in order to refine Federal regulations, which, in its view, allow for "unconstrained commercial sale of handicrafts made from brown bear parts" and create "market incentives for poaching." Between 2002 and 2007, the Federal Subsistence Board (Board) considered seven proposals regarding the sale of handicrafts made from some of the nonedible parts of bears. Throughout this period, the Board has consistently provided for the sale of handicrafts made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, and skulls of brown bear taken by Federally qualified subsistence users from units where these practices are considered appropriate.

The proponent's description of persons eligible to sell handicrafts made with these parts would increase the types of bear parts eligible for sale in much of the State, but would narrow sales only to those between Federally qualified rural residents.

Many of the proponent's requests are based on conservation concerns (ADF&G 2008). There are many well documented conservation concerns connected to the illegal trade of bear parts such as gall bladders, bile, and paws. These concerns exist because of the lucrative markets for what is referred to as the "traditional Chinese medicine" trade and Asian "wildlife cuisine" which includes the meat of bear paws (not including claws) (HSUS 2008, Garshelis and McLellan 2008, Garshelis 2002, Williamson and Phipps 1999). These types of illegal trade are a threat to bears in North America and around the world. On the other hand, there appears to be an absence of documentation regarding conservation concerns related to bear claws and bear claw handicrafts. This absence seems to indicate that the effects of the trade or sale of bear claws is not comparable to the trade and sale of bear gall bladders and paws.

Existing Federal Regulation

Definitions & Utilization of Wildlife

§___.25(j)(7) If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur, including claws, of a brown bear taken from Units 1–5, 9A–C, 9E, 12, 17, 20, or 25.

(i) In Units 1, 2, 3, 4, and 5, you may sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of a brown bear taken from Units 1, 4, or 5.

(ii) [Reserved].

Proposed Federal Regulation

Definitions & Utilization of Wildlife

§___.25(j)(7) If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur, ***not*** *including claws, of a brown bear ~~taken from Units 1–5, 9A–C, 9E, 12, 17, 20, or 25~~.*

(i) ~~In Units 1, 2, 3, 4, and 5~~, ***If you are a Federally qualified subsistence user,*** *you may sell handicraft articles made from the ~~skin, hide, pelt, fur~~, claws, bones, teeth, sinew, or skulls of a brown bear* ***to another Federally qualified subsistence user*** *~~taken from Units 1, 4, or 5~~.*

(ii) [Reserved].

Existing State Regulations

5AAC 92.200. Purchase and sale of game

In accordance with AS 16.05.920(a) and 16.05.930(e), the purchase, sale, or barter of game or any part of game is permitted except as provided in this section.

Except as provided in 5AAC 92.031, a person may not purchase, sell, barter, advertise or otherwise offer for sale or barter:

(1) any part of a bear, except an article of handicraft made from the fur of a bear;

In 2005, the State of Alaska, Board of Game began to allow the sale of raw bear hides, with claws attached, harvested in specific predator control management areas under a State permit.

5 AAC 92.031. Permit for selling skins, skulls, and trophies

(c) After the skin and skull is sealed as required under 5 AAC 92.165(a) , a person may sell the untanned skin, with claws attached, and skull of a black bear taken in an active predator control area listed in 5 AAC 92.125 only under a permit issued by the department.

(d) After the skin and skull is sealed as required under 5 AAC 92.165(a) , a person may sell the untanned skin, with claws attached, and skull of a brown bear taken in an active brown bear predator control area listed in 5 AAC 92.125 only under a permit issued by the department.

(e) In this section, "active" means that predator control permits have been issued for the referenced predator control area during the current year.

Extent of Federal Public Lands

Proposed regulations would apply to all Federal public lands in Alaska, as defined by Federal Subsistence hunting regulations. Federal public lands represent approximately 60% of Alaska or 380,000 square miles.

Customary and Traditional Use Determinations

The customary and traditional use determinations for brown bear for all units in the State are included in **Appendix A**.

Regulatory History

The following is a brief summary of regulatory actions taken by the Board regarding the sale of handicrafts made from bear parts.

May 2002 — The Board adopted regulations allowing the sale of handicrafts made from the "fur" of black bear (statewide regulation).

May 2004 — The Board adopted regulations allowing the sale of handicrafts made from the "fur" of brown bear taken in Eastern Interior, Bristol Bay, and Southeast regions. The Board also clarified its intent to maintain the Federal definition of "fur," which includes claws.

May 2005 — The Board adopted regulations that:

- Modified the definition of the term *handicraft*.
- Modified the definition of the terms *skin, hide, pelt, and fur*.
- Modified regulatory language to clarify that bear claws can be used in handicrafts for sale. (The previous language allowing the sale of handicrafts made with bear claws specifically referred to bear fur, with the reference to claws contained in the definition of fur. With the old language it was not obvious to most readers that the use of claws was permitted. This action by the Board did not authorize any new uses.)
- Allowed the sale of handicrafts in Units 1–5 made from bones, teeth, sinew, or skulls of bears taken in those units.

May 2006 — The Board rejected proposed regulations to prohibit the sales of handicrafts made from bear claws to businesses. However, the Board did adopt regulatory language that prohibits handicraft sales that constitute a "significant commercial enterprise."

May 2007 — The Board rejected proposed regulations that claws be removed from the Federal definition of fur and that sales of handicraft articles made from claws, bones, teeth, sinew, or skulls of black and brown bears be allowed for sale only between Federally qualified subsistence users statewide.

Biological Background

Brown bears range throughout most of Alaska, except the islands of the Aleutian Chain west of Unimak and the southeast Alaska islands south of Frederick Sound. Brown bear populations throughout most of Alaska are generally stable and occupy all of their historic range (Miller 1993). Throughout the State, brown bear population densities are diverse and vary according to food availability. On the North Slope

where food is scarce, bear densities can be as low as one bear every 300 miles. Brown bear densities as high as one brown bear per mile have been recorded in coastal areas with healthy salmon runs. Brown bear density is moderate in interior Alaska where the average is one bear per 15–23 miles (Eide and Miller 1994 and 2003).

The following quote from *Ursus* (2002) may provide a clearer picture of the biological status of brown and other bears:

> Despite our rapidly increasing knowledge of bears, there are few places in the world where we really know how bear populations are faring…Assessments of bear populations often are based on records of dead animals and trends in habitat availability. These data produce dubious indications of population trends. Case studies relating to the trade in bear parts, sport harvests, and nuisance kills indicate that records of human-killed bears may not be accurate and may not necessarily reflect changes in population size. Increasing bear populations may continue to rise with increased levels of human exploitation (as long as it is below the maximum sustainable take), whereas declining populations may continue to plummet despite reduced exploitation. Ironically, bear populations that have been managed for sustained harvests have generally fared better than populations in which hunting has been prohibited, mainly because the former better controls illicit hunting than the latter (Garshelis 2002: 321–334).

Effects of the Proposal

Under current Federal subsistence regulations, brown bear fur with claws can only be used to make handicrafts for sale if the bears were harvested from units in Eastern Interior, Bristol Bay and Southeast Alaska. Other parts, such as bones teeth, sinew, or skulls can only be used in handicrafts for sale from brown bear taken in Southeast Alaska. The proponent's description of persons eligible to sell handicrafts made with these parts would increase the types of bear parts eligible for sale in much of the State, but would narrow all sales only to those between Federally qualified rural residents. The removal of unit-specific restrictions would negate the intent of the Board and the Regional Advisory Councils in recognizing the diverse customary and traditional uses of bears and bear parts throughout the State. These diverse customary and traditional uses are reflected in Regional Advisory Council recommendations. Three proposals (WP08-12, WP08-52 and WP08-53) which request the inclusion of Units 11, 23, 24B and 26 for eligibility to sell brown bear handicrafts with claws have been submitted for the 2008–2010 wildlife regulatory cycle and are analyzed separately.

Previous Board action provided for the sale of handicrafts made from bear claws by Federally qualified subsistence users to consumers including and other than Federally qualified subsistence users. Restricting sales solely to other Federally qualified rural residents, as proposed, will satisfy the need to use these products for regalia and cultural events in rural areas; however, the proposed regulatory language will not allow for handicraft sales to a variety of consumers, which is desired by subsistence users to support themselves and their families in a contemporary cash-subsistence economy.

The Board has also consistently rejected attempts to remove brown bear claws as a legal item with which Federally qualified users can make handicrafts for sale. Retaining the use of claws in handicrafts for sale is consistent with previous Board action, and is not expected to significantly increase harvests, as described in previous analyses.

The Board has provided for the sale of handicrafts made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of brown bears by Federally qualified subsistence users where appropriate. The intent of

the Board has been to allow Federally qualified subsistence users to fully utilize the above-listed parts of bears legally harvested under Federal subsistence regulations. It has not been the intent of the Board to create a commercial incentive to harvest bears based on the sale of bear handicrafts.

There is no known evidence to indicate that current Federal subsistence regulations adversely affect brown bear populations, nor that Federal subsistence regulations have led to an increased legal or illegal harvest of brown bears.

OSM CONCLUSION

Oppose proposal WP08-05.

Justification

Previous action of the Board has been consistent with Section 803 of ANILCA, which includes the "making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption." This proposal would unnecessarily restrict the subsistence uses of Federally qualified subsistence users as specified in ANILCA Section 803. There is no evidence to indicate that current Federal regulations adversely affect bear populations, nor has any been provided. Further, there has been no evidence provided to indicate that current Federal regulations have led to an increased legal or illegal harvest of bears. If adopted, this proposal would broaden the use of some of the nonedible parts of brown bear into regions where use is not allowed under current Federal regulations. The residents of a number of these regions have stated, through their Regional Subsistence Advisory Councils, they are opposed to inclusion in these regulations.

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WP08-05
APPENDIX A

The customary and traditional use determinations for brown bear for all units in the State are included below.

Unit	C & T determination for Brown Bear	Harvest Limits for Brown Bear
1	*Unit 1A—Rural residents of Unit 1A, except no Federal subsistence priority for residents of Hyder* *Unit 1B—Rural residents of Unit 1A, Petersburg and Wrangell, except no Federal subsistence priority for residents of Hyder* *Unit 1C—Rural residents of Unit 1C, Haines, Hoonah, Kake, Klukwan, Skagway, and Wrangell, except no Federal subsistence priority for residents of Gustavus* *Unit 1D—Rural residents of Unit 1D*	1 bear every four regulatory years by State registration permit only
2		
3		
4	*Rural residents of Unit 4 and Kake*	Unit 4, Chichagof Island south and west of a line that follows the crest of the island from Rock Point to Rodgers Point, including Yakobi and other adjacent islands; Baranof Island south and west of a line which follows the crest of the island from Nisnemi Point to the entrance of Gut Bay and including Kruzof and other adjacent islands—One bear every four regulatory years by State permit only
5	*Rural residents of Yakutat*	1 bear by Federal registration permit only
6	*No Federal subsistence priority*	No Federal open season
7	*No Federal subsistence priority*	No Federal open season

Unit	C & T determination for Brown Bear	Harvest Limits for Brown Bear
8	*Rural residents of Old Harbor, Akhiok, Larsen Bay, Karluk, Ouzinkie, and Port Lions*	1 bear by Federal registration permit only. Up to 1 permit may be issued in Akhiok; up to 1 permit may be issued in Karluk; up to 3 permits may be issued in Larsen Bay; up to 2 permits may be issued in Old Harbor; up to 2 permits may be issued in Ouzinkie; and up to 2 permits may be issued in Port Lions.
9	*Unit 9A—Residents of Pedro Bay* *Unit 9B—Rural residents of Unit 9B* *Unit 9C—Rural residents of Unit 9C* *Unit 9D—Rural residents of Units 9D and 10 (Unimak Island)* *Unit 9E—Residents of Chignik, Chignik Lagoon, Chignik Lake, Egegik, Ivanof Bay, Perryville, Pilot Point, Ugashik, and Port Heiden/Meshik*	Units 9A, 9C, and 9D: *see Special Provisions* for the communities of False Pass, King Cove, Cold Bay, Sand Point, and Nelson Lagoon. Unit 9B, Lake Clark National Park and Preserve—Residents of Nondalton, Illiamna, Newhalen, Pedro Bay, and Port Alsworth only—1 bear by Federal registration permit only. The season will be closed when 4 females or 4 bears have been taken, whichever occurs first. Unit 9B remainder—1 bear by State registration permit only Unit 9E—1 bear by Federal registration permit only
10	*Unit 10—Rural residents of Units 9D and 10 (Unimak Island)*	No Federal open season. *See Special Provisions for the communities of False Pass, King Cove, Cold Bay, Sand Point, and Nelson Lagoon for Unit 10.*
11	*Unit 11, north of the Sanford River—Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12* *Unit 11 remainder—Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Unit 11*	1 bear
12	*Rural residents of Unit 12, Dot Lake, Chistochina, Gakona, Mentasta Lake, and Slana*	1 bear

Unit	C & T determination for Brown Bear	Harvest Limits for Brown Bear
13	*Rural residents of Unit 13 and Slana*	1 bear—Bears taken within Denali National Park must be sealed within 5 days of harvest. That portion within Denali National Park will be closed by announcement of the superintendent after 4 bears have been harvested
14	*Unit 14A—All rural residents* *Units 14B and 14C—No Federal subsistence priority*	No Federal open season
15	*No Federal Subsistence priority*	
16	*No Federal subsistence priority*	
17	*Unit 17A—Rural residents of Unit 17, and rural residents of Akiak, Akiachak, Goodnews Bay and Platinum* *Units 17A and 17B, those portions north and west of a line beginning from the Unit 18 boundary at the northwest end of Nenevok Lake, to the southern point of Upper Togiak Lake, and northeast to the northern point of Nukakuk Lake, northeast to the point where the Unit 17 boundary intersects the Shotgun Hills—Rural residents of Kwethluk* *Unit 17B, that portion draining into Nuyakuk Lake and Tikchik Lake—Rural residents of Akiak and Akiachak* *Units 17B and 17C—Rural residents of Unit 17*	1 bear by State registration permit only *Contact ADF&G for permit details*
18	*Residents of Akiachak, Akiak, Eek, Goodnews Bay, Kwethluk, Mountain Village, Napaskiak, Platinum, Quinhagak, St. Marys and Tuluksak*	1 bear by State registration permit only
19	*Units 19A and 19B—Rural residents of Units 19 and 18 within the Kuskokwim River drainage upstream from and including) the Johnson River* *Unit 19C—No Federal subsistence priority* *Unit 19D—Rural residents of Units 19A and 19D, Tuluksak, and Lower Kalskag*	Units 19A and 19B, those portions which are downstream of and including the Aniak River drainage—1 bear by State Registration permit only Unit 19A remainder; Unit 19B remainder; and Unit 19D—1 bear Unit 19C—No Federal open season
20	*Unit 20E—Rural residents of Unit 12 and Dot Lake* *Unit 20F—Rural residents of Unit 20F, Stevens Village and Manley* *Unit 20 remainder—All rural residents*	Unit 20A—1 bear Unit 20E—1 bear Unit 20 remainder—1 bear

Unit	C & T determination for Brown Bear	Harvest Limits for Brown Bear
21	*Rural residents of Units 21 and 23*	Unit 21D—1 bear by State registration permit only Unit 21 remainder—1 bear
22	*Unit 22—Rural residents of Unit 22*	Units 22A, 22B, 22D, and 22E—1 bear by State registration permit only Unit 22C—1 bear by State registration permit only
23	*Rural residents of Units 21 and 23*	Unit 23, except the Baldwin Peninsula north of the Arctic Circle—1 bear by State registration permit only Unit 23 remainder—1 bear every four years
24	*Unit 24, that portion south of caribou mountain and on public lands within and adjacent to the Dalton Highway Corridor Management Area—Rural Residents of Unit 24 and Stevens Village* *Unit 24 remainder—Rural residents of Unit 24*	1 bear by State registration permit
25	*Unit 25D—Rural residents of Unit 25D* *Unit 25 remainder—Residents of Unit 25 and Eagle*	Units 25A and 25B—1 bear Unit 25C—1 bear Unit 25D—1 bear
26	*Rural residents of Unit 26, except the Prudhoe Bay-Deadhorse Industrial Complex), Anaktuvuk Pass, and Point Hope*	Unit 26A—1 bear by State registration permit only Unit 26B—1 bear Unit 26C—1 bear

WP12-02 Executive Summary	
General Description	Proposal WP12-02 requests that only people 60 years of age or older, or disabled, be allowed to designate their harvest limit to another person. *Submitted by Michael Cronk of Tok*
Proposed Regulation	**§___.25 Subsistence taking of fish, wildlife, and shellfish: general regulations.** *(e) Hunting by designated harvest permit.* *If you are a Federally qualified subsistence user (recipient)* ***who is 60 years of age or older, or disabled****, you may designate another Federally qualified subsistence user to take deer, moose and caribou on your behalf unless you are a member of a community operating under a community harvest system or unless unit-specific regulations in §___.26 preclude or modify the use of the designated hunter system or allow the harvest of additional species by a designated hunter. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no more than two harvest limits in his/her possession at any one time, unless otherwise specified in unit-specific regulations in §___.26.*
OSM Preliminary Conclusion	**Oppose**
Southeast Regional Council Recommendation	
Southcentral Regional Council Recommendation	
Kodiak/Aleutians Regional Council Recommendation	
Bristol Bay Regional Council Recommendation	
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Northwest Arctic Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	

continued on next page

WP10-01 Executive Summary *(continued)*	
North Slope Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**1 support with modification** to include windows.

DRAFT STAFF ANALYSIS
WP12-02

ISSUES

Proposal WP12-02, submitted by Michael Cronk of Tok, Alaska, requests that only people 60 years of age or older, or disabled, be allowed to designate their harvest limit to another person.

DISCUSSION

The proponent claims that statewide regulations allow a person to harvest an unlimited number of animals per hunting season as long as he or she first obtains a designated hunter permit. The proponent explains that he supported the adoption of a designated hunter regulation to allow hunters to harvest animals for elders and others unable to hunt for themselves. The proponent further describes the problems that now exist with the designated hunter system: increasing numbers of people that formerly did not hunt are now getting designated hunter permits and hunting; hunters gathering designated hunter permits in order to continue hunting after harvesting their individual harvest limit; and hunters receiving designated hunter permits for their children but not hunting with their children and thereby not passing on knowledge of how to hunt. The proponent declares that these uses were not the intent of the Federal Subsistence Board when adopting the regulation, the abuses will continue, and wildlife populations could suffer unless limits are added to the designated hunter system.

Existing Federal Regulation

> **§___.25 Subsistence taking of fish, wildlife, and shellfish: general regulations.**
>
> *(e) Hunting by designated harvest permit.*
>
> *If you are a Federally qualified subsistence user (recipient), you may designate another Federally qualified subsistence user to take deer, moose and caribou on your behalf unless you are a member of a community operating under a community harvest system or unless unit-specific regulations in §___.26 preclude or modify the use of the designated hunter system or allow the harvest of additional species by a designated hunter. The designated hunter must obtain a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients but may have no more than two harvest limits in his/her possession at any one time, unless otherwise specified in unit specific regulations in §___.26.*

Proposed Federal Regulation

> **§___.25 Subsistence taking of fish, wildlife, and shellfish: general regulations.**
>
> *(e) Hunting by designated harvest permit.*
>
> *If you are a Federally qualified subsistence user (recipient)* ***who is 60 years of age or older, or disabled****, you may designate another Federally qualified subsistence user to take deer, moose and caribou on your behalf unless you are a member of a community operating under a community harvest system or unless unit-specific regulations in §___.26 preclude or modify the use of the designated hunter system or allow the harvest of additional species by a designated hunter. The designated hunter must obtain a designated hunter permit and must return a completed harvest*

report. The designated hunter may hunt for any number of recipients but may have no more than two harvest limits in his/her possession at any one time, unless otherwise specified in unit-specific regulations in §___.26.

Relevant Federal Regulation

Unit-specific regulations that preclude or modify the designated hunter system exist for five management units. They are Units 6, 9, 22, 23, and 26 (see **Appendix A**).

Existing State Regulation

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

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

State of Alaska Proxy System	Federal Subsistence Management Program Designated Hunter System
Applies where there is an open State harvest season.	Applies to Federal public lands when there is an open Federal harvest season.
Applies to caribou, deer, and moose.	Applies to caribou, deer, and moose.
Available to a hunter who is blind, physically disabled, or 65 years of age or older.	Available to Federally qualified subsistence users.
Either the recipient or the hunter may apply for the authorization.	Recipient may designate another Federally qualified subsistence user on his/her behalf.
No person may be a proxy for more than one recipient at a time.	A person may hunt for any number of recipients, but may have no more than two harvest limits in his/her possession at any one time.
Antler destruction is required for all species.	No antler destruction.

Extent of Federal Public Land

This proposal would apply to the entire state. Federal public lands comprise approximately 65% of Alaska and consist of 23% Bureau of Land Management, 15% National Park Service, 21% Fish and Wildlife Service, and 6% Forest Service lands.

Regulatory History

Prior to 2003, the Board adopted designated hunter regulations for 21 unit-specific hunts, and there were differences in how the regulations addressed the designated hunter system (see FSB 2003). In 2003, the Board established the statewide designated hunter system for deer, caribou, and moose, leaving the option for unit-specific regulations to include other species and special provisions (68 FR 38466. June 27, 2003). The Board was supported by the majority of Regional Advisory Councils and the Interagency Staff Committee (FSB 2003).

As mentioned earlier, instances exist in unit-specific regulations that preclude or modify the use of the designated hunter system or allow the harvest of additional species by a designated hunter. For example, in Unit 6 special provisions exist for moose, deer, black bear, beaver, and goat; in Unit 9 for caribou; in Unit 10 for caribou; in Unit 22 for muskoxen; in Unit 23 for sheep and muskoxen; and in Unit 26 for sheep and muskoxen (**Appendix A)**.

Customary and Traditional Uses

Designated hunter provisions provide recognition of the customary and traditional practices of sharing and redistribution of harvests. A plethora of research supports a need for a designated hunter system in Federal subsistence regulations to harmonize fundamental harvesting characteristics of rural Alaska communities with the Federal Subsistence Management Program. Sahlins (1972) observed that 20% to 30% of households in "family-based production" could be expected to fail to produce enough food to feed themselves. Family-based production is the foundation of the mixed subsistence-cash economy found in most rural Alaskan communities (cf. Wolfe 1981, 1987; Wolfe and Walker 1987; Wolfe et al. 1984). Family-based production is when households linked by kinship distribute the responsibility to harvest, process, and store wild resources based on factors such as skills and abilities, availability of able workers, sufficient income to purchase harvesting and processing technology, and other factors. Sahlins' (1972) observation has been repeated in subsistence studies conducted in rural Alaska communities (cf. Andrews 1988; Magdanz, Utermohle, and Wolfe 2002; Sumida 1989; Sumida and Andersen 1990). While predominantly-Native communities differ somewhat concerning family-based food production patterns, Wolfe et al. (2007) showed that some of the characteristics apply to culturally-mixed rural communities in Southeast Alaska as well. The common variables that affected household food production in rural Alaska in the late 20th century were: commercial fishing involvement, males over 15 years, age of elders, and single person households. Commercial fishing involvement and three or more males over 15 years correlated with households with relatively high wild food production. Older elders and single person households correlated with households with relatively low wild food production. Wolfe et al. (2007) observed that on a statewide basis it was not uncommon for about 30% of the households in a community to produce about 70% or more of the community's wild food harvest. Households in the higher harvesting third of households were called "super-households" based on Wolfe's (1987) research in rural Alaska communities.

The analysis of Proposal WP95-04, concerning a transferable moose harvest limit in Unit 5, described the rationale for the adoption of the proposal. The passage is repeated here because it continues to be relevant, describes the "super-household" phenomenon described above, and provides the primary rationale for the structure of the statewide designated hunter system in regulation today.

> [The designated hunter system] legalizes a traditional practice that is already going on. Within the individual harvest limits, some hunters cannot fulfill both the requirements of their own household and those of the people with whom they share. The proposal would permit hunters to harvest moose expressly for sharing.
>
> In every society, the ratio of producers to dependents is strongly influenced by the ecological setting and dominant mode of production. In societies with hunting and gathering economies (termed "subsistence" in Alaska), the proportion of producers ranges from approximately 50 to 70 percent. However, not all producers are hunters; some are engaged in processing foods. Consequently, it is common for a single hunter, in the northern context, to harvest resources for four or more individuals.

> Domestic units may pass through several developmental stages with widely varying ratios of producers to dependents. For example, a household in its early stages of development, with infants and small children, is different from a domestic unit headed by a middle-aged couple with several unmarried adult children. During later stages a household may be composed exclusively of elderly post-productive people. In any stage of development, households may contain members who are unable to or do not choose to harvest for themselves. Single-parent families are another category of households, which may rely on others to supply them with resources.
>
> Like households, individual producers also pass through developmental stages with distinctive productive capacities. A considerable amount of an apprentice harvester or processor's effort is consumed in learning. Conversely, individuals in their final productive years are primarily engaged with education and supervisory tasks rather than the direct procurement and processing of resources. Hence, the majority of production is accomplished by that segment of a population that, while having mastered requisite skills, is free of the responsibilities and physical impairments acquired with advancing adulthood. Finally, regardless of stage of development, all producers do not possess equal skills, abilities, and aptitudes. Each community has a minority of good hunters, trappers, and fishers.
>
> Inequalities in individual and household productive capacities are equalized via processes of distribution (sharing and feasting) and exchange (trade and barter). The nature, magnitude, and geographic extent of distributive processes are highly variable across households, communities, societies, and time periods (FSB 1995:31–32).

It is due to the variable nature of the distribution process, mentioned in the final paragraph of the passage above, that the Federal Subsistence Board, based on the recommendations of the majority of Regional Advisory Councils and the Interagency Staff Committee (FSB 2003), adopted the statewide designated hunter provisions that are in current Federal regulations (§___.25(e)). The Board considered, but did not adopt, a statewide provision that would restrict designators to only elderly or disabled subsistence users. However, based on a review of past analyses from 1993 to 2003, it is clear that the Board anticipated receiving requests to adopt unit-specific regulations that would preclude or modify the designated hunter system.

Harvest History

The designated hunter permit database is maintained at the Office of Subsistence Management (FWS 2011). Table 2 describes the use of the designated hunter system since 2003 when the statewide system was instituted by the Federal Subsistence Board. The data show the cumulative use for the 2003–2009 regulatory years. Designated hunters hunted for caribou, deer, moose, and sheep only. Based on Table 2, it is clear that a large majority of the harvest by designated hunter was deer, and the majority of permits were used in Southeast Alaska (Units 1–5). The portion of the total harvest taken by designated hunters for any one species was highest in Unit 3 for deer (8.9% of the harvest was taken by designated hunters), Unit 12 for caribou (7.0%), and Unit 5 for deer (5.7%); however, designated hunters generally harvested less than 2% of the total harvest for any one species in any single unit (**Table 2**).

People requesting to designate another hunter are not asked to indicate a disability, and therefore, data concerning the number of people with disabilities that designate a hunter could not be presented in the analysis.

Table 2. Use of designated hunter system based on completed harvest reports, 2003-2009 cumulative (ADF&G 2011, FWS 2011).

Management Unit	Designated Hunters Only		All Hunters[a]	
	Number of Permits Used (Hunted)	Number of Animals Harvested	Number of Animals Harvested	Percentage Harvested by Designated Hunters
Caribou				
9	6	4	2,376	0.2%
12	23	14	199	7.0%
13	100	43	11,600	0.4%
17	11	10	4,819	0.2%
18	2	1	2,894	0.0%
20	14	6	5,007	0.1%
Total (2003-2009)	156	78	26,895	0.3%
Moose				
1	1	1	1,122	0.1%
3	1	1	315	0.3%
5	4	4	314	1.3%
6	33	18	848	2.1%
11	4	4	356	1.1%
13	12	12	4,757	0.3%
15	1	1	3,193	0.0%
19	7	7	1,938	0.4%
24	8	1	1,164	0.1%
25	2	2	1,215	0.2%
26	1	1	96	1.0%
Total (2003-2009)	74	52	15,318	0.3%
Deer				
1	11	18	4,166	0.4%
2	92	105	13,697	0.8%
3	211	314	3,537	8.9%
4	224	407	30,366	1.3%
5	2	7	122	5.7%
6	1	3	14,653	<0.1%
8	134	225	31,894	0.7%
Total (2003-2007)[b]	675	1,079	98,435	1.1%
Sheep				
23	3	2	123	1.6%
Total (2003-2009)	3	2	123	1.6%

[a] All hunters including Federally qualified, non-Federally qualified, and nonresidents of the state.

[b] Harvest by all hunters available to 2007 only.

Some age data is available for the 2009 and 2010 regulatory years. For the 2009 and 2010 regulatory years combined, of the 1,108 people who designated another hunter, age data is available for only 80 people. Of the 80 people, 3 (4%) were 18-years of age or younger, 59 (74%) were age 19 to 59, and 18 (23%) were 60 or older (**Table 3**).

Table 3. The age of designators, based on the age of 80 out of a total of 1,108 people who designated another hunter during the 2009 and 2010 regulatory years (FWS 2011).

	Permits issued		Permits used		Animals taken	
Age of designators	Number	Percentage	Number	Percentage	Number	Percentage
18 years and younger	3	4%	3	4%	1	3%
19-59 years	59	74%	50	75%	28	70%
60 years and older	18	23%	14	21%	11	28%
Total	80	100%	67	100%	40	100%

Note: percentages may not equal 100 due to rounding.

The designated hunter database at the Office of Subsistence Management compiles limited data on the age of designated hunters because age is not a requirement for designating another hunter (except in Unit 6, see Appendix A). Applications for Federal registration permits request each hunter's age. When a person designates his or her harvest limit to another, the age of the designator is available on the Federal registration permit application; however, some hunts do not require a Federal registration permit. For hunts that do not require a Federal permit, the age of a designator is available on the State hunting license and not readily retrievable. Additionally, Federal registration permit applications ask each hunter to check a box if he or she is designating another hunter; however, this box is usually not checked by those using a designated hunter. Currently, age data is available for people who obtained a Federal registration permit and checked the box indicating they were using a designated hunter for the 2009 and 2010 regulatory years (FWS 2011).

Other Relevant Proposals

Action on this proposal may affect decisions on other wildlife proposals currently under consideration, WP12-10, WP12-11, and WP12-13. All three concern designated hunter provisions in Federal regulations, but none propose restrictions on the designator as does the proposal under consideration in this analysis, WP12-02.

Effects of the Proposal

If this proposal is adopted, only Federally qualified subsistence users who are 60 years of age or older, or disabled, would be allowed to designate another person to take their harvest limit of deer, caribou, and moose—except in Unit 6 where unit-specific regulations allow only those who are either blind, 65 years of age or older, at least 70% disabled, or temporarily disabled to designate a hunter (see **Appendix A**). The extent of impacts on the subsistence users cannot be measured exactly because statistics were only partially gathered to describe the age of those designating a hunter and not whether the user was disabled, noted above. From the information in Table 3, about 77% of the users designating a hunter were under 60 years old and would be prohibited from designating a hunter if this proposal is adopted.

The effect on wildlife populations would depend on the region. In regions where designated hunter use is more common, hunting effort may be eased, but no information has been systematically collected concerning this issue. No effects on other users are anticipated.

If this proposal is not adopted, Federally qualified subsistence users would continue to be allowed to designate another hunter to take their harvest limit of deer, caribou, and moose (except in Unit 6 where additional restrictions are in place, see above). No effects on wildlife populations are anticipated, and no effects on other users are anticipated.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP12-02.

Justification

Federal subsistence wildlife regulations allow any Federally qualified subsistence user to designate another subsistence user to take his or her harvest limit of deer, caribou, and moose. The designated hunter system supports a valid practice of communal sharing of resources and skills in rural Alaska. While in some regions the designated hunter system is lightly used, nonetheless it provides important regulatory flexibility to accommodate customary and traditional practices.

The proponent raises issues regarding the designated hunter system for the entire state. It is clear that in some regions people are not aware of the permit and their use of the system has not developed but is anticipated to develop as more participate in the formal harvest reporting systems available to them. Additionally, the harvest by designated hunters generally has been a small portion (less than 2%) of the total harvest by all hunters (including Federally qualified users, non-Federally qualified users, and nonresidents of the state, combined). Therefore, a statewide provision restricting the use of the designated hunter system is not supported. In circumstances where evidence is available to clearly warrant, region or unit-specific restrictions could be proposed.

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APPENDIX A

FEDERAL DESIGNATED HUNTER—UNIT SPECIFIC REGULATIONS

§___.26(n) Unit regulations

Unit 6

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

(E) A hunter younger than 10 years old at the start of the hunt may not be issued a Federal subsistence permit to harvest black bear, deer, goat, moose, wolf, and wolverine;

(F) A hunter younger than 10 years old may harvest black bear, deer, goat, moose, wolf, and wolverine under the direct, immediate supervision of a licensed adult, at least 18 years old. The animal taken is counted against the adult's harvest limit. The adult is responsible for ensuring that all legal requirements are met.

Unit 9

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

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

Unit 22

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

Unit 23

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

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

Unit 26

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

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

APPENDIX B
STATE PROXY HUNTER REGULATIONS

5 AAC 92.011. Taking of game by proxy

(a) A resident hunter (the proxy) holding a valid resident hunting license may take specified game for another resident (the beneficiary) who is blind, physically disabled, or 65 years of age or older, as authorized by AS 16.05.405 and this section.

(d) A person may not be a proxy
(1) for more than one beneficiary at a time;
(2) more than once per season per species in Unit 13;
(3) for Tier II Caribou in Unit 13, unless the proxy is a Tier II permittee.

(j) A proxy participating in a proxy hunt must remove at least one antler from the skull plate or cut the skull plate in half, on an antlered animal, for both the proxy's animal and the beneficiary's animal before leaving the kill site, unless the department has established a requirement that complete antlers and skull plates must be submitted to the department.

(k) Proxy hunting under this section is only allowed for
(1) caribou;
(2) deer; and
(3) moose in Tier II hunts, any-bull hunts, and antlerless moose hunts.

(l) Notwithstanding (k) of this section, proxy hunting is prohibited in the following hunts where the board has determined that the use of the proxy would allow circumvention of harvest restrictions specified by the board:
(1) Unit 20(E) moose and caribou registration hunts;
(2) Units 21(B), 21(C), 21(D), and 24 moose hunts if either the proxy or the beneficiary holds a drawing permit for Units 21(B), 21(C), 21(D), or 24 moose hunts;
(3) Units 9(A) and 9(B), unit 9(C), that portion within the Alagnak River drainage, and units 17(B), 17(C), 18, 19(A), and 19(B) caribou hunts from August 1 through October 31.

WRITTEN PUBLIC COMMENTS

Support with modification to include windows. The designated hunter option is important to traditional subsistence practices and ensuring that animals are harvested correctly.

Gates of the Arctic National Park Subsistence Resource Commission

WP12-03 Executive Summary	
General Description	Proposal WP12-03 would require trappers to move a trap that incidentally harvests a moose, caribou, or deer at least 300 feet for the remainder of the regulatory year. The animal would become the property of the regional management agency. The proposed regulation asks trappers to salvage the edible meat and turn it over to the appropriate agency, but this would not be required. *Submitted by the Orutsararmiut Native Council*
Proposed Regulation	**§____.25 Subsistence taking of fish, wildlife, and shellfish: general regulations.** *(a) Definitions.* *Salvage means to transport the edible meat, skull, or hide, as required by regulation, of a regulated fish, wildlife, or shellfish to the location where the edible meat will be consumed by humans or processed for human consumption in a manner which saves or prevents the edible meat from waste, and preserves the skull or hide for human use.* *(j) Utilization of fish, wildlife, or shellfish.* *(1) You may not use wildlife as food for a dog or furbearer, or as bait . . . except for the following:* *(i) The hide, skin, viscera, head, or bones of wildlife.* *(3) You must salvage the edible meat of ungulates, bear, grouse, and ptarmigan.* **§___.26 Subsistence taking of wildlife.** *(b) Except for special provisions found at paragraphs (n)(1) through (26) of this section, the following methods and means of taking wildlife for subsistence uses are prohibited:* *(10) Using a trap to take ungulates or bear.* ***Continuing to take, or attempting to take, furbearers at a site where a moose, caribou, or deer has been taken incidentally is a violation. Any moose, caribou or deer that dies as a result of being caught in a trap or snare, whether found dead or euthanized, becomes the property of the regional management agency. The trapper should salvage edible meat and surrender it to the appropriate agency. A person who salvages and surrenders the edible meat in accordance with this regulation will not be subject to citation. If such an incidental take occurs, the trapper must move all active traps and snares at least 300 feet from the site for the remainder of the regulatory year (July 1 through June 30), and after the ending of the July 1 – June 30 regulatory year, may reset again in the same place or area during subsequent trapping seasons.***

continued on next page

WP12-03 Executive Summary *(continued)*	
OSM Preliminary Conclusion	**Oppose**
Southeast Regional Council Recommendation	
Southcentral Regional Council Recommendation	
Kodiak/Aleutians Regional Council Recommendation	
Bristol Bay Regional Council Recommendation	
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Northwest Arctic Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
North Slope Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
WP12-03

ISSUES

Proposal WP12-03, submitted by the Orutsararmiut Native Council, would require trappers to move a trap that incidentally harvests a moose, caribou, or deer at least 300 feet for the remainder of the regulatory year. The animal would become the property of the regional management agency. The proposed regulation asks trappers to salvage the edible meat and turn it over to the appropriate agency, but this would not be required.

DISCUSSION

The proponent intends to protect trappers from enforcement action by more clearly writing a provision into Federal wildlife regulations that is currently only in State wildlife regulations. The proponent indicates that State enforcement officers do not always understand the State regulations concerning the actions trappers must undertake when they take a moose, caribou, or deer incidental to trapping furbearers. The proponent states that trappers have been bothered by State enforcement officers with citations that were later dismissed. Specifically, a trapper was cited for locating a trap at the same location where the trap had incidentally harvested a moose the previous regulatory year. As described below, the activity is allowed in State trapping regulations (5 AAC 92.095(a)(12)). The trapper was freed from having to pay the fine, but had to pay the legal costs of defending himself. It appears the State officer interpreted one year to mean one calendar year (January 1–December 31), while the State regulation indicates one regulatory year (July 1–June 30).

By making this proposal, the Fish and Wildlife Committee of the Orutsararmiut Native Council is responding to concerns brought by tribal members (Roczicka 2011, pers. comm.). The Orutsararmiut Native Council is the Federally recognized Indian Reorganization Act (IRA) Council representing the community of Bethel.

Existing Federal Regulation

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

(a) Definitions.

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

(j) Utilization of fish, wildlife, or shellfish.

(1) You may not use wildlife as food for a dog or furbearer, or as bait . . . except for the following:

(i) The hide, skin, viscera, head, or bones of wildlife.

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

§___.26 Subsistence taking of wildlife.

(b) Except for special provisions found at paragraphs (n)(1) through (26) of this section, the following methods and means of taking wildlife for subsistence uses are prohibited:

(10) Using a trap to take ungulates or bear.

Proposed Federal Regulation

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

(a) Definitions.

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

(j) Utilization of fish, wildlife, or shellfish.

(1) You may not use wildlife as food for a dog or furbearer, or as bait . . . except for the following:

(i) The hide, skin, viscera, head, or bones of wildlife.

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

§___.26 Subsistence taking of wildlife.

(b) Except for special provisions found at paragraphs (n)(1) through (26) of this section, the following methods and means of taking wildlife for subsistence uses are prohibited:

(10) Using a trap to take ungulates or bear. ***Continuing to take, or attempting to take, furbearers at a site where a moose, caribou, or deer has been taken incidentally is a violation. Any moose, caribou or deer that dies as a result of being caught in a trap or snare, whether found dead or euthanized, becomes the property of the regional management agency. The trapper should salvage edible meat and surrender it to the appropriate agency. A person who salvages and surrenders the edible meat in accordance with this regulation will not be subject to citation. If such an incidental take occurs, the trapper must move all active traps and snares at least 300 feet from the site for the remainder of the regulatory year (July 1 through June 30), and after the ending of the July 1 – June 30 regulatory year, may reset again in the same place or area during subsequent trapping seasons.***

Existing State Regulation

5 AAC 92.085. Unlawful methods of taking big game; exceptions

The following methods and means of taking big game are prohibited . . . :

(6) with the use of a trap or snare . . . .

5 AAC 92.095. Unlawful methods of taking furbearers; exceptions

a) The following methods and means of taking furbearers under a trapping license are prohibited . . . :

(12) by placing or leaving an active trap or snare set on land that is within 300 feet of the site at which a moose, caribou, or deer was taken using a trap or snare; this prohibition applies for the duration of the regulatory year in which the moose, caribou, or deer was taken using the trap or snare.

5 AAC 92.210. Game as animal food or bait

A person may not use game as food for a dog or furbearer, or as bait . . . .

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

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

(h) A game animal taken in violation of AS 16 or a regulation adopted under AS 16 is the property of the state.

5 AAC 92.990. Definitions

(49) "salvage" means to transport the edible meat, skull, or hide, as required by statute or regulation, of a game animal or wild fowl to the location where the edible meat will be consumed by humans or processed for human consumption in order to save or prevent the edible meat from waste, and the skull or hide will be put to human use.

16.30.010. Wanton waste of big game animals and wild fowl

(a) It is a class A misdemeanor for a person who kills a big game animal or a species of wild fowl to fail intentionally, knowingly, recklessly, or with criminal negligence to salvage for human consumption the edible meat of the animal or fowl.

Extent of Federal Public Land

This proposal would apply to the entire state. Federal public lands comprise approximately 65% of Alaska and consist of 23% Bureau of Land Management, 15% National Park Service, 21% Fish and Wildlife Service, and 6% Forest Service lands.

Regulatory History

The use of traps to harvest caribou, moose, and deer is prohibited in State and Federal wildlife regulations primarily because traps set for moose, caribou, and deer do not discriminate between animals, such as, cows, bulls, and fawns.

A good estimate of how often moose, caribou, or deer are caught in traps set for furbearers statewide, or by region, is not known at this time (Ardizzone 2011, pers. comm.; Seavoy 2011, pers. comm). State and Federal staff generally assume that low levels of incidental harvests occur and are ongoing. Snare

height above ground, trap location, bait type, location of trail snares, et cetera, are effective techniques to select for targeted furbearers and against non-targeted animals. Occasionally, non-targeted animals are caught, but trappers use techniques to avoid them, and that is one reason there are low levels of incidental harvests (Seavoy 2011, pers. comm.).

Federal regulations require that wildlife caught incidental to trapping furbearers be salvaged (§__.25(j)(3)), and only the hide, skin, viscera, head, or bones may be used for bait (§__.25 (j)(1)(i)).

In 1998, the Alaska Board of Game adopted a proposal (Proposal 103) submitted by ADF&G describing the actions trappers must take when they incidentally harvest a moose, caribou, or deer in a trap; for the remainder of the regulatory year (until June 30), a trapper must move the trap at least 300 feet from the site the animal was taken (5 AAC 92.095(a)(12)). Additionally, the animal must be salvaged (5 AAC 92.220(d)) and its parts cannot be used for bait (5 AAC 92.210). Moving the trap from the site of the incidental harvest denies trappers the benefit of continuing to set a trap at a kill site, which may attract furbearers (ADF&G 1998; Rearden 2011, pers. comm.).

Effects of the Proposal

If this proposal is adopted, Federal subsistence users would be required to move a trap for the remainder of the regulatory year when it has taken a moose, caribou, or deer incidental to trapping furbearers. This would be required if the incidental harvest occurred on Federal public lands using Federal trapping regulations. The use of traps to harvest caribou, moose, and deer is prohibited in Federal and State regulations primarily because traps do not discriminate between animals, such as, cows, bulls, and fawns. However, these animals are occasionally caught in traps set for furbearers. The regulations prohibiting the use of traps and snares are not directed at trappers and are enforced because of the nondiscriminatory nature of the method, just described. Requiring a trapper to move a trap would be a hardship that would not conserve caribou, moose or deer.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP12-03.

Justification

The clear intent of the proponent is to import State wildlife regulations into Federal wildlife regulations and to clarify their intent to law enforcement officers so that other trappers who comply with State regulations are not cited. However, benefits to Federal subsistence users or resource conservation cannot be demonstrated. The State's concern is ungulate's being used as bait, and it is not in the interest of Federal subsistence users for the Federal Subsistence Management Program to impose this regulation on them.

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Rearden, S. 2011. Wildlife biologist. Personal communications: by telephone. FWS, Yukon Delta National Wildlife Refuge, Bethel, AK.

Roczicka, G. 2011. Director, Natural Resources Department. Personal communication: by telephone. Orutsararmiut Native Council, Bethel, AK.

Seavoy, R. 2011. Wildlife biologist. Personal communication: by telephone. ADF&G, Division of Wildlife Conservation, McGrath, AK.

WP12-61 Executive Summary	
General Description	Proposal WP12-61 seeks to lower the wolf harvest limit in Unit 22 from no limit to 10 wolves. *Submitted by the Defenders of Wildlife*
Proposed Regulation	**Unit 22—Wolf Hunting** ~~*No limit*~~ ***10 Wolves*** *Nov. 1–April 15*
OSM Preliminary Conclusion	**Oppose**
Seward Peninsula Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
WP12-61

ISSUES

Proposal WP12-61, submitted by the Defenders of Wildlife, seeks to lower the wolf harvest limit in Unit 22 from no limit to 10 wolves.

DISCUSSION

Proposal WP12-61 requests that the harvest limit for wolf hunting in Unit 22 be reduced to 10 wolves. The proponent notes that in Unit 22, wolves are vulnerable to tracking, pursuit and shooting by hunters using snowmachines.

Existing Federal Regulation

Unit 22— Wolf Hunting	
No limit	*Nov. 1–April 15*
Wolf Trapping	
No limit	*Nov. 1–April 30*

Proposed Federal Regulation

Unit 22—Wolf Hunting	
~~*No limit*~~ ***10 Wolves***	*Nov. 1–April 15*

Existing State Regulation

Unit 22—Wolf Hunting	
20 Wolves	*Aug. 1–April 30*
Wolf Trapping	
No Limit	*Nov. 1–April 30*

Extent of Federal Public Lands

Federal public lands comprise approximately 33% of Unit 22 and consist of 18% Bureau of Land Management (BLM) managed, 11% is National Park Service (NPS) managed and 2% U.S. Fish and Wildlife Service (FWS) managed lands (see Unit 22 Map).

Customary and Traditional Use Determinations

Rural residents of Units 21D (north and west of the Yukon River), 22, 23, and Kotlik have a positive customary and traditional use determination to harvest wolves in Unit 22.

Regulatory History

There has been no harvest limit for wolf hunters in Unit 22 since the beginning of the Federal Subsistence Management Program in 1990. Units 25A and 22 are the only units in Alaska that currently have no Federal harvest limit for wolves in the hunting regulations.

The Federal Subsistence Management Program wolf hunting season in Unit 22 extended from August 10–April 30 in 1990. Action taken on a proposal from the Seward Peninsula Subsistence Regional Advisory Council (Proposal 47) changed the wolf hunting season to November 1–April 15 in regulatory year 1995/96. With a trapping license, during trapping season, a trapper may take free ranging wolves with a firearm on BLM and FWS lands of Unit 22. The Federal Subsistence Management Program wolf trapping season in Unit 22 is from November 1–April 15 with no harvest limit. Hunters may take wolves under State regulations on FWS, BLM, and Bering Land Bridge Nation Preserve lands in Unit 22.

The Unit 22 State wolf hunting regulations diverged from Federal regulations beginning with the 1992–1993 regulatory year when the wolf hunting limit was changed to 5 wolves with the season running from August 10–April 30. Beginning in 2008–2009 the Board of Game changed the wolf hunting season in Unit 22 to August 1–May 31 and changed the harvest limit to 20 wolves. No Federal proposals were received to make similar proposals.

Defenders of Wildlife submitted a proposal (Proposal 6) to the Alaska Board of Game requesting a November 1–March 31 season and 10 limit for wolf hunters in Unit 22. At its November 2009 meeting, the Alaska Board of Game rejected that proposal noting that the Unit 22 wolf harvest is currently low and that there are no conservation concerns for wolves in Unit 22 (Ardizzone 2009, pers. comm.).

Two years ago the Alaska Wildlife Alliance submitted a proposal (WP10-81) asking for the very same regulatory change that is requested in the current proposal. WP10-81 was opposed by the Seward Peninsula Regional Advisory Council and rejected by the Federal Subsistence Board.

Biological Background

Wolves (*Canis lupus)* are found throughout Unit 22 and are well adapted to the mountains, tundra, and river valleys of the unit. Unit 22 contains extensive open habitat. Their main prey is caribou; wolves often move toward areas of high caribou concentrations. Other prey species may be used if caribou are not available; these include reindeer, small mammals, moose, hare, and beaver. Wolves first breed at age two to four and produce pups in dens during the spring. Litters average five or six pups. Wolves abandon the den after about eight weeks and live at sites above ground until early autumn when the entire pack roams a large territory for the rest of the fall and winter. Pups constituted about half of the wolf population each August in a central Brooks Range study area, and these young wolves disperse from packs at high rates as yearlings and 2-year-olds (Adams et al. 2008). Dispersing wolves form new packs when they locate dispersers of the opposite sex from another pack and a vacant area to establish a territory (Rothman and Mech 1979). Adams et al. (2008) reported that 7 of 11 dispersing wolves (<36 months old) were subsequently detected 40–430 miles from their initial home range in the Gates of the Arctic National Park and Preserve. Garner and Reynolds (1986) observed that several wolves in northern Arctic National Wildlife Refuge dispersed as far as 500 miles from their home range. Radio collared wolves from other areas of Alaska have been found in Unit 22 (Persons 2006).

The size of the home range is dependent on prey abundance, the activities of neighboring packs, and each pack's individual habits. As a pack makes its way around its territory, it may encounter and engage other wolves within its territory at any time. A fight to the death can occur during such encounters. Predation

by other wolves is probably the major cause of natural mortality among adult wolves (Adams et al. 2008). With high reproductive capacity, good survival of young, and high dispersal rates, wolf populations are able to quickly respond to changes in prey abundance (Adams et al. 2008).

The wolf population density in Unit 22 is not known. Persons (2006) observed that since 1960 wolf numbers in Unit 22 have gradually increased and wolves expanded their range westward across the Seward Peninsula. In 1980 the wolf population was estimated at fewer than 100 wolves (Grauvogel 1980). Persons (2006) and ADF&G (2009) reported that wolf numbers in Unit 22 have increased based on data from sealing certificates and anecdotal information from observations by staff, reindeer herders, and other local residents.

Seasonal movements of the Western Arctic Caribou Herd influences wolf distribution (Ballard et al. 1997, Persons 2006). In some years, up to 17% of radio-collared wolf packs followed the migrating Western Arctic Caribou Herd and then returned to their original territory for denning (Ballard et al. 1997). When a portion of the Western Arctic Caribou Herd has wintered on the Seward Peninsula, wolves followed the caribou (Persons 2006). She observed that wolves were most abundant in the southern half of Norton Sound where caribou frequently wintered. Persons (2006) reported that the Unit 22 wolf population increased during winter months when caribou were present and that wolves were becoming permanent residents of Unit 22. Ballard et al. (1997) observed that when caribou densities were low, wolves switched to preying on resident moose.

Harvest History

The harvest of wolves, and the use, barter, and sale of pelts has long been important for subsistence uses in Unit 22.

State and Federal regulations currently require that wolves harvested in Alaska must be sealed by an ADF&G representative or appointed fur sealer. During the sealing process, information is obtained on the date and location of take, sex, color of pelt, estimated size of the wolf pack, method of take and access used. One of ADF&G's management objectives for Unit 22 is to maintain license vendors and fur sealers in all Unit 22 villages (Persons 2006). The cost of snowmachines, gas, traps, and other equipment has increased over the last 20 to 25 years, yet the price of wolf pelts has declined.

The reported annual harvest of wolves in Unit 22 has been highly variable. From regulatory year 1999/2000 to 2009/10, the wolf harvest in Unit 22 ranged from 18 to 66 wolves/year and most were shot (**Table 1**). According to Dau (2007) substantially fewer caribou have wintered on the Seward Peninsula during the winters of 2003/2004 through 2006/2007 compared to 1996/1997 through 2002/2003. These were also years where there is lower reported harvest for wolves in **Table 1**, a possible explanation for some of the variability in the harvest data. Wolves are difficult animals to bring down and it is not unreasonable to assume that some mortality is occurring as a result of wounding loss. Some wolves caught in traps that are not checked regularly are scavenged by other animals, and the hides are so damaged that they are discarded in the field with the harvest going unreported. Persons (2006) observed the magnitude of the unreported wolf harvest in Unit 22 is substantial, and fur-sealing data provides a minimum estimate of the harvest. Often hunters and trappers only seal pelts that will be commercially tanned or sold to fur buyers. Many wolf hides are home tanned and used locally, so people see no reason to get them sealed (Persons 2006). Village-based harvest surveys completed in 5 villages in Unit 22 (Stebbins, Unalakleet, St. Michaels, Shaktoolik and Koyuk) in May 2002 and 2003, and June 2004 revealed that only about 1/3 of their wolf harvest was sealed (Persons 2006). A Bering Strait Region local traditional knowledge survey for Units 22A, 22B, 22D and 22E conducted by Kawerak Inc. indicated 37.7 wolves were harvested in regulatory year 2005/06 (Ahmasuk and Trigg 2007).

Table 1. Reported wolf harvest and method of take for Unit 22, regulatory years 1999/00 to 2009/10 (ADF&G 2011).

Regulatory year	Reported total harvest	Method of take for total harvest from Unit 22				
		Trap/snare	%	Shot	%	Unknown
1999/2000	66	5	8	44	67	17
2000/01	65	4	6	56	86	5
2001/02	41	3	7	38	93	0
2002/03	45	5	11	32	71	8
2003/04	22	1	5	21	95	0
2004/05	39	4	10	34	87	1
2005/06	29	5	17	23	79	1
2006/07	19	3	16	13	68	3
2007/08	18	0	0	18	100	0
2008/09	24	4	17	17	71	3
2009/10	44	6	14	38	86	0

Other Alternatives Considered

Consideration was given to recommending a 10 or 20 wolf limit for hunters in Unit 22. There are no records of a person shooting ≥ 10 wolves per year in Unit 22.

Effects of the Proposal

If Proposal WP12-61 is adopted, the Federal wolf hunting harvest limit for Unit 22 would decrease to 10 wolves. This proposal would make the Federal subsistence wolf hunting harvest limit lower than State regulations. Currently, there is no limit on the number of wolves that can be taken by hunters under Federal regulations in Unit 22.

The Unit 22 wolf population does not appear to be declining under the current regulations. ADF&G (2010) believes that current Unit 22 wolf harvests are within sustained yield for the population. It appears that the Unit 22 wolf population is regulated more by natural factors than by the harvest by hunters and trappers.

While it is possible that Proposal WP12-61 will negatively impact subsistence users, it does not appear that this will be the case. Based on ADF&G's wolf harvest records from1990/91 to 2009/10, there are zero records of a person shooting ≥ 10 wolves in a given regulatory year in Unit 22 (ADF&G 2011).

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP12-61.

Justification

Two years ago, the Alaska Wildlife Alliance requested this same regulatory change. The Seward Peninsula Regional Advisory Council opposed that request and the Federal Subsistence Board rejected that proposal.

Wolves have long been an important subsistence resource in Unit 22. It appears that the wolf population in Units 22 is regulated more by natural factors than from the harvest by hunters and trappers. The wolf population does not appear to be declining under the current regulations. It is possible that a hunter may be able to harvest more than 10 or 20 wolves in Unit 22. This proposal would make the Federal subsistence wolf hunting harvest limit lower than State regulations.

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WP12-42 Executive Summary	
General Description	Proposal WP12-42 requests a reduction in the harvest limit and season for caribou in Unit 18. The proposal would reduce the allowable harvest limit from two to one caribou and reduce the season by approximately three months. *Submitted by the Yukon Delta National Wildlife Refuge*
Proposed Regulation	**Unit 18 — Caribou** *Unit 18 — ~~2~~ **1** caribou; ~~no more than 1caribou may be a bull; no more than 1 caribou may be taken Aug.1 – Jan. 31~~* ~~*Aug.1 – Mar. 15*~~ ***Aug. 1 – Sept. 30 Dec. 20 – the last day of February***
OSM Preliminary Conclusion	**Oppose**
Bristol Bay Regional Council Recommendation	
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
WP12-42

ISSUES

Proposal WP12-42, submitted by the Yukon Delta National Wildlife Refuge, requests a reduction in the harvest limit and season for caribou in Unit 18. The proposal would reduce the allowable harvest limit from two to one caribou and reduce the season by approximately three months.

DISCUSSION

The proponent requests to reduce the season and harvest limit for caribou in Unit 18. This request is in response to the declining population of the Mulchatna Caribou Herd (MCH) over the last several years. Reduction of the harvest limit and season length could aid in the recovery of the local caribou population.

Note: The proponent original proposed the winter hunt ending date as February 29th. Since this date is only relevant during leap years, the Office of Subsistence Management changed this portion of the proposed regulation to read as "Dec. 20 – the last day of February."

Existing Federal Regulation

Unit 18 — Caribou

Unit 18 — 2 caribou; no more than 1 caribou may be a bull; no more than 1 caribou may be taken from Aug. 1 – Jan. 31	*Aug. 1 – Mar. 15*

Proposed Federal Regulation

Unit 18 — Caribou

*Unit 18 — ~~2~~ **1** caribou~~; no more than 1caribou may be a bull; no more than 1 caribou may be taken Aug.1 – Jan. 31~~*	*~~Aug.1 – Mar. 15~~* ***Aug. 1 – Sept. 30 Dec. 20 – the last day of February***

Existing State Regulation

Unit 18 — Caribou

Residents — two caribou, no more than 1 bull may be taken, and only one caribou may be taken from Aug. 1 – Jan. 31	*Aug. 1 – Mar 15*

Extent of Federal Public Lands

Federal public lands comprise approximately 64% of Unit 18 and consist of 62% US Fish and Wildlife Service managed lands and 2% Bureau of Land Management managed lands (**See Unit 18 Map**).

Customary and Traditional Use Determinations

Rural residents of Unit 18, St. Michael, Stebbins, Togiak, Twin Hills, Upper Kalskag, and Manokotak have a positive customary and traditional determination for caribou in Unit 18.

Regulatory History

State and Federal regulations for the MCH were liberalized during the dramatic population increase that occurred in the 1990s. These regulations allowed hunters the opportunity to harvest surplus animals. Numerous modifications were made to the Federal regulations for various management units as the MCH population increased and as it expanded into new range. Following the population decline, regulations became more restrictive in 2006 and 2007.

In March 2006, the Alaska Board of Game adopted new state regulations to reduce harvest limits within the range of the MCH from five to two caribou. In March 2007, the Alaska Board of Game further restricted the caribou harvest to allow no more than one bull to be taken, and no more than one caribou to be taken Aug. 1–Jan. 31. In 2007, the Federal Subsistence Board followed suit and adopted Proposal WP07-23 with modification to reduce the harvest limits in Unit 9B, a portion of Unit17A, Unit 17B, a portion of Unit 17C, Unit 18, a portion of Unit 19A, and Unit 19B, from five caribou to three due to a large population decline. In March 2009, the Alaska Board of Game eliminated nonresident harvest on the MCH due to the harvestable surplus being lower than the amount necessary for subsistence.

In 2010, Proposal WP10-51 was submitted by the Bristol Bay Subsistence Regional Advisory Council. This proposal requested that the caribou season in Units 9A, 9B, 17B, a portion of 17C, 18, 19A, and 19B be Aug. 1 – Mar. 31, extending the existing season by 16 days. The Federal Subsistence Board supported the proposal with modification to make the season ending date March 15 for all units. In addition, Proposal WP10-60 was submitted by the Yukon Delta National Wildlife Refuge, requesting that the harvest limit for caribou in Unit 18 be reduced from three to two. The Federal Subsistence Board supported the proposal with modification to include a 1-bull restriction and extend the 1-caribou restriction from Aug. 1 – Nov. 30 to Aug. 1 – Jan. 31.

Biological Background

The ADF&G's management objectives for the MCH were to maintain a population of 100,000–150,000 with a minimum bull:cow ratio of 35:100 and to maximize opportunity to hunt caribou (Woolington 2007). However, at the Feb. 27 – Mar. 9, 2009 southcentral/southeast meeting in Anchorage, the Alaska Board of Game reduced the population objective to 30,000–80,000 caribou, citing that these numbers are more realistic for this herd (ADF&G 2009). The Alaska Board of Game also reduced harvest objectives from 6,000–15,000 to 2,400–8,000 during this meeting (ADF&G 2009). The latest photocensus provided a minimum estimate of 30,000 caribou, near the minimum population objective (**Table 1**) (Woolington 2009). Since 2001, bull:cow ratios have been estimated at less than 35 bulls:100 cows which is below the management objective for the herd (**Table 1**).

The MCH increased at an average annual rate of 17% between 1981 and 1996 and approximately 28% from 1992–1994. Overall herd size peaked in 1996, at approximately 200,000 animals with a peak bull:cow ratio of 42:100 (Woolington 2007). The dramatic population growth is attributed to mild winters, movements onto new unexploited range, low predation, and an estimated annual harvest of less than 5% of the population since the late 1970s (Woolington 2007). Since 1996, the population, bull:cow ratio, and calf:cow ratio have significantly declined (**Table 1**). Possible signs of stress in the MCH include an outbreak of hoof rot in 1998 and low calf:cow ratios in fall 1999 (Woolington 2001).

Table 1. Mulchatna Caribou Herd composition counts and population estimates, 1974-2011 (Woolington 2011).

Regulatory Year	Total bulls: 100 cows	Calves: 100 cows	Calves (%)	Cows (%)	Small bulls (% of bulls)	Medium bulls (% of bulls)	Large Bulls (% of bulls)	Total bulls (%)	Composition sample size	Minimum estimate of herd size
1974/75	55.0	34.9	18.4	---	---	---	---	---	1,846	
1978/79	50.3	64.5	27.6	---	---	---	---	---	758	
1980/81	31.3	57.1	30.0	---	---	---	---	---	2,250	
1981/82	52.5	45.1	22.8	---	---	---	---	---	1,235	
1986/87	55.9	36.9	19.2	---	---	---	---	---	2,172	
1987/88	68.2	60.1	26.3	---	---	---	---	---	1,858	
1988/89	66.0	53.7	24.4	---	---	---	---	---	536	
1993/94	42.1	44.1	23.7	53.7	---	---	---	22.6	5,907	150,000[a]
1996/97	42.4	34.4	19.5	56.6	49.8	28.5	21.7	24.0	1,727	200,000[a]
1998/99	40.6	33.6	19.3	57.4	27.8	43.7	28.5	23.3	3,086	---[b]
1999/00	30.3	14.1	9.8	69.3	59.9	26.3	13.8	21.0	4,731	175,000[c]
2000/01[e]	37.6	24.3	15.0	61.8	46.6	32.9	20.4	23.2	3,894	---[b]
2001/02	25.2	19.9	13.7	68.9	31.7	50.1	18.3	17.7	5,728	---[b]
2002/03	25.7	28.1	18.3	65.0	57.8	29.7	12.5	16.7	5,734	147,000[d]
2003/04[f]	17.4	25.6	17.9	69.9	36.2	45.3	18.5	12.2	7,821	---[b]
2004/05[g]	21.0	20.0	14.2	71.0	64.2	28.9	6.9	14.9	4,608	85,000[h]
2005/06[i]	13.9	18.1	13.7	75.8	55.3	33.3	11.5	10.6	5,211	---[b]
2006/07[j]	14.9	25.5	18.1	71.3	57.5	33.7	8.9	10.6	2,971	45,000[k]
2007/08[l]	23.0	15.8	11.4	72.1	52.7	36.0	11.3	16.6	3,943	---[b]
2008/09[m]	19.3	23.4	16.4	70.1	46.8	36.1	17.1	13.5	3,728	30,000[n]
2009/10[o]	18.5	31.0	20.7	66.9	39.7	43.9	16.3	12.4	4,595	---[b]
2010/11[p]	16.8	19.5	14.3	73.3	30.0	43.7	26.3	12.4	4,592	---[b]

[a] Estimate derived from photo-counts, corrected estimates, subjective estimate of the number of caribou in areas not surveyed, and interpolation between years when aerial photo surveys not conducted.
[b] No current population estimate based on surveys.
[c] Estimate based on photocensus conducted July 8, 1999.
[d] Estimate based on photocensus conducted June 30, 2002.
[e] NOTE: Fall 2000 bull:cow ratio and bull percentages corrected from previous table.
[f] Based on pooling data from surveys conducted 10/11/2003 and 10/14/2003.
[g] Based on pooling data from surveys conducted 10/12/2004 and 10/30/2004.
[h] Estimate based on photocensus conducted July 7, 2004.
[i] Based on pooling data from surveys conducted 10/10/2005 and 10/14/2005.
[j] Based on pooling data from surveys conducted 10/13-14/2006 and 10/22/2006.
[k] Based on photocensus conducted July 11,2006.
[l] Based on pooling data from surveys conducted 10/7-8/2007 and 10/11/2007.
[m] Based on pooling data from surveys conducted 10/7/2008 and 10/8/2008.
[n] Based on photocensus conducted July 7, 2008.
[o] Based on pooling dated from surveys conducted 10/12/2009 and 10/16/2009.
[p] Based on pooling data from surveys conducted 10/10-11/2010 and 10/13/2010.

The MCH ranges across approximately 60,000 square miles, primarily within Units 9B, 9C, 17, 18, and 19. Wintering areas during the 1980s and early 1990s were along the north and west side of Iliamna Lake, north of Kvichak River, but telemetry data indicated the MCH had been moving to the south and west for wintering (Van Daele and Boudreau 1992 *cited* in Woolington 2007). Starting in the mid-1990s, caribou from the MCH began wintering in Unit 18 south of the Kuskokwim River and in southwestern Unit 19B in increasing numbers. During the winter of 2004/05, much of the herd wintered in Unit 18, south of the Kuskokwim River, and another large part of the herd wintered in the middle Mulchatna drainage. During 2005/06, large numbers wintered near the lower Kvichak River (Woolington 2009).

Habitat

There has been no assessment of habitat by ADF&G for the MCH. Taylor (1989) reported that the carrying capacity of traditional winter areas of the herd had been exceeded by the mid to late 1980s and that the herd was having to utilize other areas to continue its growth. It appears that the MCH has been using these non-traditional winter ranges at an ever increasing rate over the last 25 years.

Portions of the herds range are showing signs of heaving use with extensive trailing evident along major travel routes. Woolington (2007) reported that some of the summer and fall range of the MCH in the Nushagak Hills and elsewhere was trampled and showing signs of heavy grazing, while traditional winter ranges on the north and west sides of Iliamna Lake also showed signs of heavy use despite the fact that few caribou appear to continue to utilize these areas.

Harvest History

Harvest on the MCH continues to decline (Woolington 2007). Total reported MCH harvest was 2,171 in 2005, but had declined to 516 by 2008 (ADF&G 2009). The harvest of males was as high as 86% in 1991/92, but decreased to 48% of the reported harvest in 2005/06 (Woolington 2007).

Most of the harvest occurs in August and September (66% in 2004/05 and 47% in 2005/06) (Woolington 2007), with the majority of harvest occurring close to villages on State lands. Additionally, March also accounts for a relatively high amount of the harvest: 10% in 2004/05 increasing to 23% in 2005/06. Data indicates an increase in the proportion of caribou taken during late winter when compared to the harvest chronology for previous years (Woolington 2007).

Reported harvest during the other nine months has always been relatively low. Between 1991–2006, harvest in July accounted for less than 0.2% of the total annual harvest; October, November, December, January, and February accounted for less than 6%; and April accounted for less than 9% (Woolington 2007). It should be noted, however, that these data only account for the reported harvest and some harvest may be occurring that is unreported.

In Unit 18, harvest by both Federally and non-Federally qualified subsistence users has generally declined since 2003, when the reported harvest for the unit was at the highest (**Table 2)**.

Effects of Proposal

If adopted, this proposal would lower the harvest limit to one caribou and reduce the season by approximately three months for Federally qualified subsistence users hunting on Federal lands of Unit 18 under Federal subsistence regulations. These restrictions may help reduce the harvest and help stabilize the MCH population. If adopted, this proposal would result in a misalignment between State and Federal regulations. The proposed one caribou limit would be more restrictive than the States two caribou harvest

Table 2. Unit 18 reported caribou harvest, 2000-2009 (USFWS 2011).

Year	Federally qualified hunters	Non-Federally qualified hunters	Total
2000	121	17	138
2001	309	81	390
2002	145	113	258
2003	435	309	744
2004	295	179	474
2005	372	160	532
2006	234	90	324
2007	329	51	380
2008	210	40	250
2009	192	27	219

limit and hunters could simply choose to hunt under State regulations, thereby limiting the effectiveness of this proposal. At this time, there is no companion State proposal before the Alaska Board of Game to align State and Federal regulations should this proposal pass.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP12-42.

Justification

This proposal would make the Federal harvest limit and season more restrictive than the State regulations. Even if this proposal is adopted by the Federal Subsistence Board, hunters will still be able to take caribou under State regulations on USFWS and BLM lands in Unit 18 and most local users would still be harvesting close to village communities that are primarily on State and private lands. Therefore, adoption of this proposal by the Federal Subsistence Board will not have the effect sought by the proponent of reducing the harvest. Without alignment with State regulations, the effectiveness of this proposal would be limited, and Federally qualified users would have less opportunity than non-Federally qualified users.

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WP12-45/49 Executive Summary	
General Description	Proposal WP12-45 requests that for a portion of Unit 18, the start of the fall hunting season be moved from Aug. 10 to Sept. 1, and that the harvest limit be modified from one antlered bull to one moose, except that a cow with a calf may not be taken. *Submitted by Aloysius Unok of Kotlik* Proposal WP12-49 requests the moose hunting season in Unit 18, that portion north and west of the Kashunak River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village be revised from fall and winter dates (Aug. 10 – Sept.30 and Dec. 20 – Feb. 28) to Aug. 1 through the last day of February. The harvest limit would be two moose, only one of which may be antlered. The harvest of an antlered bull would be limited to the dates of Sept. 1 – 30. *Submitted by the Yukon Delta National Wildlife Refuge*
Proposed Regulation	**WP-45** **Unit 18 — Moose** *Unit 18 — that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village – ~~1 antlered bull~~* ***1 moose except a cow with calf may not be taken.*** — ***Sept. 1*** *~~Aug. 10~~ – Sept. 30* *Unit 18 — that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village – 1 moose. If 1 antlered bull is taken during the fall season in this area, 1 additional moose may be taken during the winter season. If no moose are taken in the fall season, 2 moose may be taken in the winter season. No more than 2 moose may be harvested in this area in a regulatory year. A Federal registration permit is required. The Yukon Delta NWR Manager may restrict the harvest in the winter season to only 1 antlered bull or only 1 moose per regulatory year after consultation with the ADF&G and the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council chair.* — *Dec. 20 – Feb. 28*

continued on next page

WP12-45/49 Executive Summary *(continued)*		
Proposed Regulation	**WP-49** **Unit 18 — Moose**	
	Unit 18 – that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village – ~~*1 antlered bull*~~***2 moose, only one of which may be antlered. Antlered bulls may only be harvested from Sept 1 – Sept 30.***	~~*Aug. 10 – Sept. 30*~~ ***Aug. 1 – the last day of February***
	Unit 18 – ~~*that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village – 1 moose. If 1 antlered bull is taken during the fall season in this area, 1 additional moose may be taken during the winter season. If no moose are taken in the fall season, 2 moose may be taken in the winter season. No more than 2 moose may be harvested in this area in a regulatory year. A Federal registration permit is required. The Yukon Delta NWR Manager may restrict the harvest in the winter season to only 1 antlered bull or only 1 moose per regulatory year after consultation with the ADF&G and the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council chair.*~~	*Dec. 20 – Feb. 28*
OSM Preliminary Conclusion	**Support** Proposal WP12-49. **Take no action** on Proposal WP12-45.	
Yukon/Kuskokwim Delta Regional Council Recommendation		
Western Interior Regional Council Recommendation		
Seward Peninsula Regional Council Recommendation		
Interagency Staff Committee Comments		
ADF&G Comments		
Written Public Comments	**None**	

DRAFT STAFF ANALYSIS
WP12-45/49

ISSUES

Proposal WP12-45, submitted by Aloysius Unok of Kotlik, requests that for a portion of Unit 18, the start of the fall hunting season be moved from Aug. 10 to Sept. 1, and that the harvest limit be modified from one antlered bull to one moose, except that a cow with a calf may not be taken.

Proposal WP12-49, submitted by the Yukon Delta National Wildlife Refuge, requests the moose hunting season in Unit 18, that portion north and west of the Kashunak River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village be revised from fall and winter dates (Aug. 10 – Sept.30 and Dec. 20 – Feb. 28) to Aug. 1 through the last day of February. The harvest limit would be two moose, only one of which may be antlered. The harvest of an antlered bull would be limited to the dates of Sept. 1 – 30.

DISCUSSION

The proponent for Proposal WP12-45 states that hunting opportunities for local users are limited in Unit 18 by the antlered bull restriction during the fall hunting season. The proponent states that hunters have to spend a long time in the field searching for a legal animal to harvest and by allowing a 1 moose harvest limit, there would be more harvest opportunities.

The proponent for Proposal WP12-49 states that the moose population of the lower Yukon has grown dramatically and the season and harvest limit for this portion of Unit 18 can be liberalized. This proposal would increase hunting opportunities for Federally qualified subsistence users by increasing the opportunity to harvest cows and harvest two moose during the fall. Reducing the number of cows may help slow the increase in the population, thereby reducing habitat damage that could lead to a population crash.

Existing Federal Regulation

Unit 18 — Moose

Unit 18 — that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village – 1 antlered bull	*Aug. 10 – Sept. 30*

Unit 18 — that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village– 1 moose. If 1 antlered bull is taken during the fall season in this area, 1 additional moose may be taken during the winter season. If no moose are taken in the fall season, 2 moose may be taken in the winter season. No more than 2 moose may be harvested in this area in a regulatory year. A Federal registration permit is required. The Yukon Delta NWR Manager may restrict the harvest in the winter season to only 1 antlered bull or only 1 moose per regulatory year after consultation with the ADF&G and the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council chair.	*Dec. 20 – Feb. 28*

Proposed Federal Regulation

WP-45

Unit 18 — Moose

Unit 18 — that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village – ~~*1 antlered bull*~~***1 moose except a cow with calf may not be taken.***	***Sept. 1*** ~~*Aug. 10*~~ *– Sept. 30*
Unit 18 — that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village – 1 moose. If 1 antlered bull is taken during the fall season in this area, 1 additional moose may be taken during the winter season. If no moose are taken in the fall season, 2 moose may be taken in the winter season. No more than 2 moose may be harvested in this area in a regulatory year. A Federal registration permit is required. The Yukon Delta NWR Manager may restrict the harvest in the winter season to only 1 antlered bull or only 1 moose per regulatory year after consultation with the ADF&G and the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council chair.	*Dec. 20 – Feb. 28*

WP-49

Unit 18 — Moose

Unit 18 – that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village – ~~*1 antlered bull*~~***2 moose, only one of which may be antlered. Antlered bulls may only be harvested from Sept 1 – Sept 30.***	~~*Aug. 10 – Sept. 30*~~ ***Aug. 1 – the last day of February***
Unit 18 – ~~*that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village – 1 moose. If 1 antlered bull is taken during the fall season in this area, 1 additional moose may be taken during the winter season. If no moose are taken in the fall season, 2 moose may be taken in the winter season. No more than 2 moose may be harvested in this area in a regulatory year. A Federal registration permit is required. The Yukon Delta NWR Manager may restrict the harvest in the winter season to only 1 antlered bull or only 1 moose per regulatory year after consultation with the ADF&G and the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council chair.*~~	*Dec. 20 – Feb. 28*

Existing State Regulation

Unit 18 — Moose

Residents, one antlered bull	*Aug. 10 – Sept. 30*
OR	
One moose	*Dec. 20 – Feb. 28*
One antlered bull for nonresidents	*Sept. 1 – Sept. 30*

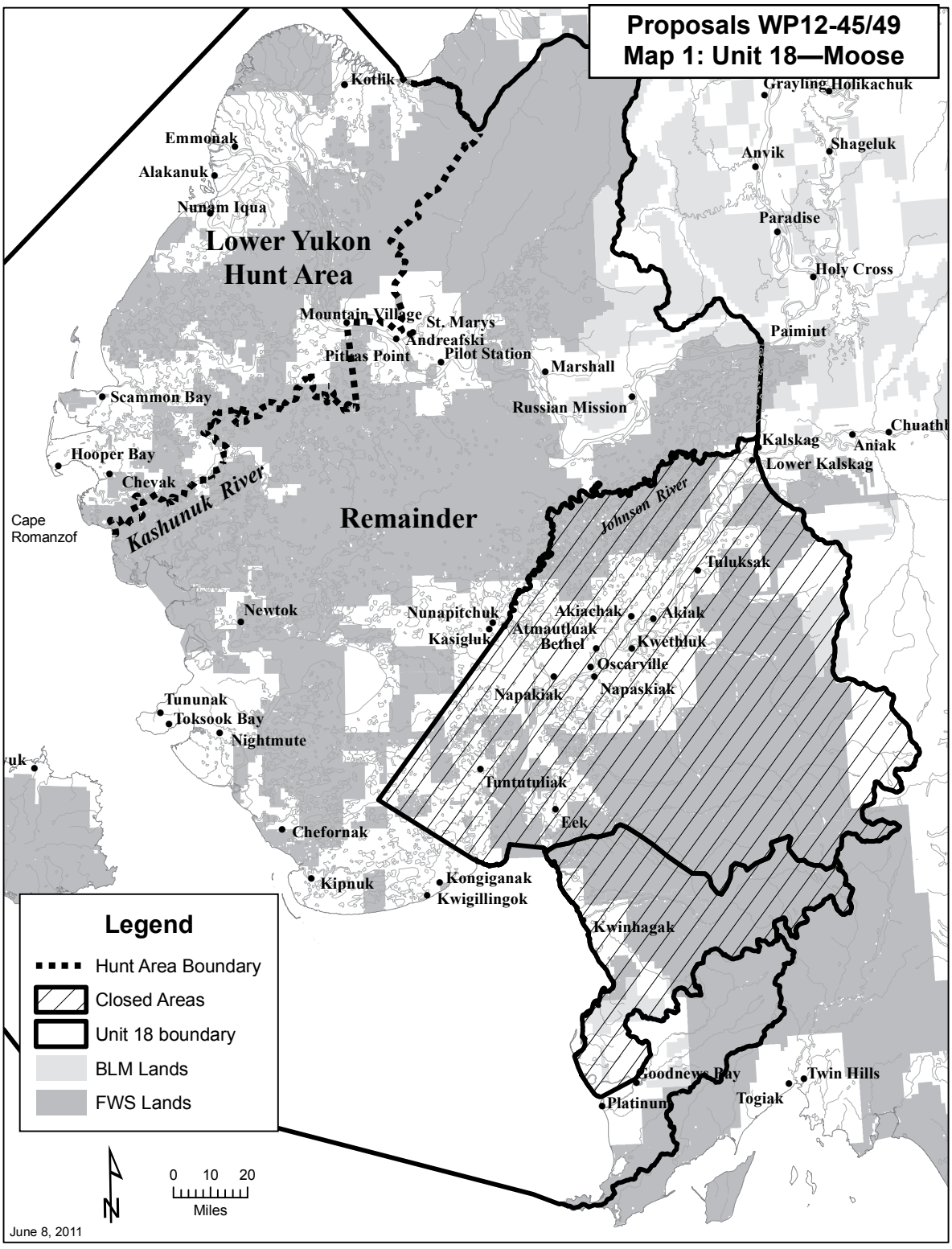
Extent of Federal Public Lands

Federal public lands comprise approximately 64% of Unit 18 and consist of 62% US Fish and Wildlife Service managed lands and 2% Bureau of Land Management managed lands (**Map 1**).

Customary and Traditional Use Determinations

Rural residents of Unit 18, Upper Kalskag, Aniak and Chuathbaluk have a positive customary and traditional determination for moose in Unit 18, that portion of the Yukon River drainage upstream of Russian Mission and that portion of the Kuskokwim River drainage upstream (but excluding) the Tuluksak drainage.

Rural residents of Unit 18, St. Michael, Stebbins, and Upper Kalskag have a positive customary and traditional determination for moose in Unit 18, that portion north of a line from Cape Romanzof to


Proposals WP12-45/49
Map 1: Unit 18—Moose
Kotlik
Grayling
Holikachuk
Emmonak
Alakanuk
Nunam Iqua
Anvik
Shageluk
Paradise
Holy Cross
Lower Yukon
Hunt Area
Mountain Village
St. Marys
Andreafski
Pitkas Point
Pilot Station
Marshall
Paimiut
Scammon Bay
Russian Mission
Kalskag
Aniak
Chuathl
Lower Kalskag
Hooper Bay
Chevak
Kashunuk River
Remainder
Johnson River
Cape
Romanzof
Tuluksak
Newtok
Nunapitchuk
Akiachak
Akiak
Atmautluak
Kasigluk
Bethel
Kwethluk
Oscarville
Napakiak
Napaskiak
Tununak
Toksook Bay
Nightmute
Tuntutuliak
Eek
Chefornak
Kipnuk
Kongiganak
Kwigillingok
Kwinhagak
Goodnews Bay
Twin Hills
Togiak
Platinum
Legend
Hunt Area Boundary
Closed Areas
Unit 18 boundary
BLM Lands
FWS Lands
N
0 10 20
Miles
June 8, 2011

Kuzilvak Mountain to Mountain Village, and all drainages north of the Yukon River downstream from Marshall.

Rural residents of Unit 18 and Upper Kalskag have a positive customary and traditional determination for moose in Unit 18 remainder.

Regulatory History

In November 2005, the Alaska Board of Game adopted State Proposal 04 in response to the rapid growth of the lower Yukon moose population. Action taken on the proposal modified the State harvest limit by allowing the harvest of antlered bulls only and established a winter season for antlered bulls and calves. During its November 2007 meeting, the Alaska Board of Game lengthened the fall moose season for the lower Yukon and remainder areas of Unit 18 by 21 days and the winter season in the lower Yukon by 10 days through the adoption of State Proposal 06.

At its March 2009 meeting, the Alaska Board of Game adopted Proposal 228, which liberalized the State harvest limit from antlered bulls to any moose for the Dec. 20–Jan. 20 season in the lower Yukon area of Unit 18. The State believed that the affected moose population has increased to a size that can support the harvest of cows.

At its November 12, 2009 work session, the Federal Subsistence Board adopted Special Action WSA08-13, submitted by Scammon Bay Traditional Council, which requested the harvest limit in the lower Yukon area of Unit 18 be increased to two moose per regulatory year, with one allowed in the fall and one in the winter.

The Alaska Board of Game, at its November 13−16, 2009 meeting, adopted new regulations to extend the winter season from Jan. 20 to Feb. 28 and move the boundary between the lower Yukon and the remainder areas, south to a more discernible geographic land mark.

State Management Objectives for Unit 18 (Perry 2008) are as follows:

- Allow the lower Yukon River moose population to increase above its estimated size of 2500–3500 moose. Allow the lower Kuskokwim River moose population to increase above its estimated size of 75–250 moose to at least 2000 moose.
- Maintain the current age and sex structure for both populations, with a minimum of 30 bulls:100 cows.
- Conduct seasonal sex and age composition surveys as weather allows.
- Conduct winter censuses and recruitment surveys in the established survey areas on a rotating basis.
- Conduct fall and/or winter trend counts to determine population trends.
- Conduct hunts consistent with population goals.
- Improve knowledge of and compliance with harvest reporting requirements and hunting regulations through education and incentives.
- Address user conflicts through education and hunter contacts.

WP10-56, submitted by the Yukon Delta National Wildlife Refuge, requested that the harvest limit in the lower Yukon area of Unit 18 (that portion north and west of a line from Cape Romanzof to Kusilvak Mountain to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village) be changed to two moose per regulatory year. Hunters would be allowed to harvest one antlered bull in the fall season and one moose in the winter season. Hunters that did not harvest a moose in the fall would

be allowed to harvest two moose during the winter season. The proposal also delegated authority to the Yukon Delta National Wildlife Refuge manager to restrict the season, if needed, after consultation with the Alaska Department of Fish and Game. The proposal was supported by the Federal Subsistence Board with modification to extend the winter season to February 28.

WP10-57, submitted by the Yukon Delta National Wildlife Refuge, requested a change in a portion of the regulatory boundary description for Unit 18, north and west of a line from Cape Romanzof to Kusilvak Mountain to Mountain Village, and excluding all Yukon River drainages upriver from Mountain Village. This area is referred to as the lower Yukon hunt area. The proposal was supported by the Federal Subsistence Board with modification to remove the Cape Romanzof to Kusilvak Mountain section and replace with a descriptor for the Kashunuk River drainage.

Biological Background

In February 2008, the Yukon Delta National Wildlife Refuge and Alaska Department of Fish and Game conducted cooperative moose surveys in portions of Unit 18, including the furthest down river survey unit along the main stem of the Yukon River corridor from Mountain Village to Kotlik. The mid-point of the moose population estimate for this area was 2,828 moose when using traditional survey methods and 3,320 moose when a Sightability Correction Factor (SCF) was incorporated in the 2008 analysis (USFWS 2008). Using the SCF population estimate on the lower Yukon River (from Mountain Village to Emmonak), the resulting moose density estimate was 2.8 moose/mi.^{2}. The affected area has experienced rapid population growth since the end of the moratorium in 1994 (**Figure 1)** with an average annual growth rate of 27% for the period of 1994–2008. Based on the 2008 survey results, it appears that the affected population could support additional harvest with the current population size, density, and productivity (Doolittle 2009, pers. comm.). The most recent population composition data for lower Yukon moose shows 30 bulls per 100 cows and 69 calves per 100 cows, with 55% of cows having calves (Rearden 2011, pers. comm.). This data most likely reflects a growing population since the 2008 surveys.

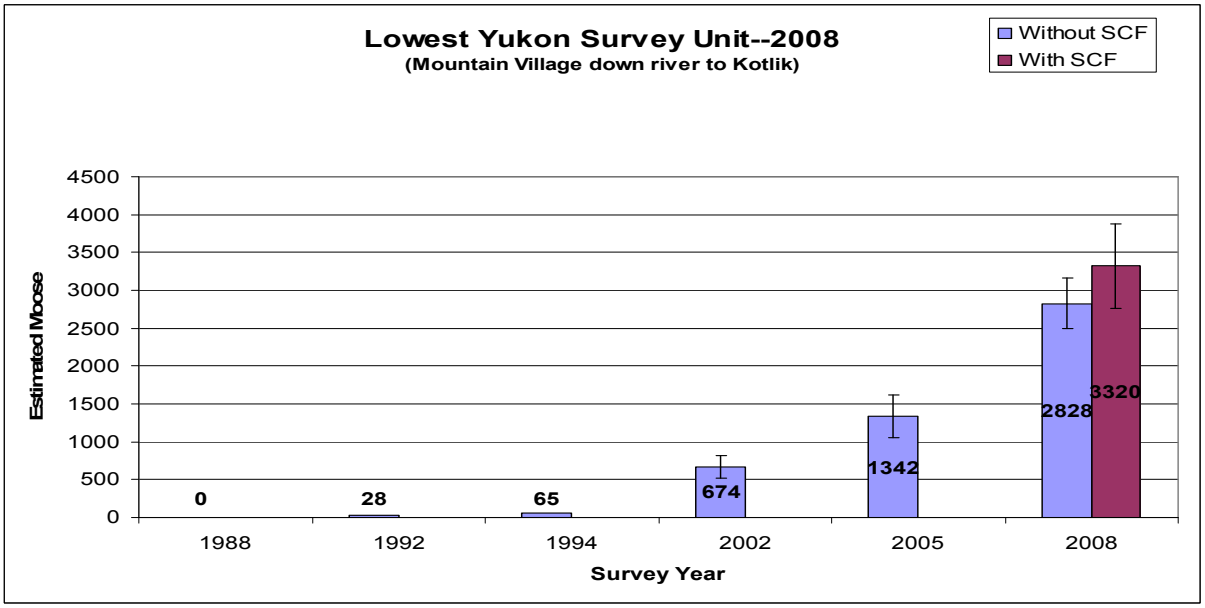


Figure 1. Moose population survey results from the lowest survey unit along the main stem of the Yukon River, 1988-2008 (UFWS 2008).

Habitat

Moose browse surveys have not been conducted within the affected area, thus there are no habitat data. Browse surveys would facilitate analysis of the impacts this moose population is having on its habitat, which could provide some insight into the carrying capacity of the habitat and the nutritional quality of the standing browse.

At the Federal Subsistence Board work session in November 2009, Mr. Gene Peltola, Refuge Manager of Yukon Delta National Wildlife Refuge, testified that if moose density continues to increase in the lower Yukon area of Unit 18, there is a risk that the population will exceed the carrying capacity of the habitat and experience a decline. Mr. Peltola stated that over the last three years there have been reports of localized calf and yearling die offs and this past winter reports of dead adult moose on the Yukon main stem. In addition, he stated that the refuge would prefer a proactive management approach because of the significance of the moose population to lower Yukon residents (FSB 2009).

Harvest History

Reported harvest totals from the fall (2005-2007) and winter seasons (2005–2009) are provided in **Table 1**. There appears to have been an increase in hunter success for the fall and winter seasons since 2005. From 2007 through 2009, the average annual reported winter moose harvest was 29. Even with the "any-moose" harvest limit provided in the 2009 winter season, the total reported winter harvest remains lower than anticipated. It should be noted that harvest information is typically collected through harvest ticket or registration permit reports submitted by users, which may undercount harvest (cf. Andersen and Alexander 1992). However, the reported moose harvest does show an increasing trend. Overall harvest continues to be lower than expected in Unit 18 relative to the moose population.

Effects of Proposal

If adopted, Proposal WP12-45 would shorten the fall season by 21 days from Aug. 10 – Sept. 30 to Sept. 1 – Sept. 30, and would change the harvest limit for the fall season from one antlered bull to one moose during the fall season, excluding a cow moose with a calf in a portion of Unit 18. This action would reduce the amount of hunting time during the fall season for Federally qualified subsistence users. In addition, changing the harvest limit to one moose would expand the segment of the moose population available for harvest. Allowing for harvest of cow moose could help slow the recruitment rate, thereby minimizing habitat degradation for the fast growing moose population on the lower Yukon.

If adopted, Proposal WP12-49 would lengthen the hunting season by approximately three months and modify the harvest limit to allow for the harvest of up to two moose during this time period, however, antlered bulls could only be taken from Sept. 1 to Sept. 30. This action would allow for increased subsistence harvest opportunities during the fall. This proposal would also help limit the growth of this quickly expanding moose population by reducing recruitment rates through a harvest at least partially directed at cows. This reduction may help prevent habitat degradation along the lower Yukon that could lead to a population crash if left unchecked.

OSM PRELIMINARY CONCLUSION

Support Proposal WP12-49.

Take no action on Proposal WP12-45.

Table 1. Total fall (ADF&G 2009) and winter (Perry 2011, pers. comm.) moose harvest reported by year for the lower Yukon area of Unit 18, 2005–2010.

Year	Reported fall moose harvest	Reported winter moose harvest
2005	97	14
2006	121	31
2007	162	29
2008	193	24
2009	178	51
2010	162	52
Total	913	201

Justification

The Federal Subsistence Board recently adopted Proposal WP10-56 to increase the harvest limit in the lower Yukon area of Unit 18 to two moose per regulatory year. Proposal WP12-49, if adopted, would provide additional opportunity for Federal subsistence users to harvest moose in the lower Yukon area of Unit 18 by lengthening the season and liberalizing harvest requirements from 1 antlered bull to 2 moose, except that antlered bulls could be taken only between Sept. 1 and Sept. 30. Moose densities along the lower Yukon are high and additional harvest should not have any negative impacts on the moose population. Proposal WP12-49 should help to reduce moose densities in this area, which would prevent or help to reduce negative impacts to habitat that could eventually lead to a crash in the population. The increased season length and hunting opportunities proposed in WP12-49 should meet the needs set forth by the proponent in WP12-45, as well as reducing the regulatory complexity between Federal and State lands in the area.

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WP12-47 Executive Summary	
General Description	Proposal WP12-47 requests the addition of a special provision to limit aircraft use for the moose season in a portion of Unit 18. *Submitted by Stanley Sheppard of the Mountain Village Working Group*
Proposed Regulation	See the analysis for the regulatory language.
OSM Preliminary Conclusion	**Oppose**
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
WP12-47

ISSUES

Proposal WP12-47, submitted by Stanley Sheppard of the Mountain Village Working Group, requests the addition of a special provision to limit aircraft use for the moose season in a portion of Unit 18.

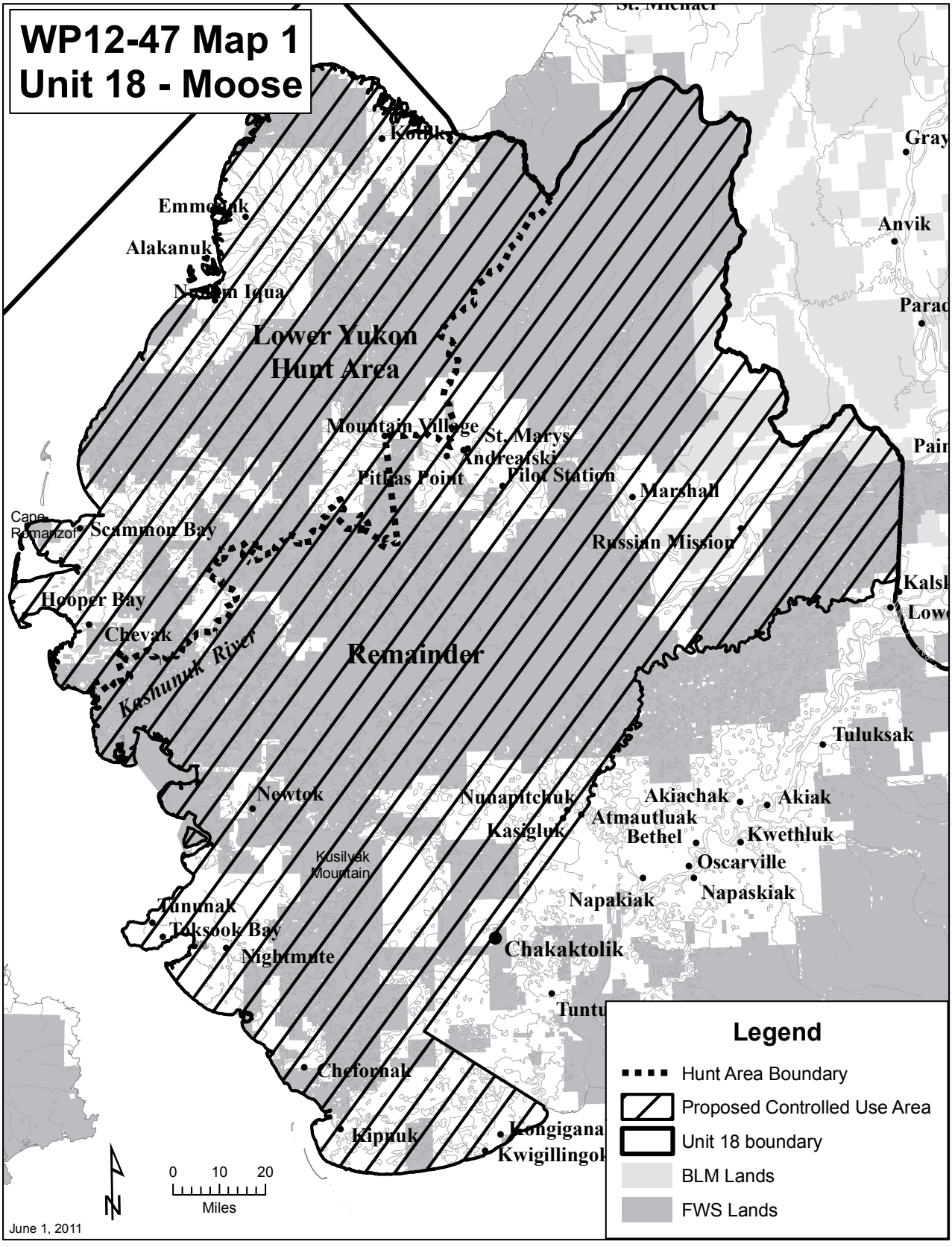
DISCUSSION

The proponent states there are concerns among Unit 18 residents regarding nonlocal users flying in to refuge lands to harvest moose. The proponent states there have been reports of nonlocal "fly-in" moose hunters claiming areas of Unit 18 for their exclusive use, and have asked local Asa'carsarmiut (Mountain Village) tribal members to leave hunting areas. The proposal requests a special provision to create a Unit 18 Federal Controlled Use Area to restrict the use of aircraft during moose seasons for users harvesting moose, including transportation of any moose hunter or moose part. The controlled use area would encompass the Lower Yukon and remainder areas of Unit 18 (**Map 1**). The controlled use area would not apply to transportation of a moose hunter or moose part by aircraft between publicly owned airports.

Existing Federal Regulations

Unit 18—Moose

Unit 18—that portion east of a line running from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W 162°22.14' Longitude), continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage.	*No open season*
Federal public lands are closed to the harvest of moose except by residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautlauk, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag.	
Unit 18—that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village—1 antlered bull.	*Aug. 10–Sept. 30*


WP12-47 Map 1
Unit 18 - Moose
Kotlik
Emmonak
Alakanuk
Nunam Iqua
Lower Yukon
Hunt Area
Mountain Village
St. Marys
Andreafski
Pitkas Point
Pilot Station
Marshall
Russian Mission
Cape Romanzof
Scammon Bay
Hooper Bay
Chevak
Kashunuk River
Remainder
Newtok
Nunapitchuk
Akiachak
Akiak
Atmautluak
Kasigluk
Bethel
Kwethluk
Oscarville
Napaskiak
Napakiak
Kusilvak Mountain
Tununak
Toksook Bay
Nightmute
Chakaktolik
Tuntutuliak
Chefornak
Kipnuk
Kongiganak
Kwigillingok
Tuluksak
Gray
Anvik
Legend
Hunt Area Boundary
Proposed Controlled Use Area
Unit 18 boundary
BLM Lands
FWS Lands
0 10 20
Miles
June 1, 2011

1 moose—If 1 antlered bull is taken during the fall season in this area, 1 additional moose may be taken during the winter season. If no moose are taken in the fall season, 2 moose may be taken in the winter season. No more than 2 moose may be harvested in this area in a regulatory year. A Federal registration permit is required. The Yukon Delta NWR Manager may restrict the harvest in the winter season to only 1 antlered bull or only 1 moose per regulatory year after consultation with the ADF&G and the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council chair.	*Dec. 20–Feb. 28*
Unit 18—south of and including the Kanektok River drainages to the Goodnews River drainage. *Federal public lands area closed to the harvest of moose.*	*No open season*
Unit 18—Goodnews River drainage, and south to the Unit 18 boundary—1 antlered bull by State registration permit. Any needed closures will be announced by the Togiak National Wildlife Refuge Manager after consultation with BLM, ADF&G, and the Chair of the Yukon–Kuskokwim Delta Subsistence Regional Advisory Council.	*Aug. 25–Sept. 20*
Unit 18 remainder—1 antlered bull	*Aug. 10–Sept. 30* *Dec. 20–Jan. 10*

Proposed Federal Regulations

Unit 18—Moose

Unit 18—that portion east of a line running from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W 162°22.14' Longitude), continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage. *Federal public lands are closed to the harvest of moose except by residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautlauk, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag.*	*No open season*
Unit 18—that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village—1 antlered bull.	*Aug. 10–Sept. 30*

1 moose—If 1 antlered bull is taken during the fall season in this area, 1 additional moose may be taken during the winter season. If no moose are taken in the fall season, 2 moose may be taken in the winter season. No more than 2 moose may be harvested in this area in a regulatory year. A Federal registration permit is required. The Yukon Delta NWR Manager may restrict the harvest in the winter season to only 1 antlered bull or only 1 moose per regulatory year after consultation with the ADF&G and the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council chair.	*Dec. 20–Feb. 28*
The Western Unit 18 Controlled Use Area is closed during moose hunting seasons to the use of aircraft for hunting moose, including transportation of any moose hunter or moose part. However, this does not apply to transportation of a moose hunter or moose part by aircraft between publicly owned airports in the controlled use area, or between a publicly owned airport within the area and points outside of the area. The controlled use area consists of that portion of Unit 18 west of a line running from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the west bank of the Johnson River and its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W 162°22.14' Longitude), continuing upriver along a line 1/2 mile north and west of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake.	
Unit 18—south of and including the Kanektok River drainages to the Goodnews River drainage.	*No open season*
Federal public lands area closed to the harvest of moose.	
Unit 18—Goodnews River drainage, and south to the Unit 18 boundary—1 antlered bull by State registration permit. Any needed closures will be announced by the Togiak National Wildlife Refuge Manager after consultation with BLM, ADF&G, and the Chair of the Yukon–Kuskokwim Delta Subsistence Regional Advisory Council.	*Aug. 25–Sept. 20*
Unit 18 remainder—1 antlered bull	*Aug. 10–Sept. 30* *Dec. 20–Jan. 10*

The Western Unit 18 Controlled Use Area is closed during moose hunting seasons to the use of aircraft for hunting moose, including transportation of any moose hunter or moose part. However, this does not apply to transportation of a moose hunter or moose part by aircraft between publicly owned airports in the controlled use area, or between a publicly owned airport within the area and points outside of the area. The controlled use area consists of that portion of Unit 18 west of a line running from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the west bank of the Johnson River and its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W 162°22.14' Longitude), continuing upriver along a line 1/2 mile north and west of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake.

Existing State Regulations

Unit 18 Kuskokwim Area, east of a line from the mouth of the Ishkowik River to Dall Lake, then to the Johnson River at its entrance to Nunavakanukakslak Lake (N 60° 59.41' Lat; W 162° 22.14' Lon), then upstream 1/2 mile south of the south bank of the Johnson River to Crooked Creek, then upstream along the creek to Arhymot Lake to the Unit 18 boundary, and north of and including the Eek River drainage.	*Resident: One antlered bull by permit available in person at ADF&G in Bethel and villages within the hunt area from Aug. 1–Aug. 25. (Harvest quota to be announced).*	*RM615*	*Sept. 1–Sept. 10*
	Nonresident:		*No open season*
Unit 18 that portion south of the Eek River drainage and north of the Goodnews River drainage	*Resident: One antlered bull*		*Sept. 1–Sept. 30*
	Nonresident:		*No open season*
Unit 18 that portion south of and including the Goodnews River drainage	*Resident: One antlered bull by permit available in person in Goodnews Bay and Platinum Aug. 1–25. Season will be closed by emergency order when 10 bull are taken.*	*RM620*	*Sept. 1–Sept. 30*
	Nonresident:		*No open season*

Unit 18 Lower Yukon Area, that portion north and west of the Kashunuk River including the north bank from the mouth of the river upstream to the old village of Chakaktolik, west of a line from Chakaktolik to Mountain Village, excluding all Yukon River drainages upriver from Mountain Village.	*Resident: One antlered bull*	*Aug. 10–Sept. 30*
	Or	
	One moose	*Dec. 20–Feb. 28*
	Nonresident: One antlered bull	*Sept. 1–Sept. 30*
Unit 18 remainder	*Resident: One antlered bull*	*Aug. 10–Sept. .30*
	Or	
	One antlered bull	*Dec. 20–Jan. 10*
	Nonresident: One antlered bull	*Sept. 1–Sept. 30*

Extent of Federal Public Lands

Federal public lands comprise approximately 64% of Unit 18 and consist of 62% FWS and 2% BLM managed lands (**Unit 18 Map**).

Customary and Traditional Use Determinations

Residents of Unit 18, Upper Kalskag, Aniak, and Chuathbaluk have a customary and traditional use determination for moose in Unit 18, that portion of the Yukon River drainage upstream of Russian Mission and that portion of the Kuskokwim River drainage upstream, but excluding the Tuluksak River drainage.

Residents of Unit 18, St. Michael, Stebbins, and Upper Kalskag have a customary and traditional use determination for moose in Unit 18, that portion north of a line from Cape Romanzof to Kuzilvak Mountain to Mountain Village, and all drainages north of the Yukon River downstream from Marshall.

Residents of Unit 18 and Upper Kalskag have a customary and traditional use determination for harvesting moose in the remainder of Unit 18.

Regulatory History

Proposals WP05-11 and WP06-27 were submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council and also requested the establishment of a Federal Controlled Use Area for all moose seasons in the lower Yukon River drainage within Unit 18. Proposal WP05-11 was deferred by the Federal Subsistence Board (Board) in 2005 based on its limited jurisdiction to implement effective controlled use areas because of mixed land jurisdictions in the affected area (FSB 2006). The request was resubmitted as Proposal WP06-27 and a companion proposal to the Alaska Board of Game (State Proposal 9). The Board rejected WP06-27 in 2006 because there were no conservation concerns with the moose population and the Board's limited jurisdiction to implement effective controlled use areas. Likewise, the Alaska Board of Game rejected State Proposal 9 at its November 2005 meeting based on their conclusion that the current level of fly-in hunter impacts on the resource and affected users was insignificant.

The areas of Unit 18 covered by the proposed controlled use area (Lower Yukon Area and remainder) were closed to non-Federally qualified users from 1991 to 2007. The closure was important given low moose numbers at that time. Proposal WP06-30 requested the removal of the Federal closure for the Unit 18 remainder fall moose season (September 1–30). The biological information presented in the WP06-30 analysis supported removal of the closure for not only the Unit 18 remainder, but also that portion of Unit 18 downstream from Mountain Village (Lower Yukon Area). The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council opposed the proposal because of local concerns. At its May 2006 meeting, the Board deferred action on the proposal for one year with a commitment to revisit the proposed regulation change in May 2007. The Board's intent for the deferral was to allow time for refuge staff to conduct information outreach on the status of the existing moose population in communities before making a decision. The Board's May 2006 deferral, along with the rapid growth and size of the lower Yukon River moose population, created disagreement over the appropriateness of the Federal closure. Because of local concerns of increased competition and hunting pressure that would follow after the elimination of the Federal closure, the Board received several proposals in October 2006 concerning the moose regulations for the affected area, including:

- Proposal WP07-26 requested a positive customary and traditional use determination for moose in Unit 18 for the residents of St. Michaels and Stebbins. The Board adopted the proposed regulatory change in May 2007.

- Proposal WP07-27 requested an August 10–August 19 families-only moose season in Unit 18 remainder. The Board did not adopt the proposed change at its May 2007 meeting because it cannot adopt regulations that favor families only.

- Proposal WP07-28 requested an earlier season in Unit 18 remainder beginning on August 20, instead of September 1. The Board adopted a modified recommendation of an August 10 season open date for the Yukon River drainage portion of Unit 18 and Unit 18 remainder at its May 2007 meeting.

- Proposal WP07-29 requested a liberalization of the harvest limit from one antlered bull to one moose in Unit 18 remainder with a winter season extension to January 20, instead of January 10. The Board adopted the season extension with the modification of one moose for the Yukon River drainage below and including Mt. Village only, due to the very high calf composition and concerns of the population size and growth rate may be adversely affecting the habitat's carrying capacity in that area.

- Proposal WP07-30 requested a continuous one bull harvest limit from September 1 to March 31. Because such liberalizations in harvest limit should be adopted gradually to allow for close monitoring of harvest effects on the population, the Board did not adopt the proposed regulatory change.

- Proposal WP07-31 requested an August 20–31 moose season with a one antlered bull harvest limit for residents of Andreafsky and St. Mary's within the Andreafsky River drainage of Unit 18 remainder; and Proposal WP07-64 requested the Board extend the fall moose season by adopting the proposed 12-day, August 20–31 extension with a one antlered bull or cow moose harvest limit for residents of Marshall. If a proposal seeks a prioritization for use of a subsistence resource among rural residents having customary and traditional use of that resource, as was the case with these two proposals, an analysis must be done in accordance with Section 804 of ANILCA if the population necessitates such prioritization. Because the moose population in this area could

support harvest by all Federally qualified subsistence users, an "804" analysis was not conducted, and the Board did not adopt these proposals.

- At its May 2007 meeting, the Board adopted Proposal WP07-32 (deferred proposal WP06-30) to open Federal public lands to non-Federally qualified subsistence users. The Board stated that the closure was no longer warranted as the moose population had increased to the point where additional harvest could occur. The Refuge Manager of the Yukon Delta National Wildlife Refuge made extensive outreach efforts with local residents and committed to lessen competition by prohibiting transporters access to local subsistence use areas (Rearden 2007, pers. comm.).

Special Action WSA06-04, submitted by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council in the fall 2006, was approved by the Board in December 2006. The special action expanded the 2006/07 harvest limit from "one bull or one calf" to "one moose" and extended the winter season 10 days in the lower area of the Yukon River drainage in Unit 18 downstream from Mountain Village. Local wildlife managers and representatives of the Council testified at the October 2006 meeting that a combination of factors, including mild fall weather conditions, a late rut, low water levels, and high fuel prices, resulted in a harvest shortfall during the 2006 fall season. These changes, implemented through the special action, provided local users additional opportunity to harvest any moose from this rapidly expanding moose population during the December 20–January 20 season.

Proposal WP10-56, submitted by the Yukon Delta National Wildlife Refuge, requested an increase in the harvest limit in the lower Yukon area of Unit 18 from one to two moose per regulatory year. Under the proposed actions, Federally qualified subsistence users who harvested a bull moose in the fall season, would be allowed to harvest an additional moose during the winter season. Federally qualified subsistence users who did not harvest a moose during the fall season could harvest two moose during the winter season. In 2010, the Board adopted proposal WP10-56 with modification to increase the harvest limit to two moose during a regulatory year and increased the length of the Federal winter season from Dec. 20–Jan. 20 to Dec. 20–Feb. 28.

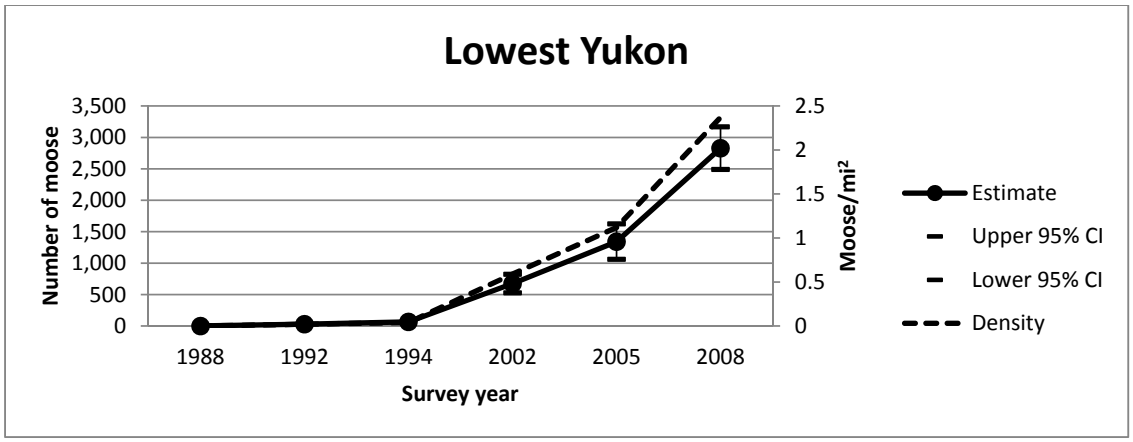
Current Events Involving Species

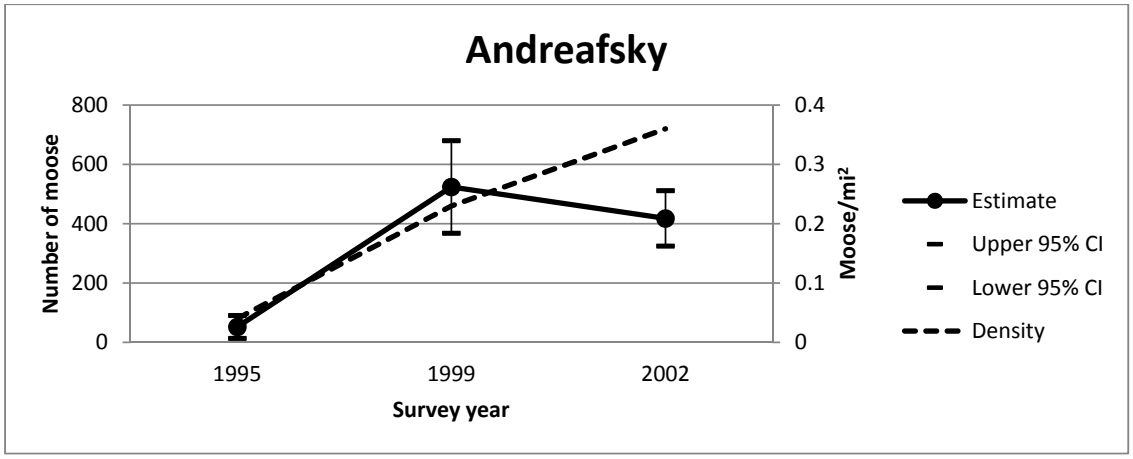
A companion proposal has been submitted to the Alaska Board of Game (Kenner 2011, pers. comm.). However, the Alaska Board of Game has not published its proposal book, and no date has been set to consider the proposal during the November 2011 to March 2012 meeting schedule.

Biological Background

A general summary, based on analysis of existing survey results for the moose population along the Yukon River in Unit 18, is that the population is highly productive, continues to grow, and is capable of supporting an increased harvest. Moose populations have steadily increased among the Lowest Yukon, Andreafsky, and Paimiut survey areas since the early to mid-1990s (Perry 2008). The Lower Yukon survey area has seen a dramatic increase in moose numbers from zero in 1988 to 2,828 moose [3,320 when including a sightability correction factor (SCF) to the estimate] in 2008 (**Figure 1**). The density of moose in the Lower Yukon area was estimated between 2.4 and 2.8 moose/mi^2 in 2008. Moose density estimates increased from 0.04 in 1995 to 0.26 moose/mi^2 in 2002 in the Andeafsky survey area (**Figure 1**). Moose density estimates increased from 0.64 in 1992 to 2.3 moose/mi2 in 2006 in the Paimiut survey area (**Figure 1**).

Yukon Delta National Wildlife Refuge biologists conducted moose composition counts along the Lower and Middle Yukon survey areas in 2010 (Rearden 2011, pers. comm.). The Middle Yukon survey area





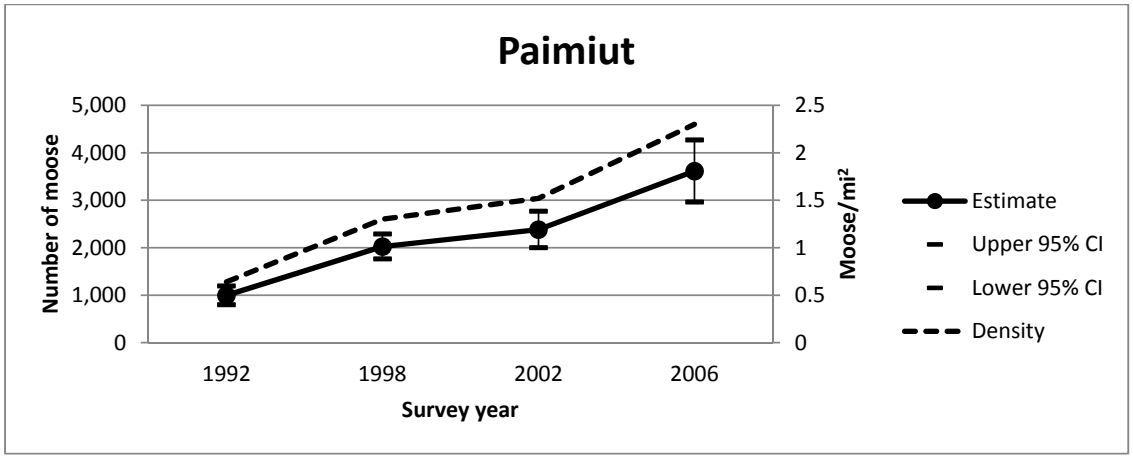


Figure 1. Moose population and density estimates for the Lowest Yukon, Andreafsky, and Paimut survey areas of Unit 18 between 1988 and 2006 (adapted from Table 1 in Perry 2008). Survey methods varied between minimum counts, the spatial method, and the Gasaway method (see Perry 2008).

includes the Andreafsky and Paimiut survey areas mentioned above. The Lower Yukon composition survey was conducted on November 8, 2010 and a total of 845 moose were observed (**Table 1**). Bull:cow ratios were 30 bulls:100 cows and calf:cow ratios were 69 calves:100 cows. Of the observed cows, 55% had calves and 26% had twins. Moose numbers also increased in the Middle Yukon survey area. A total of 619 moose were observed during the Middle Yukon composition survey (**Table 1**). Bull:cow ratios

Table 1. Sex and age composition data of moose populations in the Lower Yukon and Middle Yukon survey areas of Unit 18. Aerial surveys were flown in the fall of 2010.

		Survey area	
Class	**Subclass**	**Lower Yukon**	**Middle Yukon**
Cows	**Total**	**424**	**305**
Calves	Single	171	103
	Twins	61	40
	Triplets	0	1
	Total[a]	**293**	**186**
Bulls	Small	58	46
	Medium	58	51
	Large	12	31
	Total[a]	**128**	**128**
Adults	**Total**	**552**	**433**
All moose	**Total**	**845**	**619**

[a] Not all individuals could be positively placed into subclasses, but were counted their respective class totals.

were 42 bulls:100 cows and calf:cow ratios were 61 calves:100 cows. Of the observed cows, 47% had calves and 28% had twins. The calf:cow ratios on the Middle Yukon increased from 2002 (22 calves:100 cows) and 2005 (42 calves:100 cows). Bull:cow ratios for both of these survey areas are at or above management objectives. The calf:cow ratios are high for both survey areas suggesting that populations are still growing.

State Management Objectives for Unit 18 (Perry 2008) are as follows:

- Allow the lower Yukon River moose population to increase above its estimated size of 2500–3500 moose. Allow the lower Kuskokwim River moose population to increase above its estimated size of 75–250 moose to at least 2000 moose.
- Maintain the current age and sex structure for both populations, with a minimum of 30 bulls:100 cows.
- Conduct seasonal sex and age composition surveys as weather allows.
- Conduct winter censuses and recruitment surveys in the established survey areas on a rotating basis.
- Conduct fall and/or winter trend counts to determine population trends.
- Conduct hunts consistent with population goals.
- Improve knowledge of and compliance with harvest reporting requirements and hunting regulations through education and incentives.
- Address user conflicts through education and hunter contacts.

Harvest History

The customary and traditional use determination for caribou in Unit 18 encompasses about 26,000 people living in about 50 communities of which about 6,000 live in Bethel (ADLWD 2011). Culturally, residents of these communities are primarily Yup'ik Eskimos sharing a common language. It should be noted that many rural Alaska areas have low compliance with harvest ticket systems (Andersen and Alexander 1992), and western Alaska is no exception. The harvest report rate to ADF&G as compared to estimates from household harvest surveys during the same or similar years ranges from none to 97% (compare ADF&G 2011, FWS 2011), which means the residents of some communities do not report their moose hunting activities to ADF&G. Because of the potential for underreporting, conventional ADF&G harvest reporting systems do not always reflect the true level of harvest.

Airplanes are used to access moose hunting areas by Federally qualified subsistence users and non-Federally qualified users in Unit 18 (**Table 2**). Between 2007 and 2009, 3% to 7% of all users who returned harvest reports listed airplanes as their primary method of transportation. While the overall use of airplanes has been low compared to overall effort, non-Federally qualified users used airplanes as transportation proportionately more than Federally qualified subsistence users. Non-Federally qualified users comprised 5% to 12% of the hunting effort in which residency was identified, but comprised 64% to 72% of airplane use. The overall harvest of moose by all users utilizing airplane transportation to hunting areas has been low (less than 4% of total harvest) in Unit 18 (**Table 3**). Both the use of airplanes and the number of moose harvested by those users utilizing airplanes dropped in the 2009/2010 regulatory year (**Table 2, Table 3**).

Table 2. Total moose hunting effort and effort in which airplanes were listed as the primary method of transportation by Federally qualified subsistence users and non-Federally qualified user in Unit 18, 2007–2009. Hunting effort data was based on Federal and State reporting systems (FWS 2011).

	Regulatory year					
	2007		2008		2009	
User status	Number hunting	Number using airplanes	Number hunting	Number using airplanes	Number hunting	Number using airplanes
Federally qualified	727	15	622	17	1,054	6
Non-Federally qualified	53	27	83	44	59	20
Unknown	47	0	133	0	38	4
Total	**827**	**42**	**838**	**61**	**1,151**	**30**

Table 3. Total moose harvest and harvest in which airplanes were the primary method of transportation by Federally qualified subsistence users and non-Federally qualified user in Unit 18, 2007–2009. Harvest data was based on Federal and State reporting systems (FWS 2011).

	Regulatory year					
	2007		2008		2009	
User status	Total moose harvest	Moose harvest with airplane	Total moose harvest	Moose harvest with airplane	Total moose harvest	Moose harvest with airplane
Federally qualified	405	9	320	5	538	2
Non-Federally qualified	19	9	37	15	29	4
Unknown	34	0	107	0	27	3
Total	**458**	**18**	**464**	**20**	**594**	**9**

Moose harvest by nonresidents is minimal compared to that of residents in Unit 18. The number of moose harvested by Alaska residents (Federally qualified subsistence users and non-Federally qualified residents) has been steadily increasing in Unit 18 (**Figure 2**). Nonresident harvest has remained low throughout the unit, and the mean nonresident harvest was six moose between 1998 and 2009. In 2007, the closure to non-Federally qualified users was lifted in the Lower Yukon and remainder areas of Unit 18. For nonresidents, between 2007 and 2009, the mean harvest of moose increased slightly to 10 moose per year for all of Unit 18. During the same period, the mean resident harvest was 398 moose for all of Unit 18. The number of moose harvested by nonresidents using airplanes is likely very low. Between regulatory years 1998 and 2004, one moose was reportedly taken in the Lower Yukon area of Unit 18 by fly-in hunters from outside Alaska (FSB 2006).

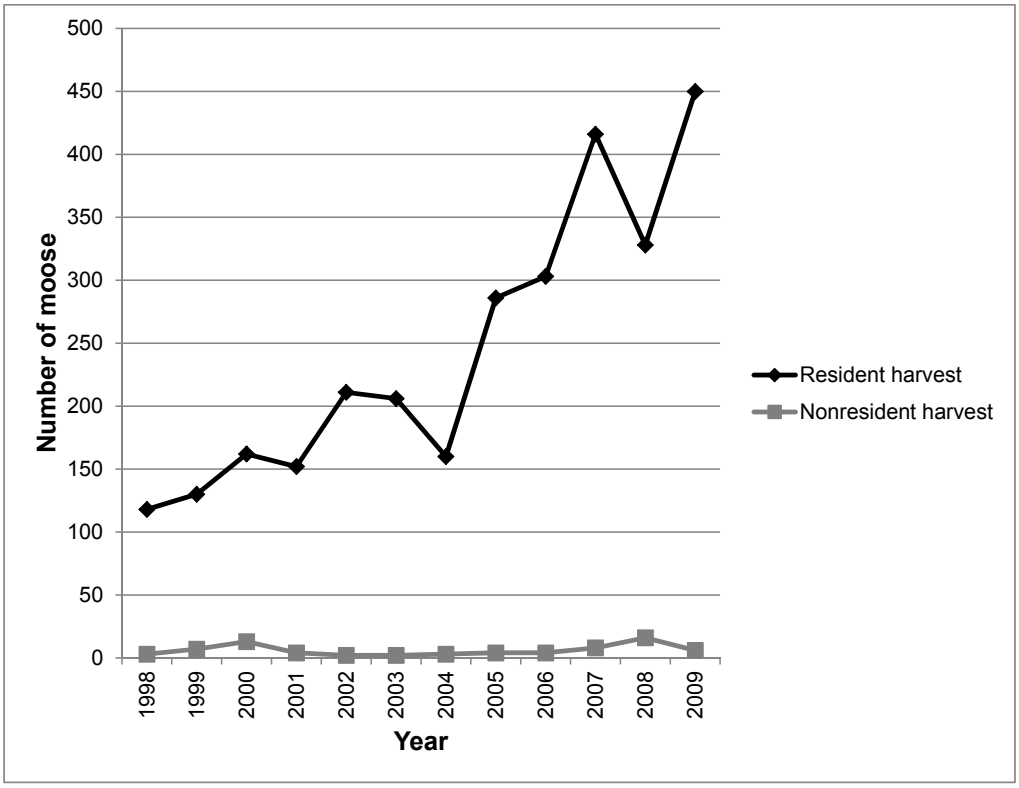


Figure 2. Total annual harvest of moose in Unit 18 by residents and nonresident using a State harvest ticket between 1998 and 2009. The Lower Yukon and remainder areas of Unit 18 were opened to non-Federally qualified users in 2007.

Effects of the Proposal

If the proposal were adopted, the use of aircraft would be restricted for hunting moose, including transportation of any moose hunter or moose part, on Federal public lands within the Unit 18 Lower Yukon and remainder areas. The proposal would affect all nonlocal and local users who access Federal public lands by aircraft to harvest moose in this portion of Unit 18, including Federally qualified subsistence users who access traditional hunt areas in the lower Yukon River drainage with privately-owned aircraft. Between 2007 and 2009, 6 to 17 Federally qualified subsistence users reported using airplanes as the primary method of transportation while hunting moose in Unit 18 (**Table 2**). Those subsistence users utilizing airplanes reportedly harvested 2 to 9 moose.

Local hunters have complained about non-local fly-in hunters interfering with their opportunities to harvest moose. Reports have consisted of non-local hunters flying in and excluding locals by claiming hunting areas (YKDSRAC 2011) and transporters dropping off hunters in close proximity to native allotments or established camps (YKDSRAC 2010). The proposed controlled use area would fail to adequately address the proponent's concerns about non-Federally qualified hunters flying in to harvest moose in Unit 18. The Federal Subsistence Board does not have the jurisdiction to restrict access methods on State and private lands, or to restrict spotting of moose from aircraft. Current State and Federal regulations already prohibit the assisting or taking of ungulates before 3:00 a.m. following the day in which airborne travel occurs, except for flights in regularly scheduled commercial aircraft.

The proposed controlled use area would likely have minimal impacts on the moose population in the Lower Yukon and remainder areas. Airplanes were reportedly used by less than 7% of all users during the 2007–2009 moose seasons in Unit 18 and these users accounted for less than 4% of the total moose harvest.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP12-47.

Justification

The Federal Subsistence Board does not have jurisdiction to restrict access methods on State and private lands, or to restrict spotting moose from aircraft. Because of the mixed land ownership and State jurisdiction on navigable waters within the affected area, the establishment of a Federal-only controlled use area would not effectively restrict aircraft access as requested by the proponent. Both Federal and State regulations currently prohibit taking moose the same day the hunter is airborne. If illegal use of aircraft for hunting moose in the area is occurring or if moose hunters are illegally displacing local tribal hunters, such incidents should be called to the attention of State and Federal law enforcement personnel.

There are no conservation concerns for the affected moose population that would require regulatory restrictions. Moose populations in these areas are highly productive, continue to expand, and can support increased harvest. In fact, Federal and State managers are concerned with the rate of increase for moose in the Lower Yukon area and are looking to reduce the population growth (Rearden 2011, pers. comm.).

Finally, although Federal subsistence management regulations parallel controlled use area restrictions established by the State, the Board has not established any Federal-only controlled use areas during its tenure. To be effective in areas of mixed jurisdiction, both State and Federal controlled use area provisions need to be in place.

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WP12-52 Executive Summary	
General Description	Proposal WP12-52 of Alakanuk Native Corporation, requests a change in regulations to ban hunting by non-Federally qualified subsistence users along the Yukon River and into Canada. *Submitted by Brian L. Williams*
Proposed Regulation	No regulation language was proposed.
OSM Preliminary Conclusion	**Oppose**
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
WP12-52

ISSUES

Proposal WP12-52, submitted by Brian L. Williams, of Alakanuk Native Corporation, requests a change in regulations to ban hunting by non-Federally qualified subsistence users along the Yukon River and into Canada.

DISCUSSION

The proponent states that subsistence practices need to have priority over sport hunting, in order to preserve wildlife for future generations and their subsistence needs. The proponent also states that sport hunters (i.e., non-Federally qualified users) should not "hunt up and down the Yukon River," and should be fined "for trespassing on our lands." The proponent additionally states that banning sport hunters will result in increased wildlife populations.

For subsistence management purposes, Native Corporation lands are under State management. Neither State nor Federal regulations have jurisdiction in Canada.

Title VIII of the 1980 Alaska National Interest Lands Claim Act (ANILCA) specifically prioritizes subsistence uses over any other consumptive uses such as commercial or sport hunting on Federal public lands. When a conservation concern exists for any resource, commercial and sport uses are restricted before subsistence uses are restricted.

Existing Federal Regulation

In implementing ANILCA, the Federal Subsistence Board was empowered to administer the subsistence taking of fish and wildlife on Federal public lands, while the Secretary of the Interior and the Secretary of Agriculture retained the authority to restrict commercial and sport uses in Alaska on lands other than public lands, as follows:

> *§100.10(a)The Secretary of the Interior and the Secretary of Agriculture hereby establish a Federal Subsistence Board, and assign it responsibility for administering the subsistence taking and uses of fish and wildlife on public lands, and the related promulgation and signature authority for regulations of subparts C and D of this part. The Secretaries, however, retain their existing authority to restrict or eliminate hunting, fishing, or trapping activities which occur on lands or waters in Alaska other than public lands when such activities interfere with subsistence hunting, fishing, or trapping on the public lands to such an extent as to result in a failure to provide the subsistence priority.*

The Federal Subsistence Board was also empowered to implement ANILCA to:

> *§100.10(iv) Allocate subsistence uses of fish and wildlife populations on public lands; (v) Ensure that the taking on public lands of fish and wildlife for nonwasteful subsistence purposes shall be accorded priority over the taking on such lands of fish and wildlife for other purposes; (vi) Close public lands to the non-subsistence taking of fish and wildlife; (vii) Establish priorities for the subsistence taking of fish and wildlife on public lands among rural Alaska residents; (viii) Restrict or eliminate taking of fish and wildlife on public lands.*

Proposed Federal Regulation

The proponent did not propose a regulation.

Extent of Federal Public Lands

Federal public lands affected by this proposal include Yukon Delta National Wildlife Refuge, Innoko National Wildlife Refuge, Nowitna National Wildlife Refuge, Yukon Flats National Wildlife Refuge, Yukon Charley Rivers National Preserve, and Bureau of Land Management lands (see unit maps for Units 18, 20, 21, 25).

Effects of the Proposal

If adopted, the proposal would ban hunting by non-Federally qualified users along the Yukon River on both Federal public lands and other lands. The proposal would affect non-Federally qualified users by not allowing harvests in places where there may not be a conservation issue. The result could be an increase in wildlife populations which would otherwise be taken by non-Federally qualified users. The proposal would not affect large portions of land along the Yukon River that are managed by the State of Alaska; a large percentage of State-managed lands are surrounding villages. There would be no effect in Canada as the Board has no jurisdiction in Canada.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP12-52.

Justification

Because the proponent's concerns are addressed in Federal Subsistence Management regulations, the proposed regulatory changes are unnecessary and should be opposed. Subsistence uses, including hunting, already have priority over other consumptive uses, including sport hunting. Moreover, the Secretary of the Interior and the Secretary of Agriculture have the authority to restrict hunting, fishing or trapping in Alaska on other than Federal public lands "when such activities interfere with subsistence" activities. In addition, sport hunting along the Yukon River in Canada is outside the purview of the Federal Subsistence Board.

WP12-53 Executive Summary	
General Description	Proposal WP12-53 would prohibit a hunter in Unit 18 from pursuing with a motorized vehicle a caribou, moose, or muskox (an ungulate) that is fleeing. *Submitted by the Yukon Delta National Wildlife Refuge*
Proposed Regulation	**General Provisions** *§__.4 Definitions* *Take or taking as used with respect to fish or wildlife, means to pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct.* **Subsistence taking of wildlife** *§__.26 (b) Except for special provisions found at paragraphs (n) (1) through (26) of this section, the following methods and means of taking wildlife for subsistence uses are prohibited:* *(4) Taking wildlife from a motorized land or air vehicle when that vehicle is in motion, or from a motor-driven boat when the boat's progress from the motor's power has not ceased;* *(5) Using a motorized vehicle to drive, herd, or molest wildlife.* **Unit 18 (Special Provisions)** *§__.26 (n)(18)(iii)**(F) You may not pursue with a motorized vehicle an ungulate that is fleeing.***
OSM Preliminary Conclusion	**Oppose**
Bristol Bay Regional Council Recommendation	
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	**None**

DRAFT STAFF ANALYSIS
WP12-53

ISSUES

Proposal WP12-53, submitted by the Yukon Delta National Wildlife Refuge, would prohibit a hunter in Unit 18 from pursuing with a motorized vehicle a caribou, moose, or muskox (an ungulate) that is fleeing.

DISCUSSION

The proposal concerns caribou, moose, and muskox in Unit 18; however, the Federal Subsistence Board has determined no Federal subsistence priority for muskox in Unit 18 because it has not recognized customary and traditional uses of muskox in Unit 18. Thus, muskox are left out of the analysis. Further, the focus of the analysis is caribou. The proponent states that caribou are more susceptible than moose to the detrimental effects of chasing. While caribou often flee rapidly when chased, moose generally walk away when approached by a motorized vehicle.

The proponent states that law enforcement has found it necessary to cite more than one hunter during the 2010/2011 hunting season for chasing caribou that were moving at full gallop (having all four hooves off the ground in one stride) (Sundown 2011, pers. comm.; Doolittle 2011, pers. comm.). The proponent states that adoption of this proposal would protect the declining Mulchatna caribou herd by reducing wounding of animals that are chased. Chasing is biologically hard on a caribou herd, especially when animals are already weak near the end of the hunting season. The proponent's concern is not the hunter who repeatedly moves forward and stops while caribou trot off. The concern is motorized vehicles chasing caribou at a constant, high speed.

Existing Federal Regulation

General Provisions

§__.4 Definitions

Take or taking as used with respect to fish or wildlife, means to pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct.

Subsistence taking of wildlife

§__.26 (b) Except for special provisions found at paragraphs (n)(1) through (26) of this section, the following methods and means of taking wildlife for subsistence uses are prohibited:

(4) Taking wildlife from a motorized land or air vehicle when that vehicle is in motion, or from a motor-driven boat when the boat's progress from the motor's power has not ceased;

(5) Using a motorized vehicle to drive, herd, or molest wildlife.

"Drive," "herd," "molest," and "harass" have not been defined in the Code of Federal Regulations for Subsistence Management (36 CFR 242 and 50 CFR 100).

The Federal Subsistence Management Program has added a definition of "harass" to the Federal subsistence regulations booklet distributed to the public ("*Subsistence Management Regulations for the Harvest of Wildlife on Federal Public Lands in America*"). It states:

> *"Harass means to disturb, worry, molest, rally, concentrate, harry, chase, drive, herd or torment"* (FWS 2010:132).

Proposed Federal Regulation

General Provisions

§__.4 Definitions

Take or taking as used with respect to fish or wildlife, means to pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct.

Subsistence taking of wildlife

§__.26 (b) Except for special provisions found at paragraphs (n)(1) through (26) of this section, the following methods and means of taking wildlife for subsistence uses are prohibited:

(4) Taking wildlife from a motorized land or air vehicle when that vehicle is in motion, or from a motor-driven boat when the boat's progress from the motor's power has not ceased;

(5) Using a motorized vehicle to drive, herd, or molest wildlife.

Unit 18 (Special Provisions)

*§__.26 (n)(18)(iii)**(F) You may not pursue with a motorized vehicle an ungulate that is fleeing.***

Existing State Regulation

5 AAC 92.080. Unlawful methods of taking game; exceptions

The following methods of taking game are prohibited:

(4) unless otherwise provided in this chapter, from a motor-driven boat or a motorized land vehicle, unless the motor has been completely shut off and the progress from the motor's power has ceased . . . .

(5) except as otherwise specified, with the use of a motorized vehicle to harass game or for the purpose of driving, herding, or molesting game.

5 AAC 92.990. Definitions

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

(70) "harass" means to repeatedly approach an animal in a manner which results in the animal altering its behavior;

The State booklet distributed to the public ("*2010/2011 Alaska Hunting Regulations*"), clarifies State wildlife regulations (5 AAC 92.080) for the public by stating:

> *"You may not take game by pursuing with a vehicle an animal that is fleeing" (ADF&G 2010:18).*

Extent of Federal Public Land

Federal public lands comprise 64% of Unit 18, of which 96% is managed by the Fish and Wildlife Service and 4% is managed by the Bureau of Land Management. The Fish and Wildlife Service lands are located within the Yukon Delta National Wildlife Refuge.

Customary and Traditional Use Determination

The customary and traditional use determination for caribou in Unit 18 is residents of Unit 18, Saint Michael, Stebbins, Togiak, Twin Hills, Upper Kalskag, and Manokotak.

The customary and traditional use determination for moose in Unit 18 is: in that portion of the Yukon River drainage upstream of Russian Mission and that portion of the Kuskokwim River drainage upstream of (but excluding) the Tuluksak River drainage—residents of Unit 18, Upper Kalskag, Aniak, and Chuathbaluk; in that portion north of a line from Cape Romanzof to Kuzilvak Mountain to Mountain Village, and all drainages north of the Yukon River downstream from Marshall—residents of Unit 18, Saint Michael, Stebbins, and Upper Kalskag; and in the remainder area of Unit 18—residents of Unit 18 and Upper Kalskag.

There is no Federal subsistence priority for muskox in Unit 18.

Biological Background

Woolington (2009) noted that in western Alaska in the 1800s:

> Skoog (1968) hypothesized that the caribou population extended from Bristol Bay to Norton Sound, including the lower Yukon and Kuskokwim drainages as far inland as the Innoko River and the Taylor Mountains. This herd apparently reached peak numbers in the 1860s and began decline in the 1870s. By the 1880s, the large migrations of caribou across the Lower Kuskokwim and Yukon Rivers had ceased (Woolington 2009: 11).

Perry (2009) continues:

> By the early 1900s, there were few caribou in the lowlands of the Delta. From the 1920s to the 1930s, reindeer herds ranged throughout much of the area but declined sharply in the 1940s (Calista Professional Services and Orutsararmuit Native Council 1984). Since the decline of the reindeer herds, the abundant caribou habitat throughout Unit 18 was only lightly used until 1994, when large numbers of Mulchatna caribou herd animals began regular, seasonal use of the Kilbuck Mountains. In the more recent years, a large portion of the Mulchatna herd has spent most of the year in Unit 18 and harvest in Unit 18 has become a larger proportion of the overall harvest (Perry 2009: 99–100).
>
> Caribou from the Western Arctic herd, the largest herd in Alaska, occasionally venture into the northern part of Unit 18. Until this reporting period [2006], hunting regulations north of

> the Yukon River were liberal to allow hunters to take advantage of these infrequent hunting opportunities. However, now Mulchatna Herd caribou are as likely as Western Arctic Herd caribou to use the area north of the Yukon River, caribou management throughout Unit 18 is based on Mulchatna caribou herd considerations (Perry 2009: 99–100).

The minimum population estimates for the Mulchatna caribou herd increased from 18,599 in 1981 to 200,000 in 1996 and declined to a minimum of 30,000 by summer 2008. Distribution of the herd is widespread in areas of Units 9B, 17, 18, 19A, and 19B (Woolington 2009)

Populations of moose are increasing in many areas of Unit 18, and in the lower Yukon River drainage subsistence hunters may legally harvest up to two moose per year.

Harvest

Door to door household harvest surveys have been conducted with residents of some communities situated in Unit 18. The results regarding the harvest of caribou are located in **Table 1**.

Method and Means

The customary and traditional use determination for caribou in Unit 18 encompasses about 26,000 people living in 47 communities of which about 6,000 live in Bethel (ADLWD 2011).

Methods and means used to harvest caribou have gradually evolved since the beginning of the 20th century when accurate firearms were introduced and since snowmachines became common in the 1970s. Before the introduction of accurate firearms, caribou were harvested using an array of techniques. Single hunters stalked caribou until within bow shot. Some methods were more elaborate involving several hunters ducking, hiding, and emerging to confuse the herd into coming into bow shot (Nelson (1983[1899]). Although larger herds roamed the region, their movements were not entirely predictable. When discovered, hunts were launched quickly and caribou were sometimes corralled cooperatively by a group of hunters. Caribou most often were taken late in the fall when their meat was prime and skins best for garments and bedding and the thick layer of fat was rendered into oil (Oswalt 1990).

The introduction of firearms with firing accuracy resulted in modifications to hunting methods. Firearms were a more efficient method than bow and arrow, for example, and while harvesting caribou still required specialized skills, firearms could make harvesting easier. Caribou herds in the area of Unit 18 diminished in part due to the increased efficiency of firearms to harvest caribou and miners' reliance on caribou as food (Oswalt 1990). From 1900 to the 1930s, introduced reindeer were herded, an event with its own complicated history. Caribou were shot on sight to prevent them luring reindeer from the herd. However, after 1940, reindeer and caribou herds had mostly integrated with some notable exceptions (e.g., the herd owned by the Stebbins tribal council) (cf. Wolfe and Pete 1984).

Snowmachines were generally considered less reliable than sleds pulled by dogs, but by the early 1970s, with improvements in reliability, the snowmachine had largely replaced the dog team (Andersen et al. 2011).

Contemporary hunting methods and means have been described by hunters in the region. Hunters from some lower Yukon River villages described hunting in the Andreafsky Mountains in the 1980s. It was unclear if the group was hunting caribou or reindeer from the nearby herd at Stebbins. Caribou/reindeer roamed in small groups, difficult to approach by snowmachine. Several hunters attempted to herd a group to locations where shots could be taken, such as, up a cul-de-sac or toward a heavy brush line. In

Table 1. Levels of participation in the harvest and use of caribou in selected communities (Sources: ADF&G 2011; Krauthoefer and Koster 2007; Weekley et al. 2011).

		Percentage of Households					Estimated Harvest Levels				
								95% Confidence Limit of Estimated Total Harvest		Per	
Community	Study Year	Using (%)	Attempting to harvest (%)	Harvesting (%)	Receiving (%)	Giving (%)	Estimated Harvest	Low	High	Household	capita
Lower Yukon Area											
Alakanuk	2009-2010	5	0	0	5	0	**0**	0	0	0	0
Chevak	2009-2010	2	3	3	19	8	**8**	3	23	0.05	0.01
Kotlik	2009-2010	10	2	2	10	4	**2**	1	18	0.02	0
Marshall	2009-2010	16	6	4	12	6	**6**	4	16	0.08	0.02
Mountain Village	2009-2010	8	2	2	8	2	**9**	4	28	0.06	0.01
Nunam Iqua	2009-2010	0	0	0	0	0	**0**	0	0	0	0
Russian Mission	2009-2010	28	5	0	23	9	**0**	0	0	0	0
Saint Marys	2009-2010	0	0	0	0	0	**0**	0	0	0	0
Scammon Bay	2009-2010	13	0	0	13	11	**0**	0	0	0	0
Lower Kuskokwim Area											
Akiachak	1998	95	83	83	53	65	**374**	332	417	3.17	
Kwethluk	1986		5	2	28	0	**2**				
Nunapitchuk	1986	0	0	0	0	0	**0**	0	0	0	0
Middle Kuskokwim Area											
Lower Kalskag	2003-2004	35	38	29	18	21	**47**	22	78	0.60	0.15
	2004-2005	10	7	5	5	2	**7**	6	12	0.10	0.03
	2005-2006	13	7	0	13	0	**0**	0	0	0	0
Upper Kalskag	2003-2004	53	47	35	29	29	**42**	24	62	0.70	0.17
	2004-2005	53	47	35	29	29	**4**	4	5	0.10	0.02
	2005-2006	27	32	15	15	9	**16**	8	32	2.00	0.06

Note: In the Lower Yukon Area, harvest locations were not reported. In the Middle Kuskokwim Area, the only Unit 18 caribou harvest was 15 caribou harvested in 2003-2004 by Lower Kalskag, and other caribou were harvested in Units 19A, 19B. Kwethluk harvest occured primarily up the Kwethluk River in Units 17 and 18, and Akiakchak harvests occured primarily up the Kisaralik River in Unit 18

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this description, the high speed chase was considered "a relatively risky, dare-devil technique" (Wolfe and Pete 1984:9). Kwethluk hunters in the 1980s hunting with snowmachines reported hunting in upper Kwethluk and Kisaralik River valleys. "The high hills and low mountains scattered throughout the area provided lookouts where hunters can watch for caribou" (Coffing 1991: 157).

While there may be some instances of hunters herding caribou to position them so they can be more easily shot, instances of outright chasing of caribou are probably rare. Taking into account the numerous, recently-arrived residents of Bethel, it is likely that at least a few lack the specialized skills necessary to harvest a caribou using methods commonly practiced, and resort to chasing fleeing caribou (Sundown 2011, pers. comm.). Moreover, some experienced hunters lack the resources to travel long distances to harvest caribou, and their harvest must occur when caribou are first sighted nearby, before hunting pressure causes the herd to move on. If unsuccessful, hunters may feel pressure to pursue fleeing caribou or otherwise not harvest (Nick 2011, pers. comm.).

Effects of the Proposal

If this proposal is adopted, there would be no effect on Federal subsistence users in Unit 18. The prohibition against chasing ungulates that are fleeing is encompassed in Federal subsistence general provisions and other wildlife regulations (§__.4; §__.26(b)(4) and (5)), thus there would be no effect from the proposed regulation. Similarly, if this proposal is not adopted there would be no effect on Federal subsistence users in Unit 18.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP12-53.

Justification

Federal wildlife regulations already prohibit chasing wildlife with a motorized vehicle. The intent of the proponent is to make explicit that using a motorized vehicle to pursue an ungulate that is fleeing at or near full gallop is prohibited. To this end, staff recommend that the language included in the State booklet distributed to the public *(*ADF&G 2010:18), mentioned above, be added to the Federal booklet distributed to the public, with modification: *"*You may not take ungulates by pursuing with a motorized vehicle an animal that is fleeing at or near full gallop."

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INTRODUCTION

BACKGROUND

Since 1999, under the authority of Title VIII of ANILCA, the Federal government has assumed expanded management responsibility for subsistence fisheries on Federal public lands in Alaska. Expanded subsistence fisheries management has imposed 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, and to seek data from, consult with, and make use of the special knowledge of local residents engaged in subsistence uses. 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. 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.

Although all proposals addressing subsistence fisheries on Federal lands will be considered, the 2012 Request for Proposals was focused on priority information needs developed either by strategic planning efforts or by expert opinion, followed by review and comment by the Subsistence Regional Advisory Councils. The Monitoring Program is administered by region, and strategic plans sponsored by this program were developed by workgroups of fisheries managers, researchers, Federal Subsistence Regional Advisory Council members and 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 can be viewed on or downloaded from the Office of Subsistence Management's website: http://alaska.fws.gov/asm/index.cfml. 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 the expert opinions of the Regional Advisory Councils, the Technical Review Committee, Federal and State managers and staff from the Office of Subsistence Management. Additionally, a strategic plan 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.

Cumulative effects of climate change will likely fundamentally affect subsistence fishery resources, their uses, and how they are managed. Therefore, all investigators were asked to consider examining or discussing climate change effects as part of their project. Investigators conducting long-term projects were encouraged to participate in a standardized air and water temperature monitoring program for which the Office of Subsistence Management will provide calibrated temperature loggers and associated equipment, analysis and reporting services, and access to a temperature database. The Office of Subsistence Management has also specifically requested research proposals that would focus on effects of climate change on subsistence fishery resources and uses, and that would describe management implications.

> *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.*

To implement the Monitoring Program, a collaborative approach is utilized in which five Federal agencies (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 proposals and investigation plans. 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 approves the final monitoring plan.

PROJECT EVALUATION PROCESS

The Technical Review Committee evaluates proposals, and subsequently full investigation plans, and makes recommendations for funding. The committee is chaired by the Fisheries Division Chief of the Office of Subsistence Management and is composed of representatives from each of the five Federal agencies and three representatives from the Alaska Department of Fish and Game. Fisheries and Anthropology staff from the Office of Subsistence Management provide support for the committee.

Four factors are used to evaluate studies:

1. **Strategic Priority**

   Proposed projects should address the following and must meet the first criteria to be eligible for Federal subsistence funding.

   Federal Jurisdiction—Issue or information needs addressed in projects must have a direct association to a subsistence fishery within a Federal conservation unit as defined in legislation, regulation and plans.

   Conservation Mandate—Risk to the conservation of species and populations that support subsistence fisheries, and risk to conservation unit purposes as defined in legislation, regulation and plans.

   Allocation Priority—Risk of failure to provide a priority to subsistence uses.

   Data Gaps—Amount of information available to support subsistence management (higher priority given where a lack of information exists).

   Role of Resource—Contribution of a species to a subsistence harvest (e.g., number of villages affected, pounds of fish harvested, miles of river) and qualitative significance (e.g., cultural value, unique seasonal role).

   Local Concern—Level of user concerns over subsistence harvests (e.g., upstream vs. downstream allocation, effects of recreational use, changes in fish abundance and population characteristics).

2. **Technical-Scientific Merit**

   The project must meet accepted standards for design, information collection, compilation, analysis, and reporting. Projects should have clear study objectives, an appropriate sampling design, correct statistical analysis, a realistic schedule and budget, and appropriate products, including written reports. Projects must not duplicate work already being done.

3. **Investigator Ability and Resources**

Investigators must have the ability and resources to successfully complete the proposed study. This will be evaluated considering ability in terms of education and training, related work experience, publications, reports, presentations, and past or ongoing work on Monitoring Program studies; and considering resources in terms of office and laboratory (if relevant) facilities, technical and logistic support, and personnel and budget administration.

4. Partnership-Capacity Building

Partnerships and capacity building are priorities of the Monitoring Program. ANILCA mandates that the Federal government provide rural residents a meaningful role in the management of subsistence fisheries, and the Monitoring Program offers tremendous opportunities for partnerships and participation of local residents in monitoring and research. Investigators are requested to include a strategy for integrating local capacity development in their investigation plans. Investigators must complete appropriate consultations with local villages and communities in the area where the project is to be conducted. 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.

POLICY AND FUNDING GUIDELINES

Several policies have been developed to aid in implementing funding.

- Proposals of up to four years duration may be considered in any year's monitoring plan.
- Studies must be non-duplicative with existing projects. Most Monitoring Program funding is dedicated to non-Federal sources.
- Activities not eligible for funding under the Monitoring Program include: a) habitat protection, restoration, and enhancement; b) hatchery propagation, restoration, enhancement, and supplementation; c) contaminant assessment, evaluation, and monitoring; and d) projects where the primary objective is capacity building (e.g., science camps, technician training, intern programs). These activities would most appropriately be addressed by the land management agencies.
- When long-term projects can no longer be funded by agencies, and the project provides direct information for Federal subsistence fisheries management, the Monitoring Program may fund up to 50% of the project cost.

Finances and Guideline Model for Funding

The Monitoring Program was first implemented in 2000, with an initial allocation of $5 million. Since 2001, a total of $6.25 million has been annually allocated for the Monitoring Program. In 2010, the total funding was reduced to $6.05 million. The Department of the Interior, through the U.S. Fish and Wildlife Service, has provided $4.25 million. The Department of Agriculture, through the U.S. Forest Service, provided $1.8 million annually. But the level of funding for 2012 is uncertain. If Department of Agriculture funding is not provided, none of the project investigation plans submitted for the Southeast Region would be funded.

The Monitoring Program budget funds continuations of existing projects (year-2, 3 or 4 of multi-year projects), and new projects in the biennial year. The Office of Subsistence Management issued requests for proposals on an annual basis until 2008, and then shifted to a biennial basis. Therefore, the next request for proposals after 2012 will be for 2014 proposals. Budget guidelines are established by

geographic region and data type, and for 2012, $2 million is projected to be available for new starts. Proposals are solicited according to the following two data types:

5. **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. The budget guideline for this category is two-thirds of available funding.

6. **Harvest Monitoring and Traditional Ecological Knowledge (HM-TEK)**.

   These projects address assessment of subsistence fisheries including quantification of harvest and effort, and description and assessment of fishing and use patterns. The budget guideline for this category is one-third of available funding.

2012 FISHERIES RESOURCE MONITORING PLAN

For 2012, a total of 32 investigation plans are under consideration for funding (**Table 1**). Of these, 22 are SST projects and 10 are HM-TEK projects. The Technical Review Committee recommends funding 29 of these investigation plans.

Table 1. Number of investigation plans received for funding consideration in 2012, and number recommended for funding by the Technical Review Committee. Data types are stock status and trends (SST), and harvest monitoring and traditional ecological knowledge (HM-TEK).

	Investigation Plans			Technical Review Committee		
Geographic Region	**SST**	**HM-TEK**	**Total**	**SST**	**HM-TEK**	**Total**
Northern Alaska	4	3	7	3	3	6
Yukon	6	1	7	5	1	6
Kuskokwim	7	1	8	6	1	7
Southwest Alaska	0	3	3	0	3	3
Southcentral Alaska	1	1	2	1	1	2
Southeast Alaska	3	1	4	3	1	4
Multi-Regional	1	0	1	1	0	1
Total	22	10	32	19	10	29

Total funding available for new projects in 2012 is $2.70 million, while the proposed cost of funding all 32 projects submitted would be $2.74 million. The 29 projects recommended for funding by the Technical Review Committee have a total cost of $2.18 million. In making their recommendations, the committee weighed the importance of funding new projects in 2012 with the knowledge that the next request for proposals will be issued in 2014. As has been done in past years, any unallocated Monitoring Program funds from the current year will be used to increase the amount of funding available for subsequent years.

The 2012 draft Monitoring Plan recommended by the Technical Review Committee would provide 28% of the funding to Alaska Native organizations, 47% to State agencies, 14% to Federal agencies, and 11% to other non-government organizations.

NORTHERN ALASKA REGION OVERVIEW

Issues and Information Needs

The 2012 Request for Proposals for the Northern Region identified seven priorities:

- Baseline harvest assessment and monitoring of subsistence fisheries in the Northwest Arctic and North Slope regions.
- Historic trends and variability in harvest locations, harvests and uses of non-salmon fish.
- Iñupiaq taxonomy of fish species, Iñupiaq natural history of fish, land use, place name mapping, species distribution, and methods for and timing of harvests. Species of interest include sheefish, northern pike, or other subsistence non-salmon fish in the Northwest Arctic region.
- Harvest and use of fish species by residents of Shishmaref.
- Spawning distribution, timing, and stock structure of Selawik River whitefish species.
- Spawning distribution, timing, and stock structure of Meade River whitefish species.
- Spawning distribution, timing, and stock structure of Kuk River smelt.

Projects Funded Under the Fisheries Resource Monitoring Program

Since the inception of the Monitoring Program in 2000, 29 projects have been funded in the Northern Region; four of these will still be operating during 2012 (Tables 1 and 2). Two of these projects concern sheefish assessment Selawik (projects 10-100, and 10-104) drainages, one concerns Chinook salmon assessment in the Unalakleet River (project 10-102), one concerns local ecological knowledge of non-salmon fishes in Bering Strait (project 10-151), and one concerns effects of climate change on Northwest Alaska subsistence fisheries (project 10-152).

Projects Forwarded for Investigation Plan Development

Eleven proposals for research in the Northern Region were submitted to the Office of Subsistence Management in response to the 2012 Request for Proposals. In March 2011, the Technical Review Committee reviewed the proposals and recommended eight for investigation plan development. Of these, one was withdrawn by the investigators. Investigators for the other seven proposals responded to Technical Review Committee review comments in developing their investigation plans. Detailed budgets submitted with each investigation plan allowed identification of funds requested by Alaska Native, State, Federal, and other organizations; funds that would be used to hire local residents; and matching funds from investigating agencies and organizations (Tables 3 and 4).

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 rigid allocations. Upon further review and evaluation, the Technical Review Committee, Regional Advisory Councils, Interagency Staff Committee and the Federal Subsistence Board have the opportunity to address the highest priority projects across regions. For 2012, approximately $459,000 is available for funding new projects in the Northern Region.

Recommendations for Funding

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. After reviewing the seven investigation plans, the Technical Review Committee recommended funding six of the proposed projects (Table 5):

12-100	Selawick River Inconnu Assessment	$ 78,680
12-103	Kobuk River Sheefish Assessment	$ 13,800
12-104	Noatak River Dolly Varden Assessment	$ 2,280
12-153	Northwest Alaska Fisheries Harvest Surveys	$ 106,421
12-154	North Slope Emerging Salmon Fishery Traditional Ecological Knowledge	$ 48,493
12-155	North Slope Climate Change and Subsistence Use of Whitefish	$ 134,703
	Total	$ 384,377

The six projects recommended for funding by the Technical Review Committee comprise a strong Monitoring Plan for the region by addressing strategically important information needs based on sound science and by promoting cooperative partnerships. Each project recommended for funding in the Northern Alaska region in 2012 is summarized below (see Executive Summaries for more details on all projects).

12-100 Selawick River Inconnu Assessment. A large permafrost slump located about 40 km upstream from the sheefish spawning area in the Selawik River began emitting large amounts of sediment into the river in 2004. The investigators are requesting four years of funding to monitor the annual abundance and age structure of the Selawik River inconnu (also referred to as sheefish) spawning population to determine whether the sediment emitted from the slump have had an identifiable impact on abundance trends over time. The investigators propose using a DIDSON sonar system to estimate inconnu abundance as they migrate downstream from their spawning grounds and angling gear to apportion sonar counts among species. The proposed work would address an important subsistence inconnu fishery associated with Selawik National Wildlife Refuge and would build upon several Fisheries Resource Monitoring Program projects (02-020, 02-040, 03-016 and 04-101). U.S. Fish and Wildlife would provide matching funds averaging $50,250 per year.

12-103 Kobuk River Sheefish Assessment. This three-year project would build upon Monitoring Program project 08-103 by allowing continued tracking of radio-tagged sheefish (also referred to as inconnu) in the Kobuk River. Sheefish radio-tagging during project 08-103 occurred in 2008 and 2009. Providing additional funding for tracking these tags would allow collection of five years of sheefish migratory data. Results from this work would describe run timing and spawning frequency, giving fishery managers a better context in which to interpret previously completed stock abundance work. This project would address an important subsistence sheefish fishery associated with Gates of the Arctic National Preserve, Selawik National Wildlife Refuge, Kobuk Valley Wilderness, and Kobuk Valley National Park. Continuing this work would allow more information to be gleaned from already deployed radio tags at a very modest cost to the Monitoring Program. In addition, Alaska Department of Fish and Game would provide matching funds of $18,500 per year, which is more than the requested funding.

12-104 Noatak River Dolly Varden Assessment. This project would address an important subsistence Dolly Varden fishery in Northwest Alaska associated with Gates of the Arctic National Preserve and the Noatak National Reserve. Dolly Varden annual subsistence harvests have ranged from 15,000 to 30,000 fish. Most subsistence fishers target mixed-stock populations both in the fall, as Dolly Varden migrate into freshwater, and in the spring, as they move seaward. This project would use radiotelemetry to document overwintering locations of Dolly Varden in the Noatak River during the winters of 2012/2013

and 2013/2014, and DIDSON sonar, if feasible, to estimate abundance of Dolly Varden migrating seaward during June 2014. The investigators would use a logical stepwise approach to deploy the DIDSON sonar component of the project and described how they would address cold weather challenges. Information gained from this project would allow fishery managers to evaluate the importance of the Noatak River Dolly Varden population in comparison to the Kivalina and Wulik rivers populations. Alaska Department of Fish and Game would provide matching funds averaging $59,000 per year.

12-153 Northwest Alaska Fisheries Harvest Surveys. This four-year project would fill gaps in available data concerning salmon and non-salmon species harvests in the Northern Region. Annual harvest assessments are not conducted in Kotzebue Area communities. This project would obtain data on harvests as well as contextual information on fisheries in the communities of Kivalina, Noatak, Noorvik, Selawik, Kiana, Ambler, Shungnak, and Kobuk. The information would also be used to better understand how increased mining and development in the region as well as climate related changes have and will affect trends in subsistence harvests, uses, and distribution of resources. Information would be collected through annual harvest surveys, semi-structured key respondent interviews, and participant observation.

12-154 Norton Sound Salmon Fishery Traditional Ecological Knowledge. This four-year project would document baseline ethnographic data regarding salmon and non-salmon fisheries in two North Slope communities: Point Lay and Wainwright. The investigator would document several aspects of salmon and non-salmon fisheries including traditional ecological knowledge, ecology, life-histories, climate change related observations, trends in resource abundance, and socio-economic factors. Additionally, the investigator would provide baseline subsistence fishing harvest estimates by species and harvest location. The investigator would work with the study communities to create educational materials and employ harvest calendars to collect harvest data.

12-155 North Slope Climate Change and Subsistence Use of Whitefish. This two-year project would gather traditional ecological knowledge on subsistence uses of broad whitefish (Aanaakjiq), Arctic cisco (Qaaqtag), and least cisco (Iqalusaaq) in the communities of Wainwright, Barrow, Nuiqsut, and Kaktovik. Information collected would document changes in harvest locations, changes in harvest timing, and changes in preservation methods. The investigators would examine a twenty-year history of harvests in the region by comparing current local knowledge about subsistence resources with that of knowledge of the past. Information would be collected through flexible conversational interviews, participant observation, and subsistence mapping.

Table 1. Summary of Fisheries Resource Monitoring Program projects completed in Northern Alaska since 2000. Abbreviations used for investigators are: ADFG=Alaska Department of Fish and Game, AJ=Anore Jones, AKP=City of Anaktuvuk Pass, KI=Kawarek Inc., KIC=Kaktovik Inupiat Corp., MQ=Maniilaq, NPS=National Park Service, NVK=Native Village of Kotzebue, NVU=Native Village of Unalakleet, NSB=North Slope Borough, STB=Stebbins IRA, UAF=University Alaska Fairbanks, USFWS=U.S. Fish and Wildlife Service, and USGS=U.S. Geological Survey.

Project Number		Project Title	Investigators
		North Slope	
00-002		Eastern NS Dolly Varden Spawning and Over-wintering Assessment	ADFG, USFWS
01-113		Eastern NS Dolly Varden Genetic Stock ID Stock Assessment	ADFG, USFWS
01-101		Eastern NS (Kaktovik) Subsistence Fish Harvest Assessment	ADFG, KIC
02-050		NS (Anaktuvuk Pass) Subsistence Fish Harvest Assessment	ADFG, NSB, AKP
03-012		SST of Arctic Cisco and Dolly Varden in Kaktovik Lagoons	USFWS
04-103		North Slope Dolly Varden Sonar Feasibility	USFWS
06-108		North Slope Dolly Varden Aerial Monitoring	ADFG
07-105	[a]	North Slope Dolly Varden Genetic Baseline Completion	USFWS
07-107	[a]	Hulahula River Dolly Varden Sonar Enumeration	USFWS
		Northwest Arctic	
00-001		Northwestern Dolly Varden and Arctic Char Stock Identification	ADFG, USFWS
00-020		Hotham Inlet Kotzebue Winter Subsistence Sheefish Harvest	ADFG
01-136		Northwestern Alaska Dolly Varden Genetic Diversity	ADFG, USFWS
01-137		Northwestern Alaska Dolly Varden Spawning Stock Assessment	ADFG
02-023		Qaluich Nigingnaqtuat: Fish That We Eat	AJ
02-040		Kotzebue Sound Whitefish Traditional Knowledge	ADFG, MQ
03-016		Selawik River Harvest ID, Spring and Fall Subsistence Fisheries	USFWS
04-101		Selawik River Inconnu Spawning Abundance	USFWS
04-102	[a]	Selawik Refuge Whitefish Migration and Habitat Use	USFWS
04-109	[a]	Wulik River Dolly Varden Wintering Stocks	USFWS
04-157		Exploring Approaches to Sustainable Fisheries Harvest Assessment	ADFG, MQ
07-151		Northwest Alaska Subsistence Fish Harvest Patterns and Trends	ADFG, MQ
08-103	[a]	Kobuk River Sheefish Spawning and Run Timing	ADFG, USFWS
10-100	[a]	Selawik Drainage Sheefish Winter Movement Patterns	UAF, USGS, USFWS, NVK
		Seward Peninsula	
01-224		Nome Sub-district Subsistence Salmon Survey	ADFG, KI
02-020		Pikmiktalik River Salmon Site Surveys and Enumeration	USFWS, NPS, STB, KI
04-105		Pikmiktalik River Chum and Coho Salmon Enumeration	KI
04-151		Customary Trade of Fish in the Seward Peninsula Area	ADFG, KI
05-101		Unalakleet River Coho Salmon Distribution and Abundance	ADFG, NVU
06-101		Pikmiktalik River Chum and Coho Salmon Enumeration	KI

[a] Final Report in preparation.

Table 2. Summary of ongoing 2012 projects funded under the Fisheries Resource Monitoring Program in Northern Alaska. Abbreviations used for investigators are: ADFG=Alaska Department of Fish and Game, KI=Kawerak, Inc., NSEDC=Norton Sound Economic Development Corporation, UAF=University Alaska Fairbanks, USFWS=U.S. Fish and Wildlife Service, .

Project Number	Project Title	Investigators	Budget ($1000) 2012	2013
	Stock Status and Trends			
10-102	Unalakleet River Chinook Salmon Assessment	ADFG, NSEDC	$94.7	$96.7
10-104	Selawik Lake and Hotham Inlet Sheefish Genetic Analysis	USFWS, ADFG, NVK	$115.3	$83.8
	Harvest Monitoring and Traditional Ecological Knowledge			
10-151	Bering Strait Non-Salmon Fish Local Ecological Knowledge	KI	$119.5	$29.3
10-152	Northwest Alaska Climate Change and Subsistence Fisheries	UAF	$54.4	$0.0

Table 3. Northern Alaska project costs, by organization (Alaska Native, State, Federal, other), for investigation plans submitted to the Fisheries Resource Monitoring Program for funding consideration in 2012.

Project Number	Title	Budget ($000s) Alaska Native	State	Federal	Other
	Stock Status and Trends				
12-100	Selawik River Inconnu Assessment	$10.5		$68.2	
12-102	Kuk River Rainbow Smelt Assessment				$307.1
12-103	Kobuk River Sheefish Assessment		$13.8		
12-104	Noatak River Dolly Varden Assessment		$2.3		
	Harvest Monitoring and Traditional Ecological Knowledge				
12-153	Northwest Alaska Fisheries Harvest Surveys	$31.9	$74.6		
12-154	North Slope Emerging Salmon Fishery Traditional Ecological Knowledge		$47.5		
12-155	North Slope Climate Change and Subsistence Use of Whitefish				$142.7

Table 4. Northern Alaska local hire and matching funds for investigation plans submitted to the Fisheries Resource Monitoring Program for funding consideration in 2012. Abbreviations used are: ADFG=Alaska Department of Fish and Game, KI=Kawerak Inc., SWCS=SWCA Environmental Consultants, UAF=University of Alaska, Fairbanks, USFWS=U.S. Fish and Wildlife Service, and WNR=Wild North Resources, LCC.

Project Number	Lead Organization	Title	Funding ($000s) Local Hire	Matching
		Stock Status and Trends		
12-100	USFWS	Selawik River Inconnu Assessment	$3.6	$110.0
12-102	WNR	Kuk River Rainbow Smelt Assessment	$0.0	$42.0
12-103	ADFG	Kobuk River Sheefish Assessment	$0.0	$18.5
12-104	ADFG	Noatak River Dolly Varden Assessment	$0.0	$46.9
		Harvest Monitoring and Traditional Ecological Knowledge		
12-153	ADFG	Northwest Alaska Fisheries Harvest Surveys	$0.0	$0.0
12-154	ADFG	North Slope Salmon Fishery Traditional Ecological Knowledge	$0.0	$0.0
12-155	SWCA	North Slope Climate Change and Subsistence Use of Whitefish	$15.0	$0.0

Table 5. Funding recommendations by the Technical Review Committee (TRC) for Northern Alaska 2012 Fisheries Resource Monitoring Program.

Project Number	Title	TRC		Requested Budget ($000) 2012	2013	2014	2015
	Stock Status and Trends						
12-100	Selawik River Inconnu Assessment	Yes		$78.7	$124.3	$104.8	$68.7
12-102	Kuk River Rainbow Smelt Assessment	No		$307.1	$286.6	$31.4	$0.0
12-103	Kobuk River Sheefish Assessment	Yes		$13.8	$13.8	$13.8	$0.0
10-104	Noatak River Dolly Varden Assessment	Yes		$2.3	$142.4	$76.2	$2.5
	Harvest Monitoring and Traditional Ecological Knowledge						
12-153	Northwest Alaska Fisheries Harvest Surveys	Yes		$106.4	$117.4	$119.8	$98.5
12-154	North Slope Salmon Fishery Traditional Ecological Knowledge	Yes	*	$48.5	$42.3	$44.8	$30.6
12-155	North Slope Climate Change and Subsistence Use of Whitefish	Yes	*	$134.7	$52.5		
	Total			$691.5	$779.3	$390.8	$200.3
	Funding Guideline			$805.0			
	TRC Recommendation			$249.7	$440.2	$359.4	$200.3

* = Yes with modification

Project Number:	12-100
Project Title:	Selawik River Inconnu Spawning Population Abundance and Age Structure Evaluation
Geographic Region:	Northwest Alaska
Information Type:	Stock Status and Trends
Principal Investigator:	Raymond Hander, U.S. Fish and Wildlife Service
Co-Investigators:	Mary Beth Loewen, U.S. Fish and Wildlife Service
	Randy J. Brown, U.S. Fish and Wildlife Service

Project Cost: **2012:** $78,680 **2013:** $124,299 **2014**: $104,818 **2015:** $68,749

Recommendation: Fund

Issue

The Selawik National Wildlife Refuge (Refuge) has a congressional mandate through ANILCA to conserve inconnu (sheefish) *Stenodus leucichthys* populations. This project addresses two priority issues identified for the Northern Region in the 2012 Fisheries Resource Monitoring Program: "spawning distribution, timing, and stock structure of Selawik River whitefish species"; and "identify and characterize critical factors affecting population dynamics of Selawik River inconnu". This project benefits from information provided by FIS projects 02-020, 02-040, 03-016, and 04-101.

There are two known populations of inconnu in Northwest Alaska, one that spawns in the upper Kobuk River and the other that spawns in the upper Selawik River. Both populations are subject to intensive fisheries throughout the region. A large permafrost thaw slump (thaw slump) located about 40 km upstream from the inconnu spawning area on the Selawik River began emitting large amounts of sediment into the river in 2004. Since then the normally clear Selawik River has flowed extraordinarily turbid during the summer months transporting huge quantities of sediment downstream, potentially destroying the habitat for stream-spawning fish. Similar slumps in the upper Yukon River drainage have been emitting sediment into the Stewart River for over 40 years so we must assume that the Selawik River slump will continue for the foreseeable future. Habitat qualities of the inconnu spawning area in the Selawik River have undoubtedly changed because of the dramatically increased sediment exposure. These changes will probably reduce the proportion of fertilized eggs that develop successfully and produce young. If production is reduced but not eliminated the inconnu population would be expected to decline over time. If production is eliminated the population would be expected to become extinct as existing fish gradually die off, or possibly to become established in another suitable location. The increased sediment in the upper Selawik River is an environmental factor that will have a profound effect on the inconnu population that spawns there.

Objectives

1. Collect inconnu age structure data from male inconnu from the Selawik and Kobuk River spawning populations in 2012, 2013, and 2014;
2. Identify possible recruitment failures and missing age classes based on Chi-square test of six age class bins;
3. Determine the spawning population abundance of Selawik River inconnu in 2012, 2013, and 2014; and

4. Determine whether age structure and spawning population abundance data support the null hypothesis that sediment deposition from the slump does not affect recruitment over time caused by reduced egg survival.

Methods

This project will involve three distinct components that together will reveal whether the Selawik River thaw slump is impacting egg development and subsequent recruitment of the inconnu population in the drainage. The first component will be a series of annual age distribution profiles of spawning male inconnu collected from the Selawik River spawning area. We have chosen to focus on males because they will provide the recruitment data we are seeking without reducing the number of fertilized eggs on the spawning grounds each year. The earliest age distribution profiles will be dominated by cohorts that were spawned prior to the thaw slump and will be unaffected by the sediment released into the river. These early age distribution profiles will serve as baselines for comparison with later profiles. The second component will be a series of annual age distribution profiles of spawning male inconnu from the Kobuk River population. If recruitment failure is observed in both sample collections, it would indicate an effect in their shared rearing environment and not necessarily in the Selawik River spawning area. If recruitment failure is observed only in the Selawik River sample collection it would indicate an effect from the Selawik River spawning area. The Alaska Department of Fish and Game operates an annual chum salmon *Oncorhynchus keta* test fishery on the Kobuk River near the community of Kiana during July and August. Incidental catches of inconnu from 2003 to 2008 have ranged from 375 to 880. During 2010, otoliths and gonosomatic index data were collected from Kobuk River inconnu and preliminary analysis suggest that inconnu caught in the test fishery are preparing to spawn and would provide commensurate age distribution data. The third component of the project will be a complimentary series of annual spawning population estimates for the Selawik River inconnu population. Age distribution data is proportional to the sample so one could see identical profiles from a population at radically different population levels. Brown found that individuals in the first seven age classes of a Yukon River inconnu spawning population made up 80% to 90% of his sample. If the Selawik River inconnu population is similarly skewed to the younger age classes, which is common for coregonid populations in general, then the spawning population should decline dramatically with even modest declines in recruitment. Modeling exercises suggest that our ability to identify large declines in recruitment (80% or greater) with age distribution data will be substantial, but modest declines in recruitment (50% or less) will be difficult to detect with statistical certainty. Annual spawning population estimates will allow us to identify modest declines in recruitment. These three components will permit detection of modest to high recruitment failure resulting from reduced egg survival caused by sediment from the Selawik River thaw slump.

Partnerships and Capacity Building

Project logistics and partnership would be a collaborative effort between the U.S. Fish and Wildlife Service and the Native Village of Selawik. Residents of Selawik will be sought after to assist with collecting otoliths. Specific training to address project specific sampling procedures and protocols will be conducted for individuals prior to initiating sampling. Selawik residents will also be sought for logistical support for camp gear transportation logistics. Discussions with the Selawik IRA Council regarding the project are planned during one of their monthly meetings.

Justification

The proposed work is technically sound and addresses an important subsistence sheefish fishery associated with Selawik National Wildlife Refuge. This project builds upon several Fisheries Resource Monitoring Program projects (02-020, 02040, 03-016 and 04-101). The investigators responded to the

Technical Review Committee's comments by providing details concerning trend detection and DIDSON sonar application. If the Fisheries Resource Monitoring Program were to provide support for the proposed work, it would need to be understood that no commitment is made beyond the four year funding cycle. Investigators would need to consider alternative funding sources for additional future study years as a contingency.

Project Number: 12-102
Project Title: Kuk River Rainbow Smelt Stock Assessment
Geographic Region: Northern Alaska
Information Type: Stock Status and Trends
Principal Investigator: Melissa Cunningham, Wild North Resources, LLC
Co-Investigator(s): Blair Flannery, U. S. Fish and Wildlife Service
Olgoonik Corporation

Project Cost: **2012:** $307,124 **2013:** $286,644 **2014:** $31,403

Recommendation: Do Not Fund

Issue

This study will address one of the priority needs for fisheries information in the Northern geographic area by the Regional Advisory Council. Rainbow smelt *Osmerus mordax* inhabit the Kuk River and are an important part of the subsistence diet for residents of the Wainwright area. They are the most harvested fish species in the area; however, general biological information is lacking. One study conducted along the coastal waters of the Beaufort Sea indicated that rainbow smelt were the most abundant fish collected in the winter fishery. Beyond this study, detailed information on Pacific-Arctic populations of rainbow smelt does not exist.

Kuk River rainbow smelt spawning distribution, timing, and baseline stock assessment data will be determined and will aid in identify potential affects from climate change. Biomass estimates of the smelt spawning population in the Kuk River will provide an index of the overall run strength. This information will help managers monitor long term population trends. To manage rainbow smelt as an important subsistence resource, managers require necessary baseline biological information to make informed decisions on the population for sustainability.

Objectives:

1. Obtain smelt general biological information from Wainwright fishermen to assist with the field sample plan, and document knowledge of potential climate changes affecting the Kuk River smelt;
2. Document smelt spawning distribution and timing in the Kuk River for 2012 and 2013;
3. Identify the age, fork length, weight, sex ratio, genetic composition and fecundity of smelt in the Kuk River during the spawning run and compare to the winter subsistence fishery for 2012 and 2013;
4. Estimate biomass of the smelt spawning population for 2012 and 2013

Methods

Objective 1 - General smelt life history information will be obtained by regular consultations over the phone and face to face with Wainwright smelt fishermen during winter sampling in 2012, and 2013. Information obtained will include fishing techniques used, run timing and spawning areas observed. Notable changes in the population over time such as movements, timing, abundance, size, disease or habitat will also be discussed.

Objective 2 – Spatial and temporal documentation of the Kuk River spawning population will be conducted over two years. Sampling will occur in the Kuk River Proper from a boat from ice break up until catch rates decline. Smelt will be collected by dip net primarily, but also gill and fyke net dependant on the conditions. General habitat characterization will be assessed at concentrated spawning locations. Confirmed spawning areas will be recorded by GPS and delineated and mapped with Arc View software.

Objective 3 – Eighty smelt will be collected randomly throughout the week during the spawning run to determine the age, sex, length, weigh and genetic composition of the Kuk River smelt population. Fifty pre-spawned female will be analyzed for fecundity (number of eggs/female). All samples will be analyzed for age by reading circuli on both ear bones (otoliths). Each smelt will be measured by weight (g), fork length (mm) and sexed (observed reproductive characteristics – nuptial tubercles on males). One hundred smelt will be sampled from the Kungok, Ivisaruk and Kuk River Proper during the spawning run annually to compare genetic diversity within the watershed. Blair Flannery with the Conservation Genetics Lab will conduct this analysis. Two hundred smelt will be collected annually and measured for the same parameters during the winter subsistence harvest, and compared to the spring spawning data to determine changes in demographics.
Objective 4 - Biomass (eggs and larvae) sampling will occur approximately three weeks after spawning has commenced, and will extend for approximately four weeks. Data collection will include sampling the entire water column with a plankton net at two locations along the Kuk River during the day and at night. Nine samples will be collected per site to obtain a representation of vertical and horizontal distribution of biomass during the period of sample.

Partnerships and Capacity Building

One individual from Wainwright will be hired through Olgoonik Corporation to help assist with field operations throughout the season. Local hire will assist with collection of biological data, logistics and transportation needs. Promoting local involvement of resource users as active participants in this scientific study will educate individuals on the management process of their important fisheries resources. This experience may also initiate an interest to obtain a secondary education in the sciences. Individuals will be trained on all field procedures and safety protocols to collect data safely and accurately. Olgoonik Corporation is proposing to match funds for successful completion of this study and will be listed as Co-Investigator.

General biological information of the Kuk River smelt will be obtained from prominent fisher people within the Wainwright village through consultations. This information will be utilized to aid in determining the field sampling plan including sample locations and timing of spawning smelt. At the end of the two years of study, a summary of results will be presented to the Wainwright community through a PowerPoint presentation and a poster will be produced and will remain in Wainwright at a public location.

Justification

While this work is timely, has local importance and is accompanied by an impressive match, the details provided in the investigation plan are lacking and not fully developed. The overall funding requested of $625,171 is excessive given the lack of direct application to Federal management. The investigators are encouraged to narrow their focus to one or two of the objectives, reduce the budget, clearly articulate how the objectives will be achieved and develop a clear link to Federal subsistence management. Kuk River Smelt is an important resource to the community of Wainwright and little is known about the population The Technical Review Committee would encourage a resubmission of this project in the 2014 funding cycle.

Project Number: 12-103
Project Title: Spawning location, run timing, and spawning frequency of Kobuk River sheefish.
Geographic Region: Northern Alaska
Information Type: Stock Status and Trends
Principle Investigator: James Savereide, Alaska Department of Fish and Game
Co-Investigator(s): Randy J. Brown, U.S. Fish and Wildlife Service

Project Cost: **2012:** $13,800 **2013:** $13,800 **2014**: $13,800

Recommendation: Fund

Issue

The Kobuk River sheefish *Stenodus leucichthys* population supports substantial inriver subsistence fisheries and winter subsistence fisheries that occur in Hotham Inlet and Selawik Lake. Inriver fisheries utilize gillnets, beach seines, and hook and line techniques to capture migrating sheefish during their upstream (mid-June through August) and downstream (late September through mid-October) spawning migrations, whereas the winter fishery mainly utilizes under-ice gillnets and hand-held jig lines. Sheefish harvested in Hotham Inlet and Selawik Lake are from a mixed population comprised of the only two known spawning stocks in the region, the Selawik and Kobuk River stocks. Stock assessments are only feasible within the individual rivers, when the stocks are separated into spawning aggregations; however, estimates of spawning frequency are needed to determine the total stock size because mature sheefish can spawn more than once and in sequential and/or non-sequential years. Even though sheefish in the Northern Region are not identified as a priority need, an understanding of total exploitable stock size would allow researchers to determine sustainable harvest levels for an important subsistence fishery. In 2008, a four-year radiotelemetry project (08-103) was funded by the Fisheries Monitoring Program to estimate the spawning frequency, spawning locations, and migratory timing of sheefish in the Kobuk River.

The spawning locations, estimates of migratory timing (up and downstream), and spawning frequency have been determined annually since 2008, and will continue through the fall of 2011 as part of project 08-103. At that time, 3 years of information will be available to estimate the spawning frequencies of sheefish tagged in 2008, and two years will be available for sheefish tagged in 2009. However, the potential for a more complete and descriptive database is available because the minimum life expectancy of the radio transmitters deployed is five years. To obtain more detailed and precise estimates of spawning frequency, spawning locations, and migratory timing and to maximize the potential of the radio transmitters already purchased, three more years of data from aerial tracking surveys and the stationary tracking stations should be collected. This would provide five years of spawning information for each year transmitters were deployed.

Objectives

1. Document spawning locations within the Kobuk River upstream of the village of Kobuk;
2. Describe the timing of spawning migrations (upstream and downstream past the village of Kobuk) for mature sheefish within the Kobuk River drainage;

3. Estimate the proportion of the sheefish spawning population in 2008 and 2009 that returned annually to spawning areas upstream of the village of Kobuk from 2012 to 2014 such that each annual proportion is within 10% percentage points 90% of the time; and,
4. Identify and characterize different spawning frequency strategies used by adult sheefish in the Kobuk River, estimate the proportion of adults using each strategy, and estimate the potential variation in the proportion of adult sheefish spawning in any given year.

Methods

Spawning frequency, spawning locations, and migratory timing of mature sheefish in the Kobuk River stock will be determined by assessing spawning status of individually radiotagged sheefish over 3 consecutive years (2012–2014). The radio transmitters will be operable each year from July through October. Combined with the results from project 08-103, this will provide a total of 5 annual assignments of spawning status to categorize and estimate spawning frequency. This approach will serve to provide precise estimates of spawning frequency (sequential, non-sequential, or combination thereof) expressed by the stock.

Spawning migrations, frequency, and locations of radiotagged sheefish will be deciphered using a combination of aerial tracking surveys and stationary tracking stations. Two tracking stations located just upstream from the village of Kobuk will be used to record upstream and downstream migrations of radiotagged fish. Replicate aerial surveys conducted by U.S. Fish and Wildlife Service and Selawik National Wildlife Refuge will be conducted annually during July and August to document their locations throughout the river during their upstream migration, and during late September to mid-October to document their locations within the spawning area.

Partnerships and Capacity Building

One field technician was hired through the Kobuk IRA to assist with capture and sampling of fish, and this project extension will continue to utilize a local field technician and provide compensation for local logistical support (e.g., boat rentals, tracking station maintenance, and land leases). A rural outreach educational program on sheefish was carried out between the village of Kobuk, Kobuk Elementary School, and Alaska Department of Fish and Game; this program will continue through 2014. Additionally, progress reports will be presented to residents of the region at least once a year and written documents will be distributed to fisheries managers, researchers, local community groups and other interested parties.

Justification

This project will build upon Monitoring Program project 08-103 by allowing continue monitoring of radio-tagged sheefish in the Kobuk River. Combined with project 08-103, funding for this project will result in five years of sheefish migratory data. Results from this work will describe run timing and spawning frequency, giving fishery managers the context for understanding previously completed stock abundance work. This project is technically sound and addresses an important subsistence sheefish fishery associated with Gates of the Arctic National Preserve, Selawik National Wildlife Refuge, Kobuk Valley Wilderness and Kobuk Valley National Park. The investigators have the expertise needed to successfully conduct this ongoing project. Both investigators have worked on several successful Monitoring Program projects. Continuing this project would allow for a maximum amount of information to be gleaned from the deployed radio tags at a very modest cost. In addition, Alaska Department of Fish and Game is providing matching funds ($18,500 per year) greater than the requested funds.

Project Number: 12-104
Project Title: Evaluation of the overwintering Dolly Varden population in the Noatak River.
Geographic Region: Northern Alaska
Information Type: Stock Status and Trends
Principal Investigator: Brendan Scanlon, Alaska Department of Fish and Game
Co-Investigator(s): Marci Johnson, National Park Service

Project Cost: **2012:** $2,280 **2013:** $142,381 **2014:** $76,152 **2015:** $2,508

Recommendation: Fund

Issue

Many northwestern Alaska residents maintain a traditional subsistence lifestyle and rely greatly on the harvest of overwintering Dolly Varden *Salvelinus malma* from the Noatak River. These fish are captured with gillnets or beach seines during open water periods and with hook and line during winter, and in some communities they outrank salmon and whitefish in importance to the subsistence economy. Currently, fisheries managers have little defensible information relative to habitat and abundance for the overwintering population of Dolly Varden in the Noatak River, which is needed to identify sustainable subsistence harvest levels, evaluate the potential effects of habitat perturbations, and address regulatory proposals or climatic change.

Objectives

1. Document overwintering locations of Dolly Varden in the Noatak River during the winters of 2012/2013 and 2013/2014.
2. Assess the feasibility of using side-scan sonar (i.e. DIDSON) to estimate the abundance of outmigrating overwintering Dolly Varden following breakup on the Noatak River. This will be accomplished using a set of secondary objectives.
    a. Identify the location upstream of which 90% of the Dolly Varden overwinter (OW_{90}) during the winters of 2012/2013 and 2013/2014.
    b. Describe the onset and duration of the Dolly Varden outmigration at OW_{90} during late spring of 2013 and 2014.
    c. Evaluate physical characteristics of potential sonar sites near OW_{90} in June 2013 that could impact sonar detection of Dolly Varden such as channel profile (width, depth and substrate), debris load during break up, target range, target size, and aim/position of the sonar.
    d. Evaluate biological characteristics of potential sonar sites near OW_{90} in June 2013 that could impact sonar detection of Dolly Varden such fish density, swimming behavior (e.g. direction of movement), and relative abundance of Dolly Varden and non-target species.
    e. Based on conclusions from objectives 2a-d, enumerate all downstream targets at the selected OW_{90} site using a DIDSON sonar during the outmigration period of Dolly Varden during June of 2014.
    f. Determine the relative abundance of non-target species in the immediate vicinity of the OW_{90} site using methods identified in Objectives 2c and 2d during June of 2014.

Methods

Radiotelemetry will be employed to evaluate overwintering areas, and identify OW_{90} and downstream run timing past OW_{90} of Dolly Varden in the Noatak River. During each of the first two years (2012 and 2013) of the study, 125 Dolly Varden will be surgically implanted with programmable radio transmitters. Deploying transmitter during mid-September will ensure that only overwintering Dolly Varden will be tagged. Data related to run timing and overwintering locations will be collected using a combination of aerial tracking surveys and ground-based tracking stations. A minimum of four tracking flights will be conducted each year: early March, mid-April, early June, and early July.

Objective 2 reflects a stepwise approach toward assessing the feasibility of the sonar and the conditions that need to be satisfied to enumerate the downstream migration of overwintering Dolly Varden. Because species apportionment can be problematic, our expectation of project success will be that downstream targets can be accurately counted and the relative abundance of non-target species will be negligible (i.e. <5%). We expect that the downstream outmigration period for a vast majority of the overwintering Dolly Varden will be very brief (<one week) and that their abundance (e.g. 30,000–150,000 fish) will simply overwhelm other species of similar size (e.g. ≥200 mm TL) that may confound the sonar counts. This ideal scenario will provide a relatively accurate census even without having to rigorously account for species apportionment.

In 2013, investigation of the potential sonar site will start immediately after ice-out. Based on work conducted in the neighboring Wulik River and prior telemetry work, it is assumed that there will be a delay of about seven days after ice-out before fish begin their outmigration to sea. Recommended procedures for site selection, installation, and operation of the DIDSON sonar will be followed over a four-week period. A radio receiver in camp or tracking station in camp will provide data on the progression of outmigrating radio tagged Dolly Varden. Test fishing will be developed and conducted to evaluate whether Dolly Varden make up ≥90% of the total number of fish present in the ensonified field.

In 2014, the outmigration of Dolly Varden will be counted following breakup conditioned upon the results of the telemetry work and sonar investigations in 2013. All necessary equipment and personnel will be staged to ensure that the river can be ensonified immediately after ice-out and once the river can be safely navigated. Two DIDSON units will be operated, one on each bank of the river. Best practices for profiling the river channel, aiming, and testing of the sonar using targets will be repeated. The maximum attainable range window of an individual DIDSON unit on low frequency is 40 m and the window length of each sonar unit will be adjusted to maximize image resolution and avoid overlap. Sonar operations will be terminated after the outmigration period, which will be identified by telemetry and test fishing data. Test fishing results from 2013 will be used to develop a standardized protocol for determining the relative abundance of Dolly Varden and other species moving downstream through the ensonification field.

Partnership/Capacity Development

A letter of support will be solicited from the Northwest Arctic Regional Advisory Council at their August 2011 meeting in Kotzebue, and a portion of the requested funds will provide for a locally-hired technician from the village of Noatak to be recruited for approximately four weeks each year of this project to assist with operation of the DIDSON sonar. During the 2002-2003 Noatak River Dolly Varden telemetry experiment four individuals from Noatak were successfully hired each year to assist with weir and field camp operations in the upper Kugururok River. In addition, consultation with the Noatak/Kivalina Fish and Game Advisory Committee as well as the Noatak IRA will be conducted well before the start of the project to describe objectives and how the results will be used in management, and to inform fishers about

the tag-return program. Finally, educational outreach regarding Dolly Varden life history and the field methods used in this experiment will be conducted as the public school in Noatak in May 2013.

Presentations will also be made at other regional villages and schools, such as Ambler, Kiana, and Kotzebue as interest and resources allow. Project results will be presented at Federal Regional Advisory Councils, and State Advisory Committees, and in regional newspapers and radio shows.

Justification

This project addresses an important subsistence Dolly Varden fishery in Northwest Alaska. The investigators plan to use radiotelemetry to document overwintering locations of Dolly Varden in the Noatak River and DIDSON sonar to estimate the outmigrating Dolly Varden. The investigators developed a logical stepwise approach to deploying the DIDSON sonar component of the project and detailed how they will address cold weather challenges. Information gained from this project will allow fishery managers to evaluate the importance of the Noatak River Dolly Varden population as compared to the Kivalina and Wulik rivers populations. It will also provide baseline information on Noatak River Dolly Varden overwintering habitat.

Project Number:	12-153
Project Title:	Northwest Alaska Key Subsistence Fisheries Harvest Monitoring Program
Geographic Region:	Northern Alaska
Information Type:	Harvest Monitoring/Traditional Ecological Knowledge
Principal Investigator:	Nicole M. Braem, Alaska Department of Fish and Game
Co-Investigator(s):	James S. Magdanz, Alaska Department of Fish and Game
	Enoch Shiedt, Maniilaq, Inc.

Project Cost: **2012:** $106,421 **2013:** $117,408 **2014:** $119,760 **2015:** $98,540

Recommendation: Fund

Issue

Substantial subsistence fisheries sustain eight small communities (Kivalina, Noatak, Noorvik, Selawik, Kiana, Ambler, Shungnak and Kobuk) within the Kotzebue Management Area, yet little information on the subsistence harvest and use of salmon, char, whitefish, and other non- salmon species has been collected since 2004, when the annual salmon harvest monitoring program was terminated due to lack of funding. The Kotzebue Area has, by far, the largest subsistence salmon fishery in Alaska lacking an annual harvest assessment program.

Several development projects related to mineral extraction may occur in the area: oil exploration in the Chukchi Sea, a road to the Ambler mining district that would link a remote region to the road system and likely lead to further mining development, and the extension of the road from Red Dog mine, among others. While little commercial exploitation of fish stocks currently occurs in the region, it is expected that interest in developing such fisheries will grow in coming decades as activity in and access to the Arctic increases. While chum are the predominant salmon species in the region, it is believed that more commercially valuable species such as sockeye, Chinook and coho will expand their ranges as the Arctic warms. In 2009, U.S. Secretary of Commerce Gary Locke approved a plan prohibiting the expansion of commercial fishing into federal arctic waters; however, this limitation is in place until "researchers gather sufficient information on fish and the Arctic marine environment to prevent adverse impacts of commercial harvesting or activity on the ecosystem." Among species identified in the plan as likely initial target species were Arctic cod, saffron cod and snow crab. Thus, state and federal fisheries regulatory bodies, including the Federal Subsistence Board, will require current and comprehensive data on the subsistence fisheries of this area in the near future.

The primary objective of this project is to gather *contextualized* harvest information in this region with an eye to future information needs. As time series data further accumulate, researchers may be able to detect an increasing trend in harvest of one species concurrent with a decline in another… but be unable to interpret the trends. It is hoped that traditional ecological and local knowledge can further inform and contextualize quantitative harvest data and information on factors affecting fishing during the study period.

Interested parties need updated harvest information both for established state and federal management processes and for planning and impact assessment efforts. Both the Seward Peninsula and Northwest Arctic Regional Advisory Councils have identified salmon and char fisheries as the most important fisheries in their areas and have expressed concerns about the effects of climate change on subsistence fisheries resources. Baseline harvest assessment and monitoring of subsistence fisheries and historic

trends and variability in harvest location, harvests and use of non-salmon fish have been identified as priority information needs for the Northern Region.

Objectives

1. Estimate annual harvest and use patterns of salmon, char, whitefish and other key non-salmon species of fish used by residents of the study communities in 2012, 2013, and 2014. Assess whether subsistence needs for these species are being met and impacts.
2. Systematically collect contextual information on what factors influence harvest and use of salmon, char, whitefish, and other key species in each study year.
3. Conduct network analysis of harvest, processing, and distribution networks of subsistence caught fish.
4. Document traditional and local knowledge about salmon, char, whitefish and other key subsistence species with particular attention to observed changes over time. Explore how various factors are affecting harvest methods, species targeted, the organization of fishing, fishing locations, preservation techniques, and harvest timing.
5. Compare data collected to historic and contemporary information; interpret changes and trends in the subsistence harvest and use of salmon, char, whitefish and other key species.

Methods

Three methods of data collection will be used in order to meet the objectives of this study: an adapted harvest survey, key respondent interviews, and participant-observation. Of an estimated 812 total households (based on 2010 federal census data), we estimate that about 650 (80%) will be surveyed each year (in January 2013, 2014, and 2015). Sixteen key respondent interviews will be conducted with knowledgeable subsistence fishers and processors identified in collaboration with Maniilaq and tribal councils. Investigators will make one trip to a community for the purpose of participant observation each year. Trips will be time to coincide with an important fish harvest period, i.e. seining for whitefish in the fall, jigging for Dolly Varden in the spring, or during salmon fishing in the summer.

Partnerships and Capacity Building

Consultation with Maniilaq, Inc. is ongoing. This will be a collaborative project between Alaska Department of Fish and Game, Maniilaq, Inc., and the tribal governments of the study communities. To continue capacity building at the community level, project partners will hire and train local residents to conduct surveys within their communities.

Justification

The goal of this project is to re-establish data collection for subsistence salmon and nonsalmon fisheries in the Northern region, namely in eight communities in the Kotzebue area (Kivalina, Noatak, Noorvik, Selawik, Kiana, Ambler, Shungnak, and Kobuk). Harvest surveys have not occurred for a number of years and increasing impacts to subsistence fisheries may be felt by subsistence users in coming years stemming from factors such as resource development or climate change. Regional Advisory Councils and the Monitoring Program have requested harvest data on salmon and nonsalmon fish. Additionally, the research will provide much needed socio-environmental and economic contexts for understanding changes including trends in harvests, uses, and distribution of subsistence resources. Given the importance of salmon and nonsalmon fisheries in this region, the lack of an annual harvest assessment

program, and the changing socio-environmental conditions, this study will be timely and valuable. The investigators demonstrate a clear understanding of the importance of collecting not just harvest numbers, but also broader data on subsistence harvests, uses, distributions, knowledge, and conditions. The investigators seek to broaden managers' understandings of change as well as the contexts within which and why they are occurring. This project would provide valuable information for managers and the Monitoring Program. The investigation plan addresses a priority information need in the 2012 Request for Proposals. The technical and scientific merit is high. The objectives are clearly stated. The investigators are qualified to conduct the proposed research and the partnership and capacity building component of the research is rated as high.

Project Number: 12-154
Project Title: Traditional Ecological Knowledge and Harvest Monitoring of an Emerging North Slope Salmon Fishery
Geographic Region: Northern Alaska
Information Type: Harvest Monitoring/Traditional Ecological Knowledge
Principal Investigator: Brittany Retherford, Alaska Department of Fish and Game

Project Cost: **2012:** $48,493 **2013:** $42,325 **2014:** $44,835 **2015:** $30,609

Recommendation: Fund with modification

Issue

Though less visible and widely used than subsistence resources such as whale and caribou, fish continue to be an important subsistence resource for residents of North Slope villages. This project will document subsistence salmon and non-salmon fishery traditional ecological knowledge and harvest trends in two North Slope communities: Point Lay and Wainwright. Salmon in particular have been emerging as an increasingly used and harvested resource in these villages, yet baseline ethnographic information is lacking to understand the extent to which it is becoming a targeted fishery. Interviews conducted by Alaska Department of Fish and Game researchers in 2009 and 2010 in Wainwright and Point Lay found that local fishers have traditionally harvested and used salmon species in the past, though harvest of salmon species has been largely opportunistic as fishing and hunting camps and cabins are located at areas where caribou have historically migrated, and as incidental catch of targeted non-salmon fisheries. It is hypothesized that rapid climatic changes that might affect fish abundance, combined with socioeconomic shifts affecting the annual seasonal round, is providing greater opportunity for fishers to harvest both salmon and non-salmon species. This research responds to a unique opportunity to document what appears to be an emerging fishery for salmon (primarily pink and chum, but some Chinook as well), while simultaneously, collecting baseline ethnographic and harvest data about select non-salmon fish species. Both research objectives respond directly to the following priority information need for northern Alaska in 2012:"baseline harvest assessment and monitoring of subsistence fisheries in the Northwest Arctic and North Slope regions." The latter objective responds directly to the need that includes "historic trends and variability in harvest locations, harvest and uses of non-salmon fish." This research addresses priority needs identified by the North Slope Regional Advisory Council. The North Slope Regional Advisory Council has identified Arctic char, Dolly Varden, whitefish, lake trout, and Arctic grayling fisheries as the most important for their area. While fishing for some of these species, local residents incidentally catch salmon. The North Slope Regional Advisory Council has also expressed concern about the effects of climate change on subsistence fishery resources. There has also been a need expressed by local representatives to the lead researcher to synthesize and compile historic data and literature related to subsistence fisheries in Wainwright (Retherford personal communication – 2011).

Objectives

To address the research question: *What socio-cultural, economic, and environmental factors (such as climate change) have shaped salmon harvest and non-salmon harvest fishing efforts over time in Point Lay and Wainwright?*

1. For each community, document and catalogue traditional ecological knowledge of subsistence salmon and non-salmon fishing, including historic abundance and trends, gear types used, seasonality, and harvest location information for each species.
2. Synthesize existing data related to subsistence fisheries in Point Lay and Wainwright, including existing reports, Regional Advisory Council minutes, and other archival sources.

To address the research question: *What changes are occurring in the subsistence harvest and use patterns of salmon and non-salmon fishes, if any, in these North Slope study communities?*

3. Develop and implement an exploratory harvest monitoring program for salmon and non-salmon fisheries. Collect data on species harvest quantities, seasonality of harvest, and gear types for three study years: 2012, 2013, and 2014.
4. Map general areas where subsistence salmon and non-salmon fisheries take place for each community, including local place names and historic harvest locations to help establish patterns and trends.
5. Create a set of species identification educational materials to distribute to community members during organized outreach events and harvest calendar collection trips.

Methods

This research project will be conducted following basic procedures and policies characteristic of Alaska Department of Fish and Game Division of Subsistence research. Division staff will consult with regional and local governments and organizations with interests in fish and wildlife management and subsistence uses following the principles of informed consent, conducting research in the Arctic, and the Alaska Department of Fish and Game and Alaska Boards of Fisheries and Game's tribal consultation policy.

A three-year project is proposed. There are three components that are designed to address both research questions. The first component of the project will be primarily focused on a literature review and original archival research. A second component will be focused on building community participation and data collection as part of the proposed three-year exploratory harvest monitoring program. This component also includes the synthesis and analysis of collected data. The third component of the project is collecting and cataloging traditional ecological knowledge. The results of all three components will be summarized in a comprehensive final report.

Partnerships/Capacity Building

The principal investigator 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 harvest monitoring program. Investigators will also regularly consult with the North Slope Wildlife Department and the Inupiat Community of the Arctic Slope to explore possibilities for collaborative efforts. Meetings will also be held annually to update study communities on project status, as well as, solicit ongoing feedback. This is particularly important due to the exploratory nature of this project.

Justification

This project aims to document baseline ethnographic data regarding salmon and nonsalmon fisheries in two North Slope communities, Point Lay and Wainwright. Though this project claims to addresses

a priority information need for the Northern Region, specifically the baseline harvest assessment and monitoring, trends and variability of nonsalmon fisheries, and locally-specific information on salmon and nonsalmon fisheries, the investigator does not make a compelling link between fishing in Wainwright and Point Lay to Federal waters or management. According to Monitoring Program guidelines, it is a requirement that a clear linkage be made. The investigation plan would benefit from additional input on technical writing, organization and presentation. The investigator was asked in the proposal review to focus the direction and scope of the proposed project by clarifying research questions and objectives such that they would be clear, measurable, and attainable. The suggestion to narrow the scope of the research meant the investigator should focus on one or two manageable and well-conceived research questions and clear and obtainable research objectives. The research questions and objectives are similar to those in the proposal and are broad in scope but answerable and achievable. The link to Federal subsistence fisheries management was elaborated upon (as requested specifically in the proposal review), but not fully. The investigator needs to explain the clear and comprehensive link to Federal waters and Federal management that exists for these communities. Given that the project is exploratory research of an emerging fishery, it has significant potential. Partnership and capacity building is ranked as a medium and letters of support from local entities should be provided. The overall framework, questions, and objectives; the research methods and researcher ability, combined with the need for this information on an exploratory project on an emerging fishery lead to a recommendation to fund this project.

Project Number:	12-155
Project Title:	Climate Change and Traditional Ecological Knowledge of Subsistence Whitefish and Cisco on the North Slope of Alaska
Geographic Region:	Northern Alaska
Information Type:	Harvest Monitoring and Traditional Ecological Knowledge
Principal Investigator:	George Weekley, SWCA Environmental Consultants
Co-Investigator(s):	Liam Frink, University of Nevada-Las Vegas Celeste Giordano, University of Nevada-Las Vegas Mike Pederson, North Slope Borough Kim Gould, SWCA Environmental Consultants Brian Brettschneider, SWCA Environmental Consultants

Project Cost: **2012:** $134,703 **2013:** $52,453

Recommendation: Fund with Modification

Issue

This study will gather traditional ecological knowledge on subsistence uses of broad whitefish *Coregonus nasus* (Aanaakjiq), Arctic cisco *Coregonus autumnalis* (Qaaqtaq), and least cisco *Coregonus sardinella* (Iqalusaaq). This study will document the possible impacts to these three species as a result of the effects of climate change as measured by the changes in harvesting location and timing, as well as preservation and processing of these resources. The study will take place in the communities of Wainwright, Barrow, Nuiqsut, and Kaktovik.

Objectives

Changes in Harvest Locations and Timing over the Past 20 Years

1. Identify traditional subsistence harvest locations of cisco and whitefish for each community.
2. Document place names for traditional cisco and whitefish harvest locations for each community.
3. Document duration of use at various subsistence harvest locations for cisco and whitefish for each community.
4. Document timing of subsistence harvest for cisco and whitefish for each community.
5. Identify perceived potential reasons for changes (if any) to subsistence harvest locations for cisco and whitefish, including perceived changes to climatic conditions.
6. Identify perceived potential reasons for changes (if any) to timing of subsistence harvest of cisco and whitefish, including perceived changes to climatic conditions.
7. Map changes to community subsistence harvest locations using subsistence mapping techniques.

Changes in Fish Preservation Methods over the Past 20 Years

8. Identify past methods used to prepare and preserve cisco and whitefish and investigate whether climate change is perceived to have affected those preparation and preservation methods.

9. Identify current fish preparation and preservation methods used in response to any perceived climate change.
10. Document any observed signs of fish pathogens (e.g., flesh texture changes due to *Ichthyophonus* and other parasites*)* in harvested whitefish that may have affected fish preservation methods and/or indicate changes in pathogen prevalence.

Methods

Data for this study will be collected by a combination of conversational interview, participant observation, and subsistence mapping. Conversational interviews will typically begin with an opening question and then free-flow into additional questions based on the participant's responses. The interviewer will use a digital voice recorder to accurately capture participant interviews. As a back-up, the interviewer will take notes to clarify information in digital recordings and to document information from participants who do not want to be recorded.

Areas identified by study participants as historic and/or contemporary subsistence harvesting locations will be documented on paper maps through subsistence mapping techniques. The interviewer will use GIS-generated 11x17" aerial photography maps showing known topographical identification points. Participants will be asked to circle locations where harvesting of the target subsistence resources occurs and to identify specific species harvested at those locations. Maps showing subsistence harvest locations will then be digitized into a shapefile for GIS use. At the end of the analysis, SWCA Environmental Consultants will produce a report that outlines data gathered from the study and an interpretation of these data in the results. All data gathered that correspond to the goals and objectives will be summarized in the report in textual and/or graphic form.

Partnerships/Capacity Building

SWCA Environmental Consultants is teaming with the North Slope Borough Department of Wildlife Management and will be working with them to help improve their capacity for conducting research projects involving qualitative research methods.

The project would contribute to the North Slope Borough Department of Wildlife Management's identified mission and responsibilities as listed below:

- Document the continued importance of subsistence hunting, fishing, and trapping through maintaining accurate, area-specific harvest records
- Determine those geographic areas critical to subsistence-use animals.
- Define critical aspects of the biology of major subsistence-use animals, to support efforts directed toward local management of such species.
- Cooperate with the Alaska Department of Fish and Game, the U.S. Fish and Wildlife Service, and the U.S. National Marine Fisheries Service regarding the conduct of studies and evaluation of data for strong local input into management of subsistence-use resources.
- Work closely with the Borough's fish and game management committee in developing and implementing programs for subsistence-use animals. Since this committee has a representative from each village, it is a valuable means for assisting in the local coordination of wildlife studies conducted by the borough and others and state and federal management programs.

The Borough's responsibilities for the project include the following:

- Getting local cooperation and support from the tribal governments,

- Identifying and setting up interview times with community residents,
- Assisting with language translations during qualitative interviews,
- Assisting in analyzing qualitative data from resident interviews,
- Collaboration between SWCA fisheries biologists and NSB fisheries biologists to determine possible physiological effects to whitefish and cisco that may result from climate change, and
- Assisting in report writing.

Justification

The investigators offer a streamlined project as per the comments of the Technical Review Committee. The focus is solely on collecting qualitative ethnographic research about the harvests and associated uses, methods and means, and knowledge of subsistence fisheries in the Northern Region communities of Wainwright, Barrow, Nuiqsut, and Kaktovik. The priority information need is for more comprehensive baseline and ethnographic data of salmon and nonsalmon fisheries in the region. The principal investigator has chosen to collaborate with researchers new to the Monitoring Program, who may provide interesting and valuable insight into the intersection of subsistence issues, health, and community well-being. Though there are some flaws in the project design/plan, including too many research sites for collecting in-depth qualitative research in a short period of time, potentially significant data is being offered using a reasonable budget in a short time span. There may be problems will recall bias, with relying solely on very open ended interviews, and the level of trust between residents and researchers given the timeframe. The ethnographic data collection will be tied to spatial data collection and mapping and may offer interesting insights into current and past whitefish and cisco subsistence fishing conditions in these four Northern Region communities. The investigators attempt to integrate current and past knowledge, both "scientific" and "traditional" through interviews and literature. It will be an impressive project if they do so, however, the scope is too grand for the timeframe and researcher's experience in these particular communities. Therefore, we recommend funding this project if the researchers narrow the scope. If the researchers provided the detailed ethnographic data and analysis for only one or two communities, they will more likely meet their research objectives while offering a thorough and interesting ethnographic study. The investigators should reconsider using Barrow as one of the research sites, given its population size. Wainwright is a focus of another Monitoring Program proposed project, consequently Wainwright as a study site should be reconsidered. A revised investigation plan will need to be submitted. A revised timeline and budget for the research will need to be provided. It is also recommended that letters of support from local entities be sought, once the area of research is solidified.

BRIEFING ON TRIBAL CONSULTATION

As discussed with the Regional Advisory Councils at the Winter 2011 meetings, the Federal Subsistence Board has been taking steps to formally incorporate tribal consultation into the Federal Subsistence Management Program, while maintaining the established role of the Councils. This action is consistent with the Secretaries of the Interior and Agriculture's renewed emphasis on respectful relationships with tribes.

Towards this end, Tribes were invited to participate in the January 18–21, 2011 Federal Board meeting. Invitations were sent to all Federally recognized Tribes in Alaska, as well as ANCSA corporations[1]. The invitations were twofold: Tribes and ANCSA Corporations were invited to provide comments on the fisheries proposals and they were also invited to a meeting on the 21st to discuss development of a consultation protocol for the overall Federal Subsistence Management Program. The meeting on the 21st was generally a listening session, and the Board recognized that development of specific consultation mechanisms would require further meetings between the Federal Subsistence Board and Tribes and ANCSA Corporations. The Board's goal is to work with Tribes and ANCSA Corporations to develop a consultation policy for the subsistence management program, consistent with Departmental policies.

At its May 4–5, 2011 meeting, the Federal Subsistence Board reviewed the summary of comments from the January 21st meeting, and directed that a workgroup comprised of a small number of Federal and tribal representatives be formed to develop a draft protocol(s) on consultation for the Board's review. The workgroup held an initial meeting in June 2011 to begin developing interim protocols to guide consultation between the Federal Subsistence Board and Tribes and ANCSA corporations.

In July 2012, the Board approved two interim protocols, one for Tribes and one for ANCSA Corporations; these will guide consultation efforts through the wildlife cycle. The interim protocols (included in the Council books), and an accompanying letter, were sent out to all Tribes and ANCSA Corporations in July. The Workgroup is continuing to work on drafting the final protocols, and multiple opportunities will be provided for Tribal and ANCSA Corporation involvement and review of the draft documents. It is hoped that the final protocols will be ready in time for the Board to adopt at its May 2012 meeting. A few key dates and events in the development of final protocols are as follows:

- October 20, 2011—Consultation with ANCSA Corporations at AFN
- December 1, 2011—Consultation with Federally recognized Tribes at the BIA Tribal Service Providers Conference
- January 17–19, 2012—Federal Subsistence Board meeting in Anchorage, discussion of draft protocols on the agenda

[1]Consultation with Alaska Native corporations is based on Public Law 108–199, div. H, Sec. 161, Jan. 23, 2004, 118 Stat. 452, as amended by Public Law 108–447, div. H, title V, Sec. 518, Dec. 8, 2004, 118 Stat. 3267, which provides that: "The Director of the Office of Management and Budget and all Federal agencies shall hereafter consult with Alaska Native corporations on the same basis as Indian tribes under Executive Order No. 13175." See also 25 USC Section 450, note.

Final as adopted by Federal Subsistence Board: July 12, 2011

U. S. Department of Interior

& U.S. Department of Agriculture

FEDERAL SUBSISTENCE BOARD

INTERIM PROTOCOL

FOR

GOVERNMENT-TO-GOVERNMENT CONSULTATION

The United States Government has a unique relationship with American Indian governments as set forth in the Constitution of the United States, treaties, statutes, court decisions, executive orders and policies. In recognition of that special relationship, on November 6, 2000, the President issued Executive Order 13175 (Consultation & Coordination with Indian Tribal Governments), which provided guidelines to all Federal agencies for establishing regular and meaningful consultation with Tribal officials in decision-making processes that may have Tribal implications. On November 5, 2009, a Presidential Memorandum was issued pursuant to Executive Order 13175, reaffirming the Federal government's commitment to operate within a government-to-government relationship with federally recognized tribes. Pursuant to the direction provided by the Secretaries of Interior and Agriculture, this document lays out an interim protocol for consultation between the Federal Government and Federally recognized Tribal Governments located in Alaska for the Federal Subsistence Board process.

The following **interim** protocol sets out a framework for consultation during the 2011 cycle of the Federal Subsistence Management Program with respect to: 1) the 2012-2014 wildlife regulatory proposals and 2) the Government-to-Government Subsistence Consultation Protocol.

1. Each federally recognized Tribe will be sent a letter from the Federal Subsistence Board inviting consultation on all 2012-2014 wildlife regulatory proposals. The letter will:
    a. Explain the interim consultation process and the need for this interim consultation effort regarding the 2012-2014 wildlife regulatory proposals.
    b. Explain that the final consultation protocol is expected to be in place by May 2012 in time to be implemented for the fisheries regulatory cycle process.
    c. Inform the Tribes of the face-to-face consultation opportunity focusing on the consultation protocol during the Tribal Service Providers Conference on the afternoon of December 1, 2011 in Anchorage.
2. Government-to-government consultation will take place regarding the 2012-2014 wildlife regulatory proposals during the August 15 through September16, 2011, timeframe.
    a. Conduct a consultation via teleconference for each Federal Subsistence Regional Advisory Council area prior to the Regional Advisory Council meeting.
        i. At least four Federal Subsistence Board members or their designees will participate in each teleconference.

Final as adopted by Federal Subsistence Board: July 12, 2011

ii. Federal officials will receive training on principles and practices of government-to-government consultation prior to participating in the teleconferences.
iii. A Tribal official and Federal official will be selected during the consultation to jointly report the results of the consultation to the Federal Subsistence Regional Advisory Council.

3. An in-person government-to-government consultation will be held the day prior to the January Federal Subsistence Board meeting regarding wildlife regulatory proposals and the May Board meeting regarding the consultation protocol.

Final as adopted by Federal Subsistence Board: July 12, 2011

FEDERAL SUBSISTENCE BOARD

INTERIM PROTOCOL

FOR

GOVERNMENT-TO-ANCSA-CORPORATIONS CONSULTATION

Pursuant to the direction provided by the Secretaries of Interior and Agriculture, this document lays out an interim protocol for consultation between the Federal Government and Alaska Native Claims Settlement Act (ANCSA) Corporations.

ANCSA Corporations, by mandate of the 25 USC §450 note (Consultation with Alaska Native corporations), must be consulted with by the Federal Subsistence Board with respect to: 1) the 2012-2014 wildlife regulatory proposals and 2) the Government-to-ANCSA-Corporations Subsistence Consultation Protocol.

Interim Consultation Protocol:

1. Each ANCSA corporation will be sent a letter from the Federal Subsistence Board inviting consultation on all 2012-2014 wildlife regulatory proposals.
   The letter will:
   a. Explain the interim consultation process and the need for this interim consultation effort regarding the 2012-2014 wildlife regulatory proposals.
   b. Explain that a final protocol is expected to be in place by May 2012, in time to be implemented for the fisheries regulatory cycle process.
   c. Mention the Board's interest in having a presentation made about the consultation protocol at the AFN convention.
2. Two dates will be scheduled for a government-to-ANCSA-corporations consultation teleconference opportunity prior to August 22, 2011.
   a. ANCSA corporations can choose to consult at either or both teleconferences.
   b. At least four Federal Subsistence Board members or their designees will participate at each consultation.
   c. ANCSA corporations and Federal agencies will each appoint a representative to report the results of consultation to each of the 10 Federal Subsistence Regional Advisory Councils during the fall 2011 Regional Advisory Council meetings.

STATUS REPORT ON THE SECRETARIAL RECOMMENDATIONS TO THE FEDERAL SUBSISTENCE MANAGEMENT PROGRAM

"Subsistence is of critical cultural as well as nutritional importance to rural Alaskans, and I take seriously the responsibility for carrying out the mandate of Title VIII of ANILCA to provide opportunities and priority for subsistence uses on Federal lands and waters."

Secretary Salazar, December 2010

Implementation of a subsistence program that fulfills the obligations of the U.S. Government to rural families is important to me. The Federal Subsistence Management Program in Alaska aligns closely with the mission of the U.S. Department of Agriculture's (USDA) mission and embodies key priorities that include sustaining the livelihood of rural families, ensuring access to healthy and affordable food, providing jobs in rural communities, sustaining cultural and traditional ways of life, and strengthening relationships with Alaska Native tribes.

Secretary Vilsack, April 2011

In 2009, the Secretaries of Interior and Agriculture announced a review of the Federal Subsistence Management Program, acknowledging that it was no longer temporary, and stating that there was value in examining the program. Their stated goals were to look ahead to plan for the future of the program to ensure that it is best serving rural Alaskans and that the letter and spirit of Title VIII of ANILCA are being met. The review began in November 2009, and preliminary recommendations were released in August 2010.

In December 2010 the Secretary of Interior with concurrence from the Secretary of Agriculture announced the results of their review and provided several recommendations to the Federal Subsistence Board towards the purpose of providing a more responsive, effective program.

All of these recommendations can be implemented by the Secretary of the Interior or by the Secretary with concurrence of the Secretary of Agriculture, or by the Federal Subsistence Board. Most can be accomplished as a matter of Secretarial directive or policy. However, some would be regulatory changes requiring a formal rule-making process. The Federal Board prioritized the recommendations and began working on a subset in December 2010. Work is proceeding as follows:

1. Develop a proposed regulation to increase the membership on the Federal Subsistence Board to include two additional public members representing subsistence users.

    - **Status**: A Final Rule has been developed and will be published in the Federal Register following Secretarial Signature. The recommended language from the Secretaries is as follows:

      "(1) The voting members of the Board are: … two public members representing rural Alaskan subsistence users who possess personal knowledge of and direct experience with subsistence uses in rural Alaska to be appointed by the Secretary of the Interior with the concurrence of the Secretary of Agriculture."

- Once the Final Rule is published, the Secretaries will begin the application/nomination process. The goal is to have these two positions seated by January 2012.

2. As a matter of policy, expand deference to appropriate RAC recommendations in addition to the "takings" decisions of the Board provided for under Section 805(c) of ANILCA, subject to the three exceptions found in that Section.

    - **Status:** The Board is still in the process of considering expanding its deference to Regional Advisory Council recommendations to matters beyond take. The Board is generally supportive of expanding deference to Councils on C&T and has yet to determine whether or not it is sufficient to reflect this perspective in policy or if rulemaking needs to be pursued. With regard to deference on rural determinations, the Board is continuing to learn the intricacies of the regulations and the process, and is exploring whether or not deference regarding rural determinations is appropriate given Court findings. Finally, with regard to deference on in-season management decisions, the Board understands that because in-season management decisions often must be made quickly in response to newly obtained information, deference to Council recommendations will occur only when time and conservation allow.

3. Review, with RAC input, the December 2008 Memorandum of Understanding (MOU) with the State to determine either the need for the MOU or the need for potential changes to clarify federal authorities in regard to the subsistence program.

    - **Status:** The MOU was provided to all ten Regional Advisory Councils for comment during winter 2011 meeting cycle. Council comments were summarized and reviewed by the Board in summer 2011. The Board has directed that the changes recommended by the Councils be examined by a work group comprised of both state and federal members, with a report back to the Board and final action on proposed changes by December 2011.

4. Review, with RAC input, the customary and traditional use determination process and present recommendations for regulatory changes.

    - **Status**: All ten Regional Advisory Councils were asked for their perspectives on the existing process during the Winter 2011 meeting cycle. These comments were summarized and reviewed by the Board in May 2011. Because most comments were generally supportive of the existing process, the Board is focusing its energies on other action items at this point in time.

5. Review, with RAC input, rural/nonrural determination process and present recommendations for regulatory changes.

    - **Status:** The Board held a work session in April to learn about rural process, and is continuing to learn the intricacies of the regulations and the process. In response to the Secretarial Review, the Board is exploring whether or not it can delay the implementation date for the communities or areas which were rural and were determined to be nonrural during the 2000 review process. The Board is evaluating how best to proceed in conducting the 2010 rural determination process.

6. Review the Board's written policy on executive sessions and minimize the use of executive sessions to those cases specifically prescribed.

- **Status:** The Board has revised its Executive Session policy to reflect that it intends to keep its business transparent, and will provide a summary of Executive Sessions as and when they occur. The Board adopted its revised policy at its May 2011 meeting.

7. At the request of the Director of the US Fish and Wildlife Service and under Departmental procedures, review and submit recommendations for Departmental consideration of the annual budget for the Federal subsistence program. Under this directive, the following elements (gleaned from the Secretarial Review comments) are recommended as a focus:

   a. Hold Federal Subsistence Board meetings in rural areas

      - **Status**: Pending Additional funding

   b. Increase Training and support to Regional Advisory Councils

      - **Status**: Implement when funding and staffing allow.

   c. Implement Wildlife Monitoring Studies

      - **Status:** Pending additional funding

   d. Increase Tribal Consultation

      - **Status:** In Progress (see written briefing)

   e. Increase capacity within Office of Subsistence Management for research and implementation

      - **Status:** Pending additional funding

   f. Reinstate the annual regulatory cycle

      - **Status:** The Board sees the value of every other year cycle, but may be open to reinstating the annual cycle should funding allow.

The Federal Board has not yet begun work on the following directives:

8. Review, with RAC input, and present recommendations for changes to Federal subsistence procedural and structural regulations (Parts A&B of the CFRs) adopted from the State in order to ensure Federal authorities are fully reflected and in accord with subsistence priorities provided for in Title VIII.

9. Ensure the Secretaries are informed when non-Department rule-making entities develop regulations that may adversely affect subsistence users.

10. To the extent practicable, utilize contracting and use of ANILCA Section 809 cooperative agreements with local tribes and other entities in the Board's review and approval of proposals for fulfilling subsistence program elements.

BUDGET IMPLICATIONS

The Secretary's 2010 Report recognizes that the Federal program will be in place for the foreseeable future and as such, it must fulfill the commitments made in ANILCA relative to providing for the rural subsistence priority. In light of the Secretary's emphasis on the Federal Subsistence Management Program and resultant heightened expectations of rural Alaskans, additional funding is needed for the Federal Subsistence Management Program to implement many of the Secretarial Recommendations. Unfortunately, funding in 2012 and beyond is likely to be flat or reduced; this will affect the ability of both the Board and the Program to deliver on certain of these recommendations.

UPDATE ON BERING SEA/ALEUTIAN ISLANDS CHUM SALMON BYCATCH

In May 2011, the Federal Subsistence Board sent a letter to the North Pacific Fishery Management Council recommending that a hard cap of 50,000 (the lowest hard cap amount among the range of alternatives under consideration), with a trigger cap of 25,000 be adopted.

During its June 2011 meeting in Nome, the North Pacific Fishery Management Council (Council) held its initial review of the analysis of proposed management measures to minimize chum salmon bycatch in the Bering Sea pollock fishery. Representatives from the Seward Peninsula, Yukon-Kuskokwim Delta, Western Interior and Eastern Interior Regional Advisory Councils attended, and provided testimony. The proposed measures included hard caps on the pollock fishery; triggered time and area closures; and participation in the Rolling Hotspot Program, a fleet-managed program for real-time bycatch area closures on 4–7 day time frames. The Council revised and restructured the suite of alternatives and options, and requested new information. Some of the changes include the following:

- An additional option for a separate hard cap for June and July when western Alaskan chum stocks are more prevalent in the bycatch. If reached, this cap would close all fishing for Bering Sea Pollock until August 1.

- Removal from consideration complicated monthly area management options and triggers (formerly Alternative 3).

- Additional provisions to the Rolling Hotspot program for area closures based on historical bycatch proportions (80% and 60%) to which the fleet would be subject regardless of Rolling Hot Spot program participation.

- Analysis of additional parameters of the Rolling Hotspot program that could be adjusted by the Council to improve program performance.

The full Council motion is posted on the website (see http://www.fakr.noaa.gov/npfmc/current_issues/bycatch/ChumBycatchMotion611.pdf).

A revised set of alternatives based upon the Council's motion will be posted in the near future.

The Council further requested that the analysis be revised per its requests and be brought back to the Council for review in early 2012. The decision to schedule a review for 2012 was made, at least in part, since the October 2011 meeting is in Dutch Harbor, which is difficult place for rural western Alaska residents to access, and the December 2012 meeting is focused on groundfish stock assessments, so staff are focused on preparing assessments for several months prior to this meeting. Once the Council reviews the chum salmon bycatch analysis in early 2012, it will need to provide time for the public to comment on the analysis and proposed alternatives. It is unlikely the Council will make a final decision until its April 2012 meeting.

Federal Subsistence Board
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Anchorage, Alaska 99503-6199

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

U.S. FOREST SERVICE

FWS/OSM11056/TT

Eric Olson, Chair
North Pacific Fishery Management Council
605 W. 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

MAY 20

Dear Mr. Olson:

The Federal Subsistence Board (Board) is taking this opportunity to provide its comments and recommendation on chum salmon bycatch in the Bering Sea/Aleutian Islands (BSAI) commercial pollock fishery as the North Pacific Fishery Management Council (NPFMC) prepares to select a preliminary preferred alternative at its June 2011 meeting in Nome, Alaska. The Board, comprised of the Regional Directors of the U.S. Fish and Wildlife Service, the Bureau of Indian Affairs, the National Park Service, the Bureau of Land Management and the USDA Forest Service, and a Chair appointed by the Secretaries of the Interior and Agriculture, provides subsistence fishing opportunities in Federal public waters in Alaska under Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA).

Bycatch is of concern to the Board and the affected Regional Advisory Councils because Western Alaska chum salmon stocks are important subsistence resources for Federally-qualified subsistence users in the Norton Sound, Yukon, Kuskokwim, and Bristol Bay areas. Along the Yukon and Kuskokwim rivers alone, there are 6,800 households in 80 villages. Chum salmon make a significant contribution to the way of life of western and interior Alaska's subsistence users, families and communities. The recent fall chum salmon runs in the Yukon River are of particular concern. In both 2009 and 2010, subsistence harvest was restricted due to poor, lower than average size runs and/or to ensure passage into Canada to meet escapement goals.

At its May 2011 public meeting the Board reviewed, discussed and heard public testimony on the various alternatives under consideration in the NPFMC's revised *Bering Sea non-Chinook (Chum) Salmon Bycatch Management Measures*, dated February 2011. **The Board recommends that a hard cap of 50,000, with a trigger cap of 25,000 chum salmon be adopted**. Once the trigger cap is reached, conservation measures would be implemented to assist the pollock fishery fleet to avoid reaching the hard cap. This alternative would provide a better opportunity for increased numbers of chum salmon to reach Western and Interior Alaska rivers to meet spawning escapement and provide for subsistence uses.

It also comes closest to the stipulation in the U.S./Canada Yukon River Salmon Agreement, signed in 2002, which requires the United States to increase in-river returns of Yukon River origin salmon by reducing marine catches and bycatches of Yukon River salmon. The 50,000 level represents a meaningful reduction in the 1997-2001 average of 58,000 chum salmon bycatch, just prior to the signing of the U.S./Canada Yukon River Salmon Agreement. This five-year period is also the same period utilized by the Board for its recommendation to the NPFMC on BSAI Chinook salmon bycatch in April 2009.

The Board appreciates the outreach efforts that NPFMC members and staff conducted on this issue by attending the February/March 2011 meetings of the Yukon-Kuskokwim Delta, Western Interior, Eastern Interior and Bristol Bay Subsistence Regional Advisory Councils. If the Board can be of further assistance, please contact Peter J. Probasco, Assistant Regional Director, Office of Subsistence Management, at (907) 786-3888. The Board will continue to monitor developments on this important issue and looks forward to the results of your efforts to significantly reduce chum salmon bycatch in the BSAI pollock fishery.

Sincerely,

/S/

Tim Towarak
Chair, Federal Subsistence Board

cc: Federal Subsistence Board members
Gene Virden, Acting Regional Director - Bureau of Indian Affairs
Bud Cribley, State Director - Bureau of Land Management
Sue Masica, Regional Director - National Park Service
Geoff Haskett, Regional Director - U.S. Fish and Wildlife Service
Beth Pendleton, Regional Forester - USDA Forest Service
Pat Pourchot, Department of the Interior, Alaska
Peter J. Probasco, Office of Subsistence Management
Lester Wilde, Chair, Yukon-Kuskokwim Delta Regional Advisory Council
Jack Reakoff, Chair, Western Interior Alaska Regional Advisory Council
Sue Entsminger, Chair, Eastern Interior Alaska Regional Advisory Council
Molly Chythlook, Chair, Bristol Bay Regional Advisory Council
Weaver Ivanoff, Chair, Seward Peninsula Regional Advisory Council
Cora J. Campbell, Commissioner, Alaska Department of Fish and Game
James W. Balsiger, Administrator, Alaska Region, National Marine Fisheries Service
David Balton, Deputy Assistant Secretary, Oceans and Fisheries, U.S. Department of State

TRI-RAC CUSTOMARY TRADE SUBCOMMITTEE STATUS REPORT

The Tri-RAC subcommittee on customary trade is composed of members from the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council, the Western Interior Subsistence Regional Advisory Council, and the Eastern Interior Subsistence Regional Advisory Council.

The Tri-RAC subcommittee met on May 18-19 and again on August 23-24 to address a river-wide solution to the issue of customary trade of Yukon River Chinook salmon. At both meetings, the subcommittee agreed that low runs of Chinook salmon require conservation efforts to extend to customary trade practices. In the event Chinook salmon runs return to prior levels, limits to customary trade may no longer be warranted.

Subcommittee members present at the May meeting included: Raymond Oney, Harry Wilde Sr., and Aloysius Unok (YKDSRAC); Ray Collins, Robert Walker and Jenny Pelkola (WISRAC); Andy Bassich, Andrew Firmin, and Bill Glanz (EISRAC). Subcommittee members present at the August meeting included: Raymond Oney, Harry Wilde Sr., and Aloysius Unok (YKDSRAC); Ray Collins and Don Honea, Jr. (WISRAC); Andy Bassich, Andrew Firmin, and Bill Glanz (EISRAC).

At its May meeting, the subcommittee suggested three broad customary trade regulatory changes. These changes were motivated by many years of low Yukon River Chinook returns and concern over the continued viability of Chinook populations. The subcommittee's ideas for proposed regulatory changes were sent out for public review and comment.

At its August meeting, the subcommittee discussed the public response to the proposed regulatory changes. Based on those discussions, the subcommittee developed the following recommendation.

Because of declining Chinook salmon runs, the Tri-RAC recommends the following regulation to govern customary trade of Yukon River Chinook salmon:

Customary trade of Yukon River Chinook salmon may only occur between Federally qualified rural residents with a current customary and traditional use determination.

Justification

- By allowing customary trade only between federally qualified rural residents with a customary and traditional use determination for Yukon River Chinook salmon, the subcommittee hopes to curtail large customary trade exchanges involving Chinook salmon which are reported to occur in urban areas of Alaska and may rise to the level of a significant commercial enterprise.

- In times of low abundance, Yukon River Chinook salmon should remain within the Yukon River drainage for subsistence uses.

- Reduces overall Chinook salmon harvest, which may allow fisheries managers to minimize subsistence fishing restrictions.

- Provides fisheries managers additional fish to meet drainage-wide escapement goals, which has the potential of improving future returns.

- Allows fishers to recover reasonable expenses for traditional subsistence activities, which was the original intent of customary trade.

The subcommittee also developed an alternative proposal. This proposal was developed for RAC discussion, but is not the subcommittee's preferred option.

Alternative Proposal

Preclude customary trade of Yukon River Chinook salmon between rural residents and others.

a) Establish a $750 limit per calendar year per qualified household;

b) Require customary trade recordkeeping and receipt form.

Justification

- Establishes an enforceable dollar amount for customary trade of Yukon River Chinook salmon.
- Addresses problem by limiting potential for large volume sales.
- By allowing customary trade only between federally qualified rural residents, and not between rural residents and others, the subcommittee hopes to curtail large customary trade exchanges involving Chinook salmon, which are reported to occur in urban areas of Alaska and may rise to the level of a significant commercial enterprise.
- Reduces overall harvest, which may allow fisheries managers to minimize subsistence fishing restrictions.
- Provides fisheries managers additional fish to meet drainage-wide escapement goals, which has the potential of improving future returns.
- Provides law enforcement necessary information to curtail illegal cash sales by identifying harvest sources and quantities.

Because of declining Yukon River Chinook runs, the subcommittee also recommends that a required Chinook salmon harvest calendar be implemented for Federally qualified subsistence users.

Justification

- Accurate harvest reporting would facilitate Yukon River Chinook salmon management by providing an account of day-to-day harvest levels. This information would be used to support post-season household survey data, and would not replace such data.
- A harvest calendar would also be part of educating people toward greater conservation awareness.

Next Steps:

- Council and public comments compiled and taken back to the subcommittee
- Subcommittee decides on a proposal to submit
- Proposal goes through the Federal regulatory process for fish beginning with the publication of the proposed rule and call to change regulations
- Councils provide recommendations on the proposal during the 2012 fall meetings
- Federal Subsistence Board action in January 2013

Winter 2012 Regional Advisory Council Meeting Calendar

February–March 2012 current as of 03/28/11

Meeting dates and locations are subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Feb. 12	*Feb. 13* *Window Opens*	*Feb. 14*	*Feb. 15*	*Feb. 16*	*Feb. 17*	*Feb. 18*
			NS—Barrow			
		SP—Nome				
Feb. 19	*Feb. 20* ***HOLIDAY***	*Feb. 21*	*Feb. 22*	*Feb. 23*	*Feb. 24*	*Feb. 25*
				YKD—Emmonak		
Feb. 26	*Feb. 27*	*Feb. 28*	*Feb. 29*	*Mar. 1*	*Mar. 2*	*Mar. 3*
		WI—McGrath			**EI—Central**	
Mar. 4	*Mar. 5*	*Mar. 6*	*Mar. 7*	*Mar. 8*	*Mar. 9*	*Mar. 10*
	BB—Naknek		**NWA—Kotzebue**			
Mar. 11	*Mar. 12*	*Mar. 13*	*Mar. 14*	*Mar. 15*	*Mar. 16*	*Mar. 17*
	SE—Sitka					
		SC—Anchorage				
Mar. 18	*Mar. 19*	*Mar. 20*	*Mar. 21*	*Mar. 22*	*Mar. 23* *Window Closes*	*Mar. 24*
			K/A—Old Harbor			

Fall 2012 Regional Advisory Council Meeting Calendar

August 20–October 12, 2012 current as of 07/20/11

Meeting dates and locations are subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Aug. 19	*Aug. 20* WINDOW OPENS	*Aug. 21*	*Aug. 22*	*Aug. 23*	*Aug. 24*	*Aug. 25*
Aug. 26	*Aug. 27*	*Aug. 28*	*Aug. 29*	*Aug. 30*	*Aug. 31*	*Sept. 1*
Sept. 2	*Sept. 3* **HOLIDAY**	*Sept. 4*	*Sept. 5*	*Sept. 6*	*Sept. 7*	*Sept. 8*
Sept. 9	*Sept. 10*	*Sept. 11*	*Sept. 12*	*Sept. 13*	*Sept. 14*	*Sept. 15*
Sept. 16	*Sept. 17*	*Sept. 18*	*Sept. 19*	*Sept. 20*	*Sept. 21*	*Sept. 22*
Sept. 23	*Sept. 24*	*Sept. 25*	*Sept. 26*	*Sept. 27*	*Sept. 28*	*Sept. 29*
Sept. 30 END OF FY2012	*Oct. 1*	*Oct. 2*	*Oct. 3*	*Oct. 4*	*Oct. 5*	*Oct. 6*
Oct. 7	*Oct. 8* **HOLIDAY**	*Oct. 9*	*Oct. 10*	*Oct. 11*	*Oct. 12* WINDOW CLOSES	*Oct. 13*